

ISSN 2277-7733

# Voice of Research

Volume 5 Issue 4, March 2017

ICV - 66.11



*An International Refereed Journal  
for Change and Development*

Impact  
factor  
3.522

Chief Editor  
Avdesh S Jha



## Advisory Committee

Dr. Varesh Sinha (IAS)  
*Ex. Chief Secretary, Gujarat.*

Dr. Vinod Kumar Mall (IPS)  
*A. D. G. Police, Gujarat.*

Shri U. S. Jha  
*Sr. DOM, Indian Railways*

Dr. Arbind Sinha  
*Retd. Professor, MICA*

Dr. C. N. Ray  
*CEPT University, Ahmedabad*

Cao Chenrui  
*HOD, Hindi Department, YMU, China*

Dr. R. S. Patel  
*Professor and Head, Gujarat University*

Dr. M. N. Patel  
*Ex. Vice-Chancellor, Gujarat University*

Dr. Sunil Shukla  
*Director, EDII Ahmedabad*

Dr. G. P. Vadodaria  
*Principal, L. D. College of Engineering*

Dr. Rupesh Vasani  
*Executive Member, World Dean Council*

Dr. M. M. Goel  
*Retd. Professor and Dean, Kurukshetra University*

Minesh S. Jha  
*Management Consultant*

Dr. Lu Fang  
*Vice-Dean, YMU, China*

Dr. Ranvijay Sinha  
*Director, Sino-India Forum, Yunnan*

Kanhaiya Chaudhari  
*Director (Agricultural Ext.), ICAR, New Delhi*

Dr. C. P. Bhatta  
*Professor, IIM, Calcutta*

Dr. Rajul Gajjar  
*Director, GTU*

Dr. G. S. Parasher  
*Ex. Pro Vice-Chancellor, RTMU, Nagpur*

Dr. Maithili R. P. Singh  
*Professor, Central University Rajasthan*

Ajay Patel  
*Project Scientist, BISAG*

Dr. Rajneeshsingh Patel  
*Director, T.D. Campus, Rewa*

## Chief Editor

Dr. Avdhesh S. Jha, *Ahmedabad.*

## Issue Editors

Dr. Nilesh Jha

Dr. Bharti Venkatesh

Dr. Asha Thokchom

## Editorial Committee

Dr. Deepak Sharma  
*California State University, USA*

Dr. Deepanjana Varshney  
*Senior faculty, King Abdulaziz University, Ministry of Higher Education, Saudi Arabia.*

Prof. Kim Fam  
*Victoria University New Zealand*

Dr. M. S. Meena  
*Principal Scientist, ICAR-ATARI*

Dr. A. K. Kulshreshtha  
*DEI Agra.*

Dr. Kalpana Modi  
*SNDT University, Mumbai*

Dr. Uma Shrivastava  
*Professor and Head, Jabalpur*

Dr. Beena Sukumaran  
*Prof. & Head, Civil & Env. Engg. Dept. Rowan University, USA*

Dr. Hiren Karathia  
*University of Lleida, Spain*

Dr. S. Ahmed Khan  
*BIT, Dubai.*

Dr. Veena Jha  
*Chauban College of Education, Bhopal*

Renisha Chainani  
*Consultant & Expert, Finance*

Dr. Madhura Kesarkar  
*SNDT University, Mumbai.*

Ana Marcela Paredes  
*Consultant - Slutsker Center for International Students - Syracuse University*

Dr. Ramanjeet Singh  
*Director, ADMAA, Amity University*

Dr. Rajshri Vaishnav  
*Education Department, RTM University*

Dr. Vivekanand Jha  
*Editor and Consultant, Gwalior*

Dr. Lalima Singh  
*S.S. Khanna Girls Degree College, Allahabad*

Dr. T. V. Ramana  
*Andhra University Campus, Kakinada*

Dr. Anjana Bhattacharjee  
*Tripura University, Tripura*

Dr. Sony Kumari  
*SVYAS University, Bangalore*

**Ms. Shobha A. J.**

*Ahmedabad*

## **EDITORIAL**

It gives me immense pleasure to present you with this March issue in orange that represents warmth, enthusiasm, creativity, success, encouragement, change, determination, health, enjoyment, balance, freedom, expression, and fascination. True to the quality of orange colour that represents joy and creativity, this issue also after presents the warmth, enthusiasm and creativity of researchers, success of their research process, and the variety and increased number of the papers in this issue indicates the encouragement, change, determination, health, enjoyment, balance, freedom, expression, and fascination of the researchers towards research. This march issue adds to the teaching learning process, teacher education, psychology, health education, business, management and technology with discussion related to teacher effectiveness, teacher education programme, teaching profession, learning material, pre-service teacher's training, evaluation, personal excellence and life skills, women entrepreneurship, self-help groups, health, women empowerment, violence against women, electronic information resources, flexible manufacturing system, licensure examination performance and justice system.

To add to education, psychology, health and philosophy, Patel relates teacher effectiveness with emotional intelligence as well provides us with recommendation and suggestions for teacher education programme, Mungure investigates efficacy of mentoring and supervision toward improving teaching profession, Singh evaluates the effectiveness of programme learning material for teaching, Punia talks to add to the pre-service teacher's training through MOOCS, John and Bhamwari reviews evaluation in 21st century as a holistic approach, Manitombi Devi talks of Higher Education in 21st century with respect to vision and action, Dave correlates personal excellence and development of life skills, Rathore presents a review of 'A Better India A Better World' by N.R.Murthy, Srivastava focusses on women entrepreneurship and education, Pandey presents the role of women in household decision making, and Chauhan verifies the relationship between exercise and heart disease.

Management and technology is an equally important tools for development and thus looking to its timely need Muhwezi, Wamala and Atuhaire studies the retention of academia at Makerere University, Garg studies the empowerment of elected women representatives in panchayati raj institutions, Mohammed presents the street children of Tarlac city, Mohammed and Pulmano reviews the cases of violence against women, Aggarwal shows how gainfully can a pharmaceutical company borrow in the 21st century, Patel and Patel checks the awareness and use of internet tools and electronic information resources by management students, Sundarani and Qureshi finds the adoption barriers for flexible manufacturing system, Mohammed and Mohammed talks of candidate engineers and their licensure examination performance, Mohammed and Caingat studies Barangay justice system whereas Singh correlates social barrier and mental health care.

In all this issue with the inclusion of papers related to education, philosophy, psychology, technology, management and entrepreneurship and its mix forms a strong basis to guide the enthusiastic readers. I am sure this issue will add to the system, potential readers and enthusiastic researchers and lead them for change and development.

**Chief Editor**

**Voice of Research**

# LIST OF CONTENTS

|     |  |    |
|-----|--|----|
| 1.  | TEACHER EFFECTIVENESS IN CONTEXT TO THEIR EMOTIONAL INTELLIGENCE<br>R.S. Patel .....   | 1  |
| 2.  | RECOMMENDATION AND SUGGESTIONS FOR TEACHER EDUCATION PROGRAMME<br>R.S. Patel .....   | 6  |
| 3.  | AN INVESTIGATION OF THE EFFICACY OF MENTORING AND SUPERVISION TOWARD<br>IMPROVING TEACHING PROFESSION OF THE PROSPECTIVE SCIENCE AND<br>MATHEMATICS TEACHERS DURING TEACHING PRACTICE IN SCHOOLS<br>Daudi Mika Mungure ..... | 8  |
| 4.  | EFFECTIVENESS OF PROGRAMME LEARNING MATERIAL FOR<br>TEACHING PHYSICS IN CLASS X<br>Vandana Singh .....   | 13 |
| 5.  | SUPPLEMENTING THE PRE-SERVICE TEACHER'S TRAINING THROUGH MOOCS<br>Yogesh Punia .....   | 15 |
| 6.  | EVALUATION IN 21ST CENTURY: A HOLISTIC APPROACH<br>Jeenu John and Varmala T. Bhamwari .....  | 17 |
| 7.  | INDIA: HIGHER EDUCATION IN TWENTYFIRST CENTURY VISION AND ACTION<br>K. Manitombi Devi .....  | 19 |
| 8.  | IN PURSUIT OF PERSONAL EXCELLENCE: DEVELOPMENT OF LIFE SKILLS<br>Anjali Dave .....   | 22 |
| 9.  | REVIEW OF THE BOOK 'A BETTER INDIA A BETTER WORLD' BY N.R.MURTHY<br>Bharti Rathore .....   | 26 |
| 10. | WOMEN ENTREPRENEURSHIP AND EDUCATION<br>Akanksha Srivastava .....  | 28 |
| 11. | SELF-HELP GROUPS AND THE ROLE OF WOMEN IN HOUSEHOLD<br>DECISION MAKING: CASES OF SC, OBC AND MIXED GROUPS'<br>Shashi Pandey .....  | 32 |
| 12. | EXERCISE- A DRUG FREE WAY TO REDUCE THE CHANCE OF HEART DISEASE<br>Ramesh Chand Chauhan .....  | 37 |
| 13. | RETENTION OF ACADEMIA AT MAKERERE UNIVERSITY : A TIME-TO-EVENT ANALYSIS<br>Keneth Muhwezi, Robert Wamala and Leonard K. Atuhaire .....   | 41 |
| 14. | EMPOWERMENT OF ELECTED WOMEN REPRESENTATIVES IN PANCHAYATI RAJ<br>INSTITUTIONS: A CASE STUDY OF MORADABAD DIVISION<br>Aarti Garg .....   | 46 |
| 15. | STREET CHILDREN OF TARLAC CITY: TOWARDS A PROPOSED ACTION PLAN<br>Murphy P. Mohammed .....   | 51 |
| 16. | CASES OF VIOLENCE AGAINST WOMEN: TOWARDS A PROPOSED PLAN OF ACTION<br>Murphy P. Mohammed and Rita E. Pulmano .....   | 53 |
| 17. | HOW GAINFULLY CAN A PHARMACEUTICAL COMPANY BORROW IN THE 21ST CENTURY?<br>Jigar Aggarwal .....   | 56 |
| 18. | AWARENESS AND USE OF INTERNET TOOLS AND ELECTRONIC INFORMATION<br>RESOURCES BY MANAGEMENT STUDENTS IN B - SCHOOL LIBRARIES OF GUJARAT<br>Pramod D Patel and Rajendra M Patel .....   | 60 |
| 19. | STUDY OF ADOPTION BARRIERS FOR FLEXIBLE MANUFACTURING SYSTEM IN INDUSTRY<br>S.H.Sundarani and M. N. Qureshi .....  | 64 |
| 20. | CANDIDATE ENGINEERS: AN EVALUATION OF THEIR LICENSURE EXAMINATION PERFORMANCE<br>Mervin P. Mohammed and Murphy P. Mohammed .....   | 68 |
| 21. | BARANGAY JUSTICE SYSTEM IN BARANGAY MATATALAIB, TARLAC CITY: AN EVALUATION<br>Murphy P. Mohammed and Nicanor C. Caingat .....  | 72 |
| 22. | PERCEIVED SOCIAL BARRIERS IN ACCESSING MENTAL HEALTH CARE FROM<br>MENTAL HOSPITAL: A STUDY AMONG PEOPLE WITH MENTAL HEALTH<br>PROBLEM IN ONE OF THE MENTAL HOSPITAL, UTTAR PRADESH<br>Priyanka Singh .....                   | 75 |

## Call For Papers

Voice of Research calls for unpublished articles, research papers, book review, case study for publication.

### Guidelines to Authors

- No processing fee is charged for the review of the papers. Further, the plagiarism check is not done but the papers submitted for the Journal should be original contribution by the author or researcher. In other case, it shall be the responsibility of the author(s).
- A declaration uploaded on the website, duly filled and signed by the author along with covering letter that the paper is original and has not been published or submitted for publication elsewhere should be mailed to the editor.
- Research papers should be typed in double-space with 11 font size in Garamond and one inch margin on all sides on A4 size paper. Tables with appropriate number and title on the top in single space 9 font size and references (in APA style) in 10 font size.
- Research paper with the abstract containing tables, figures and reference should be restricted to 3000-4000 words.
- The cover page should contain the title of the paper, author's name, designation, official address and address for correspondence, contact, phone/ fax number and e-mail address.
- Publication of the article or paper rests with the Editorial committee and it depends entirely on its standard and relevance. Authors may also be requested to revise their manuscript before they can be accepted for publication. Correspondence in this regard will be done with the first named author unless otherwise indicated.
- All the papers undergo double blind peer review. Minimum time taken for processing the paper 21 days. Maximum time taken for processing the paper is 45 working. Contributors are free to send the material to any other publication after this period if they don't receive any intimation from Editor, Voice of Research.

Research papers should be mailed to the editor at editor.vor11@gmail.com; editor@voiceofresearch.org

---

## Subscription Form

I Prof. /Dr. /Mr. / Mrs. /Ms. \_\_\_\_\_ wish to subscribe the journal “**VOICE OF RESEARCH**” for one year for individual/institution/library. The prescribed contribution of journal subscription is sent herewith by Demand Draft No \_\_\_\_\_ for Rs 1500 (Fifteen Hundred Only or as applicable in multiples of nos. of years) dated \_\_\_\_\_ in favour of “Editor, Voice of Research” payable at UCO Bank, Ahmedabad.

### Details of Subscriber

#### Individual/Institute/University

Name (in Block Letters):

Flat/ Bungalow no.:

Street:

City:

State:

Country:

Pin/Zip code:

Telephone / Mobile No.:

E-Mail Address:

Signature

### Note:

1. Individual Contributors and subscribers from India may pay their subscription fee in Indian Rupee amounting to Rs. 1500.00 through **Direct Deposit into Bank Account** in or through demand draft favouring **The Editor, Voice of Research** payable at **Ahmedabad. *The Draft can be sent in the name of Chief Editor at E/1, Samay Apartments, Beh. NID, Paldi, Ahmedabad- 380007.***

2. **Information of Bank Regarding Direct Deposit:**

In the Name of: “**Editor, Voice of Research**”

Bank Name: **UCO Bank**

A/c No.: **03340210001387**

Micr Code: **380028008**

Branch Code: **334**

IFSC: **UCBA0000334**

Bank Branch: **Maninagar, Ahmedabad Gujarat (India).**

### Subscription charges

#### Period of Subscription

#### Rate of Subscription

|          | Individual | Institutional |
|----------|------------|---------------|
| 1 year   | Rs. 1500   | Rs. 2500      |
| 2 years  | Rs. 2800   | Rs. 4500      |
| 3 years  | Rs. 4000   | Rs. 6000      |
| Lifetime | Rs.10000   | Rs. 20000     |



## TEACHER EFFECTIVENESS IN CONTEXT TO THEIR EMOTIONAL INTELLIGENCE

**Voice of Research**  
Volume 5, Issue 4  
March 2017  
ISSN 2277-7733

**R.S. Patel**

Professor & Head, Department of Education,  
Director, School of Psychology, Education & Philosophy, Gujarat University

### Abstract

*The present study attempts to examine the effect of emotional intelligence on teacher effectiveness at higher secondary level of education. The study was conducted on Higher Secondary School (HSS) teachers. From the analysis of the result, it was found that there is a positive effect of Emotional Intelligence (E.I.) on Teacher Effectiveness (T.E.) (as overall and in all the dimensions) at the HSS level. The T.E. of various dimensions on differential between high and low E.I. teachers are also found positively different. Thus it can be said that EI is an essential ingredient in enhancing the T.E. so, EI should be improved for the effectiveness of teaching. So it is advisable to use EI instead of IQ for TE.*

**Keywords :** *Teacher Effectiveness, Emotional Intelligence*

Education is a continuing process by which knowledge is transferred to students through the intermediaries, the teachers. All formal systems are based on the classroom teacher. "The destiny of India is being shaped in her classroom", has been pointed out by the Indian Education Commission (IEC-1964-66) According to the American Commission, the quality of the nation depends upon the quality of its citizens. The quality of its citizens depends, not exclusively, but critical measure upon the quality of their education. The quality of their education depends more upon the quality of their teachers.

Rightly said by Humayan Kabir that: "Without good teachers even the best of system is bound to fail, with good teachers, even the defects of a system can be largely overcome". The teachers is the flywheel of the whole educational machine. Elaborate blue-prints, modern school plants, the best equipment, the newest of the new media or progressive method will remain dead fossils unless there is the right use of teachers. The document, Challenge of Education – A Policy Perspective (1985) has highlighted that teacher performance is the most crucial input in education. No development has reached the threshold of development to revolutionize the classroom teaching.

Policies and plans of education in the classroom at the grass root level can materialize by effective teacher. The effectiveness of a teacher is considered to be associated with his personality and job satisfaction. In order to perform his role effectively a teacher should be intelligent in emotion and satisfied in profession, because a teacher is the hope for an individual and the nation. Since teachers' personality, behavior, interest attitude and emotions affect the children's behavioral pattern. So a teacher should understand his own emotions and other attributes as well as the same of pupils in the teaching-learning process.

Our social status and society much more emphasize on IQ, but it is surprise that IQ account for only 10-20% for determining life success according to different studies. Because most of the persons having high IQ could not compete with the topsy survey person. The huge impact on life success is EQ (Emotion Quotient) may be this is why the Danical Golman (1996, Psychologist) refers to EQ as the "Master Aptitude" because it guides the use of our intellectual and other abilities.

Effective teachers has an ability of understanding the children's emotions and their causes. He has the capability of effectively regulating these emotions in oneself and in others and most importantly he can being able to use the emotions as a source information for problem solving, creative and dealing with social situations.

### Background

It has been seen that "Emotional Quotient (E.Q.)" or E.I. is greater predictor success at work than "I.Q." Yet the issue is not hard to see. Even though research has indicated that a person's "E.Q.", is a important, if not more than one's I.Q., teachers are not aware of that reality. Why? Well, few are bothered about the latest research in the realm of education. Instructors are coming to classrooms that have problems like anger, failure, fear, disappointment, frustration, guilt, resentment, emptiness, bitterness, dependence, depression, loneliness, nostalgia and lethargy and only dictate notes, read poems aloud and leave, session after session. They seldom go to the library and read a journal or sit in front of the computer to read about the latest developments on the internet. But why is it being happening? And what factors are involved in this process, which directly hinders to be an effective teacher? Beside this, whether the T.E. is related to the E.I. or not ? Is a basic questions.

Mangal & Mangal (2009 and 2011), in their study titled "an emotionally intelligent teacher at the heart of successful CCE", emphasized that the desired attention should essentially be paid for providing proper opportunities to the school teachers for the development of emotional intelligence through some well organized programme carried out at both the pre-service and in-service stage for the successful implementation of CCE.

A research conducted by Edannur (2010) on 40 teacher educators of six teacher education institutions of Barak Valley of Assam. It emphasized that working on the emotions for positive gain, and encouraging emotional growth of children in classroom has become more crucial now than ever.

In order to find a solution to this intelligent question, the present problem is chosen by the investigators. Therefore, it is in this background, the present study is undertaken.

**Objectives**

The following objectives were framed for the present study: To Study and compare the correlation between TE and EI of Higher Secondary School Teachers (HSST). To study the correlation of TE & EI, as a whole, with all components of HSST. To study the correlation in each component of TE with different dimension of EI of HSST.

**Hypothesis**

The following null hypotheses were formulated in accordance with the objectives for present study: There will be no significant correlation between TE and EI of HSST. There will be no significant correlation between TE (as a whole) with EI of HSST. There will be no significant difference between the TE (different dimension) with EI (different dimension) of HSST.

**Method & Procedure**

Design of the Study: For the purpose of present investigation, descriptive survey method of research was employed. This method of research helps to explain the educational phenomenon in terms of conditions or relationships that exists, opinions that are held by teachers and experts, process that are going on, effects that are evident or trends that are developing.

Variables: In this study, attitude of teachers is a major variables which is related with (a) Level of Emotional Intelligence – High & Low EI, (b) Teacher Effectiveness – 10 Components of T.E. are : (1) Information Source – IS (2) Motivation – M (3) Disciplinarian – D (4) Advisor and guide relationship – AGR (5) Teaching skill – TS (6) Co-curricular Activity - CA, (7) Professional knowledge – PK (8) General Appearance and Habits in relation to classroom – GAH (9) Classroom Management - CM (10) Personal Characteristics - PC.

Sample: A sample was selected from Mehsana district of Gujarat State from INDIA. This district consists 9 talukas. These are Becharaji, Kadi, Kheralu, Mahesana, Vadnagar, Vijapur, Visnagar, Satlasana and Unjha. By method of random sampling four talukas (Kadi, Becharaji, Vijapur & Visnagar) were selected. In each taluka five higher secondary schools were selected randomly. In all twenty higher secondary schools were selected and from these schools 120 Higher Secondary School Teachers (HSST) were selected for present study. In each school all the faculty strength of HSST were included in the sample. Thus in this study, multistage sampling technique was employed.

Tools: Following tools were used for the purpose of data collection: *Teachers Effectiveness Scale (T.E.S.)*: This scale was developed by Dr. R.S. Patel and was published in Akash Manomapan Kendra (Psycho Centre) In its final form the scale consists of 69 highly determining items that are positively worded and measured at a five-point scale from strongly agree to strongly disagree. The items of the scale belong to the following teacher behavior categories: (1) Information Source - IS (2) Motivation – M (3) Disciplinarian - D (4) Advisor and guide relationship - AGR (with Pupils,

Fellow teachers, principals and parents) (5) Teaching skill - TS (6) Co-curricular activity - CA (7) Professional knowledge - PK (8) General appearance and habits in relation to classroom - GAH (9) Classroom Management - CM (10) Personal Characteristics - PC. *Emotional Intelligence (E.I.)*: Inventory constructed and standardized by Dr. R.S. Patel (2013) published by Akash Manomapan Kendra, Ahmedabad.

**Analysis and interpretation of Data**

The data was collected by the himself and collected data was edited, coding, classified, tabulated and analyze by the investigator and the interpretation (Patel-2012) and discussion have been presented.

In order to find out relationship between the variable, viz. teacher effectiveness and emotional intelligence of teachers with respect to the total sample of dimension wise, the correlation (product moment coefficient of correlation) technique was used. To find out the differences between teacher effectiveness of high and low emotional intelligence teachers, the ‘t’ test was used.

T.E. correlation with E.I. as a whole

**Table 1 - Coefficient of Correlation between Teacher Effectiveness and Emotional Intelligence (N = 100)**

| Variables              | N   | df | Coefficient of Correlation -r | Level of Significance |
|------------------------|-----|----|-------------------------------|-----------------------|
| Teacher Effectiveness  | 120 | 11 | 0.23                          | 0.05                  |
| Emotional Intelligence | 120 | 9  |                               |                       |

It can be observed from Table-1 that coefficient of correlation between T.E. and E.I. in the total sample study is 0.23, which is significant at .05 level. This indicates that there is a significant positive relationship between T.E. and E.I. of teachers. Therefore, the null hypothesis of the present study that there exists no significant relationship between T.E. and E.I. of teachers is rejected.

Thus the hypothesis of the present study that there exists a significant relationship between T.E. and E.I. of teachers is retained. In other words it can be said that teacher effectiveness is closely associated with the emotional intelligence of teachers.

Dimension wise Correlation Between T.E. and E.I.

**Table 2 - Coefficient of Correlation between Various Dimensions of T.E. and E.I. of Teachers**

| Sr. No. | Dimensions of Teacher Effectiveness   | N   | Coeffi., of Corr. (df=119) | Level of Sign. |
|---------|---|-----|----------------------------|----------------|
| 1       | Information Source (IS)   | 120 | 0.34                       | .01            |
| 2       | Motivation (M)  | 120 | 0.18                       | .05            |
| 3       | Disciplinarian (D)  | 120 | 0.30                       | N.S.           |
| 4       | Advisor and guide relationship (with pupils, fellow teachers, principals and parents) (AGR) | 120 | 0.20                       | .05            |
| 5       | Teaching Skills (TS)  | 120 | 0.23                       | .05            |
| 6       | Co-curricular activities (CA)   | 120 | 0.15                       | N.S.           |
| 7       | Professional knowledge (PK)   | 120 | 0.38                       | .01            |
| 8       | General appearance and habits in relation to classroom (GAH)                                | 120 | 0.01                       | N.S.           |
| 9       | Classroom Management (CM)   | 120 | 0.28                       | .01            |
| 10      | Personal Characteristics (PC)   | 120 | 0.06                       | N.S.           |



It can be observed from Table-2 that coefficient of correlation between IS, PK and CM dimensions of T.E. and E.I. of teachers are 0.34, 0.38 and 0.28 respectively, which are significant at .01 level. Further, the coefficient of correlation between M; AGR (with pupils, fellow teachers, principals and parents); and TS dimensions of T.E. and E.I. of teachers are 0.18; 0.20 and 0.23 respectively, which are significant at .05 level. These indicate that there is a significant positive relationship between IS, PK and CM; M; AGR (with pupils, fellow teachers, principals and parents); and TS dimensions of T.E. and E.I. of teachers.

Therefore, the null hypothesis of the present study that there exist no significant relationship between TE and EI is rejected with these dimensions. Thus, the hypothesis of the present study that there exists a significant relationship between TE and EI is retained with respect to IS, PK and CM; M; AGR (with pupils, fellow teachers, principals and parents); and TS dimensions and TE.

It means that IS, PK and CM; M; AGR (with pupils, fellow teachers, principals and parents); and TS dimensions of TE are associated with the EI of teachers.

It can also be observed from Table-2 that coefficient of correlation between D; CA; GAH (in relation to classroom) and PA dimensions of TE and EI of teachers are 0.03, 0.15, 0.01 and 0.06 respectively, which are not significant even at .05 level. This indicates that there is no significant relationship between these dimensions of TE and EI of teachers. Therefore, the null hypothesis of the present study that there exists no significant relationship between TE and EI of teachers is accepted with respect to D; CA; GAH (in relation to classroom) and PC dimensions of TE.

It means that disciplinarian behavior, organization of CA; GAH (in relation to classroom), and PC of TE is not associated with the EI of teachers.

Differentials between High and Low EI Teachers on Their Teacher Effectiveness (As a Whole and Dimension Wise)

Another objective of the present research study is to see the differences between high EI teachers and low EI teachers on their teacher effectiveness score (as a whole and dimension-wise). Keeping it in view 't' ratio were computed for this purpose.

An attempt has been made to form an extreme group, because total sample includes a bulk of cases of average type. This average group usually tends to diminish the sharper differences otherwise revealed in the high and low teacher effectiveness group. It is believed that the subjects scoring "high" or "Low" on teacher Effectiveness may perhaps yield sharper discrimination and precipitate stronger relationship with respect to emotional intelligence. It is for this purpose that the total sample of teachers has been classified into two extreme groups, viz, High EI and Low EI group respectively.

Table 3 - Significance of Difference between the Mean T.E. Scores of High and Low EI Groups of Teachers

| Variable                      | Groups | N  | Mean | SEd  | 't'  | Sign. Level |
|-------------------------------|--------|----|------|------|------|-------------|
| Overall Teacher Effectiveness | High   | 30 | 321  | 4.78 | 5.23 | .01         |
|                               | Low    | 30 | 289  |      |      |             |

Differentials between High and Low EI Teachers on their TE (as a whole)

It can be seen from Table-3 that the mean scores on TE of high and low EI group of teachers are found to be 321 and 289 respectively. The 't' ratio between them comes out to be 5.23. It is significant at .01 level. It means that the high and low EI group of teachers differ significantly with respect to their overall TE. Therefore, the hypothesis of the present study that there exist significant differences between TE of teachers belonging to high and low EI group is retained with respect to overall TE of teachers.

Table-3 further indicated that the high EI groups of teachers have obtained higher mean score on TE than the low EI group of teachers. It suggest that higher EI teachers are found to be more effective teachers as compared to lower EI Teachers.

Table 4 - Significant difference between the mean scores on different dimension of T.E. of high and low E.I. groups of teachers

| Sr. No. | Dimensions  | Mean Scores of EI teacher Group |            | SEd  | 't'  | Sign. Level |
|---------|---|---------------------------------|------------|------|------|-------------|
|         |   | High (N=25)                     | Low (N=25) |      |      |             |
| 1.      | Information Source  | 4.7                             | 4.1        | 0.18 | 3.15 | 0.01        |
| 2       | Motivation  | 9.01                            | 8.35       | 0.33 | 1.80 | NS          |
| 3       | Disciplinarian  | 13.20                           | 13.30      | 0.45 | 0.11 | NS          |
| 4       | Advisor and Guide relationship with pupils, fellow teachers, principals and parents | 37.70                           | 35.02      | 0.99 | 2.79 | 0.01        |
| 5       | Teaching Skill  | 72                              | 62         | 2.35 | 2.54 | 0.05        |
| 6       | Co-curricular Activities  | 13.50                           | 12.70      | 0.42 | 2.04 | 0.05        |
| 7       | Professional Knowledge  | 64.30                           | 58.10      | 2.11 | 2.95 | 0.01        |
| 8       | General Appearance and habits In relation to classroom                              | 28.10                           | 25.50      | 0.86 | 3.15 | 0.01        |
| 9       | Classroom Management  | 28.50                           | 26.66      | 0.75 | 2.99 | 0.01        |
| 10      | Personal Characteristics  | 47.30                           | 43.74      | 1.50 | 2.40 | 0.05        |

Differentials between high and low E.I. teachers on their T.E. (Dimension-wise)

Table-4 reveals that the mean scores of different dimensions of T.E. between high and low group of E.I. groups of teachers on information source (4.7 and 4.1); Advisor and Guide relationship with pupils, fellow teachers, principals and parents (37.70 and 35.02); Professional knowledge (64.30 and 58.10); General appearance and habits in relation to classroom (28.10 and 25.50); and classroom management (28.50 and 26.66). the 't' value for these dimensions have come out to be 3.15: 2.79:2.95: 3.15 and 2.99 respectively.

These are significant at 0.01 level of significance. Further, the mean scores on teaching skill; Co-curricular activities; and personal characteristics dimensions of T.E. of high and low E.I. groups of teachers are found to be 72 and 62; 13.50 and 12.70; and 47.30 and 43.74 respectively. The calculated



't' comes out to be 2.54; 2.04; and 2.40 respectively. These are significant at .05 level. This means that the high and low E.I. groups of teachers are found to differ significantly with respect to these dimensions of T.E. It can be further observed from the table that the high E.I. groups of teachers have obtained higher mean scores on these dimensions of T.E. than the low E.I. groups of teachers.

Therefore, the hypothesis of the present study that there exists significant difference between T.E. of teachers belonging to high and low E.I. groups is retained with respect to the information source; advisor and guide relationship with pupils, fellow teachers, principals and parents; professional knowledge; general appearance and habits in relation to classroom; and classroom management; teaching skill co-curricular activities and personal characteristics dimensions of T.E.

It can be seen from Table-4 that the mean scores on motivation and disciplinarian dimensions of T.E. of high and low E.I. group of teachers are 9.01 and 8.35 and 13.36 and 13.30 respectively. The 't' value come out to be 1.80 and 0.11. These are not significant even at the lowest acceptable level of significance, i.e. .05 level. Therefore, it can be safely said that the high and low E.I. groups of teachers do not differ significantly with respect to the motivation and dimensions of T.E.

Table-4 also indicates that both high as well as low E.I. groups of teachers have obtained competitively same mean scores on motivation and disciplinarian dimensions of T.E. Thus the null hypothesis of the present study there exists no significant difference between T.E. of teachers belonging to high and low E.I. is accepted with respect to the motivation and disciplinarian dimensions of T.E.

### Discussion of Results

*Correlates:* The findings pertaining to the relationship between T.E. and E.I. of HSST in the total sample study reveal significant positive relationship between two variables, i.e. T.E. and E.I.

In describing the relationship between various dimensions of T.E. scale, viz. IS; M; AGR (fellow teachers, principals and parents); TS; PK; CM with their EM of HSST have revealed significant relationship. Whereas the relationship in dimension of TE such as: D; GAH, co-curricular activities; and PC with EI of teachers have revealed insignificant of teachers have revealed insignificant (negative and positive) relationship respectively.

It can be concluded that EI is one of the factors for contributing the TE with respect to all dimensions.

*Differentials:* The results given earlier on TE differentials between the high and low EI groups of teachers revealed a significant difference in both groups. The high EI teachers are found to have higher TE as compared to low EI teachers.

The dimension-wise results indicate that IS; AGR, (relationship with pupils, fellow teachers and principals and parents); TS; CA, PK; GAH; CM; and PC dimensions of

T.E. differentials between the high and low E.I. teachers reveal significant differences. The high E.I. teachers are found to have better IS; AGR (with pupils, fellow teachers and principals and parents); TS; CA; PK; GAH; CM; PC as compared to low E.I. teachers. However on the dimension, M and disciplinarian of T.E. differentials between the high and low E.I. groups of teachers reveal insignificant differentials. The T.E. of various dimensions (viz. M and D) on differential between high and low E.I. teachers are found to have significant difference.

Above all, some of the findings of the present study revealed that high and low E.I. groups of teachers differ significantly with respect to the dimensions such as: PC and TS of T.E. It was also found that the high E.I. groups of teachers have good professional characteristics in comparison to low E.I. teachers. These findings supported by Chhaya's (1974) study that more effective teachers significantly have better personality favorable attitude towards teaching than in effective teachers.

Effective teachers were also found significantly more emotionally stable than ineffective teachers. Arrora (1976) in his study mentioned that the ability of T.E. and E.I. are useful in helping trainee teachers to "understand themselves better and the role of teachers". She said it was vital that teachers have the E.I. to identify students who felt frustrated or sad and be able to channelize those emotions into something positive, such as motivating pupils to finish tasks. Teachers also had to understand what may upset them in the classroom and the effects this would have on students. "We think that good teachers should be those who are highly intelligent emotionally".

From the above discussion, it can be said that Emotional of the teachers is one of the strongest factors for improving T.E.

### Educational Implications

The educational implications of the present study are not difficult to discern. The subject of study is of much importance in the present day context as there is a growing focus on T.E. and E.I. of the teachers including their enhancement of effectiveness of teaching and understanding power of one's own emotions as well as the emotions of others. The present study points out that the low emotional intelligence teachers are found to have lower teacher effectiveness in comparison to high emotional intelligence teachers. It is difficult to suggest any single measure which can directly enhance the teacher effectiveness of low emotional intelligence teachers.

The present study points out that the low E.I. teachers are found to have lower T.E. in comparison to high E.I. teachers. It is difficult to suggest any single measure which can directly enhance the T.E. of low E.I. teachers. Keeping in view the complexity of the relationship between T.E. and E.I. of teachers, some broad strategies can be suggested with regard to the T.E. Learning from the existing theoretical knowledge and empirical evidence the low E.I. teacher seem to be lacking in T.E. in their poor conditions of the college. As a matter of strategy, therefore, these teachers need to be



brought on par with other teachers when they enter into the teaching profession by arranging refresher courses, orientation courses, seminars, workshops and teacher training programmes for them. Another basic reason for the lower T.E. of the low E.I. teachers may be apathetic attitude of the head of the institution and governments. Therefore, it may be suggested that the government should provide a decent salary and medical facilities to the teachers.

From the above discussion, it can be said that E.I. is an essential ingredient in enhancing the T.E. Therefore, E.I. should be improved for the effectiveness of the teaching because E.I. is a far more reliable indicator of success than intellectual intelligence. It seems that what has been regarded as folk wisdom is now being corroborated by science. This is the greatest breakthrough in cognitive psychology in the twentieth century, with profound implications for education and the organization of society in general. Scientific work done in this area also confirms that it is possible to develop E.I. This may lead to improve interpersonal relations among human beings in the family, schools, colleges at the work place and elsewhere.

Last, but not the least, the role of the state and the Central Government seems to be crucial in helping the low E.I. teachers. The first responsibility of the government is a proper survey of the needs and problems of the low E.I. teachers. The government should plan some special programmes to bridge the gap between the high and low E.I. teachers in terms of their T.E. and other associated factors.

#### Suggestions for Further Research

The present study covers HSST from only one district. Therefore, a study drawing sample from the HSST of some more districts from the State of Gujarat and other states likely to provide comparatively more comprehensive picture of the HSST with respect to the variables under investigation. A study of different variables under investigation can be carried out at the primary, secondary and higher level of education. Such a longitudinal approach is likely to bring out their carry-over effects from one stage to the other. A more comprehensive study of some cognitive and non-cognitive variables comparing the junior college teachers can be undertaken. A research study can be carried out to study these differences in the background factors in relation to the said variables.

This study provides an empirical basis for understanding as to how much the high E.I. teachers have come up in comparison to the low E.I. teachers. Also the study points out the direction in which some steps can be taken to improve the psychological make-up of the low E.I. teachers in order to enhance their E.I. The effectiveness of the process of education is rightly seen in the effectiveness of the teachers. Necessarily, teacher training is called upon to be made available to all recruits to the teaching profession who are duly selected, attracted and invited for the service of education. The essence of a programme of teacher education

is "quality" and in its absence teacher education becomes not only a financial wastage but a source of deterioration in the educational standards. This implies that effective steps in the form of financial incentives, promotional avenues and respectful work place should be taken to develop as well as maintain and further enhance the effectiveness of all working teachers.

#### References

- Arora, K. (1976), Difference between Effective and Ineffective Teachers. Ph.D. Education, JMIU.
- Chhaya, S. (1974), Study on Emotional Intelligence and their I.Q. Unpublished thesis.
- Edannur, S. (2010). Emotional Intelligence of Teacher Educators. *Int. J. Edu. Sc.*, 2(2): 11-12. As retrieved from <http://hvrvw.krepublishers.com/02-Journals/IJES/IJES-02-0-000-10-Wpb/IJES-02-2-000-10-Abst-PDF/IJES-02-2-115-10-029-Srgekala-E/IJES-2-2-115-10-029-Sreekala-E-Tt.pdf> on 15.3.13.
- Garret, H.E. (2000). *Statistics in Psychology and Education*, Vakils, Ferrer and Simons Ltd. Bombay.
- Golman, D. (1996), *Emotional Intelligence. Why it can matter more than IQ*. Bantan Books, New York.
- Goleman, D. (1998). *Working with Emotional Intelligence*. New York: Bantam Books.
- Jane: Susane. (1991). Identifying the Characteristics of Effective Teacher preparation programme faculty. *Dissertation Abstract International*, Vol.51 No.8, pp.2714A.
- Mangal, S. K. & Mangal, S. (2011). An Emotionally intelligent Teacher at the Heart of Sucontinuous and Comprehensive Edutrack Vol.10, No.8, pp6-8.
- Mangal, S. K. & Mangal, S. (2009). *Mangal's Emotional Intelligence Inventory National Psychological Corporation, Agra*.
- Mayer, J.D. & Salovey, P. (1990). Emotional intelligence & Imagination, *Journal of Cognition and Personality*, 9, pp.185-211.
- Patel R. S. (2011). *Research Handbook* (1st Ed.) Saarbrucken, Germany; LAP LAMBERT Academic Publishing GmbH & Co.
- Patel R. S. (2012). *Statistical Techniques for Data Analysis* (1st Ed.) Saarbrucken, Germany; LAP LAMBERT Academic Publishing GmbH & Co.
- Patel R.S. (2013), *Manual for Teacher Effectiveness Scale*, Published by Akash Manomapan Kendra, Ahmedabad.
- Patel R.S. (2013), *Manual for Emotional Intelligence Inventory*, Published by Akash Manomapan Kendra, Ahmedabad.
- Sudarshan S. and Sasi kumar S. (2002), *Traditional Intelligence (IQ) and Emotional Intelligence (EQ)*, University News Vol. 40(12)



## RECOMMENDATION AND SUGGESTIONS FOR TEACHER EDUCATION PROGRAMME

**R.S. Patel**

Professor & Head, Department of Education  
Director, School of Psychology, Education & Philosophy, Gujarat University

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*Three of the 13 themes discussed in the MHRD document have a close bearing on issues with regard to reform in the sector of teacher education. These are concern about learning outcomes; reforming the school examination system and revamping teacher education. Low learning outcomes are evidently the single most important concern for policy makers. The paper elaborates on these issues alongwith sure recommendation for teacher education.*

**Keywords:** Recommendation, Suggestion, Teacher Education, Education, Teacher

Concerns under the theme of *revamping teacher education* include a focus on issues of teacher motivation, competence and accountability; the acute shortage of teachers and the wide prevalence of teacher vacancy across several states. Questions posed related to the need to understand why teacher-training programmes have failed to bring about improvement in the quality of teaching-learning processes and the need for evolving measures of teacher performance assessments. Specifically the questions are: 1. Why have teacher-training programmes failed to bring about improvements in the quality of teaching-learning process? 2. What are the workable solutions towards this? 3. Are teacher performance assessments necessary to build a culture of teacher accountability? 4. Should promotion among teachers be contingent on their performance? 5. Should there be mandatory yearly in-service training for teachers?

Some questions also relate to the issue of filling up teacher vacancies and evolving computerized methods for teacher transfers. It is nevertheless clear that the focus is on creating systemic methods of accountability driven by the belief that this would ensure quality improvement in processes of teaching and learning.

Even through the first section begins with the acknowledgement that children's learning outcomes are significantly linked to the quality of teaching-learning process children experience and how this is deeply related to how teachers are trained and supported, it is evident that the kind of questions posed in the following sections belies this understanding.

Duration of pre-service teacher education programme is a critical issue in a teacher education. The NCTE implemented two years teaching programme but, it is fail and most of the students are not ready to join this programme.

Two years teacher education programme for B.Ed. and two years programme for M.Ed. spoil four years of teacher trainees and for this reason they are hesitate for teacher education  $10+2+3$  (graduation) + 2 (PG) + 2 (B.Ed.) + 2 (M.Ed.) = 21 years of duration of study which is very lengthy as compare to other professional courses like medical and engineering. In medical  $10+2+4.5 = 16.5$  years of duration for to be a M.B.B.S. and for Engineering  $10+2+4 = 16$  years of duration for to be a B.E. (Engineering) and as compare to M.B.B.S. and B.E. what will be the probable salary of teachers? It is very less and that make him frustrated

and hesitate for entering for teacher educator programme.

Not only the students but their parents and guardians are also worried about the lengthy duration of 4 years teacher educators programme.

In the present scenario, we have observed that almost in all the states number of the students in B.Ed. and M.Ed. are decreasing and many B.Ed. and M.Ed. colleges are closed and shut down due to this reason. There are so many post graduate departments in state universities of all over India lacking of M.Ed. students admission due to two years programme. In our Gujarat, state most of all the university have not enough students in M.Ed. course and some of the department have zero number of students. This is very serious thing for teacher education. So we have to think about the span of the course.

Although Justice Verma Commission recommended the duration of teaching hours but not the span of the training programme so, it is critical that the process of redesign of teacher education programme in line with new norms, which are fusible and practical. So, the teacher education programme should be not more than three semester; first and second semester inclusive training in training institution and practice in school and third semester is completely for internship with school. The theory part should be not more than 20% and practical part should be less than 80% should be included in the training programme. So, we can prepare strengthen teacher for the schools. After the completion of Internship, the University awarded the degree of B.Ed. at the end of third semester.

M.Ed. is the dominant post-graduate programme in education offered by Indian universities. M.Ed. graduates are employed by the Boards of School Education, Directorates and Inspectorates of Education, schools, SCERTs, teacher training college and as teacher educators. The assumption seems to be that the omnibus M.Ed. can create a professional capable of contributing meaningfully to the varied role.

Although M.Ed. is generally accepted as the requirement for one to become a teacher educator, the programme as offered in most universities is simply an extension of the B.Ed. seriously lacking in inputs focused on the preparation of teacher educators, secondary or elementary.

In India, overall number of teachers has increased by 58 to 72 percent from 2001 to 2015. However, number of the



teachers in increased by 99% during the same time period in which primary teachers increase 24% where as upper primary and secondary school teachers increased by 155% and 83% respectively.

Estimated vacant post in the primary schools for head master is 38% for upper primary school 56% and for secondary school, it is 69% and vacant posts for assistant teachers in primary schools it is 20%, upper primary school 49% and secondary school 59%. These data shows that need of the teachers gradually increased and at the present scenario, students are avoiding the teacher education course. So, after 10 years there may be serious crises for teachers in all states of India. So we have to think about the teacher educator programme and the time duration of the programme.

For strengthen teacher M.Ed. is to be compulsory for all who want to be a teacher. Only the B.Ed. training is not sufficient for teachers. So, in all state and in all teaching field like; primary teachers, secondary teachers, higher secondary teachers, teacher educators, college teachers and technical teachers. The B.ED. & M.Ed. programme should be compulsory. In some European countries like Finland, Netherland, Malaysia, Thailand, Singapore and some states of the U.S.A. has compulsion of B.Ed. + M.Ed. to be a teacher in any field.

It is important to look at the *specialization profile required for teacher educators* especially in view of the fact that a variety of foundational and school subject disciplines are required to be represented. Data reveals that most teacher educators who have obtained a high first division in M.Ed. have typically obtained less than 55 percent in a M.A./M.Sc./M.Com., programme and therefore are not eligible to take the NET examination in the parent discipline. Thus all teacher educators are recruited on the basis of clearing the NET (or state equivalent) examination in education. This is a structural problem that disallows the entry of talented faculty with specialization in social sciences, sciences, languages and mathematics at the master's level, thus leaving a vacuum in specific school subject specializations.

Duration of the M.Ed. two years is not necessary and not acceptable to the peoples and society. So, it need one year two semester programme with maximum 200 working days with a six hours duration of work and there should be internship programme for three months at the end of the M.Ed. programme. After the completion of Internship, the University awarded the degree of M.Ed.

The M.Ed. programme should be specialize in different areas in such as teacher education, curriculum planning, evolution, counseling, sociology and philosophy of education, psychological testing, data analysis and interpretation, advance educational research methodology, educational administration and planning, finance and education. Apart from addressing the immediate needs of preparing teachers. Universities need to be encouraged to offer post-graduate studies in education with an orientation for interdisciplinary study of educational practice and a sound

grounding in the relevant subject- example a deep understanding of science for science educators and language for language educators, techno educators etc.

This necessarily means that in addition to revamping the existing M.Ed. programme, we need to create multilateral entry points for the study of educational studies as a pursuit in higher education. Permit graduates from various courses apart from B.Ed. to seek admission into M.Ed.; broad-base the profile of teacher educators by including persons who have knowledge of the foundational disciplines of teacher education, such as psychology, philosophy, social sciences without necessarily having a M.Ed. degree for to be a college teacher.

**Recommendation For The Teacher Education:** There should be common entrance test (like NEET) after graduation for entry of teacher education programme. The need base teacher education programme should be arrange state wise. So, the placement should be 100% after training. Framework of teacher education should be integrated with B.Ed. and M.Ed. course with having 5 to 6 semesters. Skill based and quality based teacher training programme with 20% of theory and 80% of practical work should be introduce with the span of one year and separate time for the internship programme. All the teachers should be have compulsion B.Ed. and M.Ed. to be a teacher in all teaching field like; primary teachers, secondary teachers, higher secondary teachers, teacher educators, college teachers etc. (In some European countries like Finland, Netherland, Malaysia, Thailand, Singapore and some states of the U.S.A. has compulsion of B.Ed. + M.Ed. to be a teacher in any field.) In-House training colleges should be introduce to get the quality of the teacher. (German model) There should be 100% placement at the end of teacher training programme. There should be a need for monitoring body for teacher education at University level, state level and national level. The coordination of teacher education with universities and council and UGC. Mind setup of the students to enter the teacher education should have aptitude of teaching. Assurance of placement of job in teacher education and the handsome salary should be provided by the government or private sector. To design a framework for integrated course of B.Ed. and M.Ed. for the accreditation of teacher education institute having 4 to 5 semesters. The monitoring setup in the teacher education must be covered with only the educationists who are experience with this B.Ed. and M.Ed. course. So the professors and faculties attach with the University departments should have assign the duty of monitoring the teacher education in all level. To encourage the research by Indian scholars on teacher education in other countries which are link with India. To promote the research studies and project works for the international teacher education programme. To construct short term orientation programme regarding the research methodology to improve the quality of research work for teacher education. To provide an institution space and continuity for teacher education. 18. To established the norms for academic account ability on all the institute of teacher education.



## AN INVESTIGATION OF THE EFFICACY OF MENTORING AND SUPERVISION TOWARD IMPROVING TEACHING PROFESSION OF THE PROSPECTIVE SCIENCE AND MATHEMATICS TEACHERS DURING TEACHING PRACTICE IN SCHOOLS

Daudi Mika Mungure

Department of Computer Science and Mathematics,  
Faculty of Computing, Information System and Mathematics,  
The Institute of Finance Management (IFM), Dar es Salaam Tanzania.

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*This paper investigated the efficacy of mentoring and supervision toward improving teaching profession of the prospective science and mathematics teachers during teaching practice sessions where Lupanga and Morogoro secondary schools were selected. Many challenges have been reported by different scholars on mentoring and supervision during teaching practice exercise in schools hence the researcher doubt whether mentoring and supervision provided to prospective science and mathematics teachers attain its efficacy toward improving their teaching profession. The study employed qualitative approach with a case study design. Observation, key informant interview and focus group discussions were the main methods of data collection where 38 respondents were purposively involved in data collection. Content analysis was used to analyze data thematically. The study revealed that the mentoring and supervision to prospective science and mathematics teachers during teaching practice session in schools did not attain its efficacy that was to improve their teaching profession as the mentoring provided to prospective science and mathematics teachers were minimal and poor in the practicing schools. Also the assessment conducted by supervisors were not proper toward improving teaching profession for example table assessment, short time in assessing student teachers in classrooms, differences by themselves in stating specific objectives which made student teachers to be confused and lack of the provision of constructive feedback to the student teachers after assessment.*

**Keywords:** Mentoring, Supervision, Efficacy, Teaching Practice, Science and Mathematics, Prospective Science and Mathematics Teachers, Student Teachers.

During teaching practice exercise student teachers are attached to the subject teachers and heads of subjects as mentors departments so as to guide and cooperate with them on how to teach throughout their Teaching Practice (TP) exercise. Mentors support student teachers in terms of buddy support, technical advice and classroom management tips in order to improve their teaching profession. Apart from being mentored, student teachers are also assessed by their supervisor during teaching practice to see the extent to which they can link theory learnt in the college and practice in the classroom.

Mentoring During Teaching Practice: Mentoring is the process where more experienced teachers support novice teachers in terms of buddy support, technical advice, and classroom management tips in order to improve their teaching profession (Athanases & Achinstein, 2003). The main objective of mentoring is both a professional development and a personal support from their mentors which requires openness and confidentiality (Lindgren, 2005). For teaching practice to be effective each student teacher must be assigned to a qualified and experienced subject or classroom teacher during teaching practice to guide and supervise them in the whole period of TP (Holloway, 2001) In line with this idea, Kiggundu and Nayimuli (2009) conducted a study in Vaal University of Technology in South Africa and revealed that the overall impression of the mentors given to the student teachers was fairly positive. This response indicated that mentors in different countries are well done in a supportive way. They said that the mentors gave the student teachers valuable advice and shared their skills and experiences that helped the student teachers to gain more skills and experience in the process of teaching for example the preparation of

lesson plan. These implied that the student teachers became motivated to take up the teaching profession after teaching practice because of the constant guidance they received from their mentors. This shows how the mentorship is important to the prospective science and mathematics students during teaching practice exercise. The study conducted by Maphosa, Shumba & Shumba (2007) in Zimbabwe revealed that student teachers appreciated mentors who treated them with respect and made teaching practice to be useful as the teaching practice with mentors gave student teachers hands-on experience in schools and it helped them to make the decision to become teachers.

Notwithstanding positive responses from mentors, some negative aspects about mentors during teaching practice exercise are also revealed from different scholars. The study conducted by Kyriacou and Stephens (2010) in Canada revealed that experienced teachers were leaving all the work to the prospective teachers and run away when they arrived at their schools, hence the student teachers failed to cope with the heavy workload. These also evidenced by Kiggundu and Nayimuli (2009) in South Africa who observed that some of the respondents did not get any support from the school based mentors and some of respondents saw it as exploitation and abuse by the mentors who imposed exorbitant demands on prospective teachers in terms of workload.

Moreover, Kyriacou and Stephens (2010) revealed that some experienced teachers did not regard the student teacher as 'teachers' when teaching in the classroom as they were given an incidental role in the classroom by experienced teachers, example helping individual pupils during lessons while the experienced teacher takes the lead, hence the student teachers



were perceived as helpers in the class and not teachers. Apart from that the study conducted by Maphosa, Shumba and Shumba (2007) on teaching practice in Zimbabwe some mentors were observed exhibiting unprofessional conduct and engaging in unprofessional acts, for instance absenting themselves from duty, reporting late or sending pupils on personal errands even during class hours. Such unprofessional behaviour is contrary to the role of mentors. In this case mentors should be informed and insisted on their professional roles to the student teachers that is to guide them from the first day to the last day as they have gone there to learn. More than that, the study conducted by Ranjan (2013) in India revealed that the student teachers were not introduced to other members of staff which made them feel a sense of alienation and they were not respected as their fellows or experienced teachers rather than being treated as student teachers like proxy teachers. Lastly, the study conducted in Southern highland of Tanzania by Njiku (2016) revealed that during TP the host teachers felt inferior and left all activities to student teachers, on top of that they used quiet different offices or given the isolated offices different from the common one used by host teachers things which showed that there were no close interactions with the student teachers. The author also reported that only few student teachers which were about 31.6% got assistance from mentors to prepare lesson plans and schemes of work in the first day of their teaching practice.

Supervision during teaching practices: Supervision is the process of assessing student teachers during teaching practice, thus assessment in the teaching practice is the diagnosis of teaching and learning process and monitoring progress of the student teachers, grading students, predicting future achievements and motivating students (Chase, 1999). During teaching practice exercise the student teachers are assessed so as to realize their strengths and weaknesses, and through feedback given by their supervisors on what went on in the classroom, they may improve and develop more skills. This exercise is very important in helping prospective teachers to make self-evaluation by checking the methods and strategies used and trying to suggest some ways to be employed in order to reduce shortfalls, as the assessment is an integral and prominent component of the entire teaching and learning process (McInnis & Devlin, 2002). Also supervision exercise helps prospective teachers to make reflections after teaching hence can be able to refine their skills. Feedback from the practicing school, administration, supervisors and prospective teachers must be taken seriously, so that the teaching practice exercise can play an effective role to develop confidence, vision and competency in the prospective teachers teaching profession (Komba & Nkumbi, 2008).

However, in a study which was conducted by Kiggundu and Nayimuli (2009) in South Africa on teaching practice it was revealed that most of the supervisors were not assessing

the student teachers according to specific guidelines given to them by the training institution. Also there were no discussions provided to some of the prospective teachers after assessment. In a study which was conducted by Kirbulut, Boz and Katucu (2012) in Scotland on teaching practice revealed that there were no feedback given after the classroom sessions, instead the supervisors will say the teaching was fine even if it was not fine. In Pakistan Gujjar, Naoreen, Saifi & Bajwa (2010) argued that during teaching practices most of the supervisors had different orientations on assessment which brings confusion among student teachers. For example, the right time to use teaching aids and how to evaluate students after teaching. Also the study conducted by Kiggundu (2007) in South Africa observed that some supervisors assume that students are already equipped with the necessary knowledge and skills required to teach and therefore are reluctant to assist them with the development of basic skills. Inadequacy in supervisor guidance and training may result in ineffective use of practical teaching and negative experience to teaching profession.

Moreover, in a study by Oppong (2013) in Ghana on supervisors' remarks in teaching practice, it was revealed that supervisors do not have sound knowledge of the subject matter, this means that some supervisors assess the subjects which are not of their expertise hence they lack knowledge of the specific subject methodology through which they cannot give out useful remarks during assessment. For example, when the Kiswahili language teacher assesses the student teacher teaching mathematics in the classroom or conducting a science practical in the laboratory, then the assessor will end up with the general principles of teaching and fail to judge the subject matter knowledge accordingly. This type of assessment will not favour the student teachers, as the supervisor cannot assess the subject matter knowledge and its actual methodology used so as to correct them which will lead to the improvement in teaching.

In Tanzania, the study conducted by Komba and Kira (2013) on teaching practice in Tanzanian schools revealed that the role of supervisors was ineffective as most of the them were not flexible to guide, advise and discuss with the student teachers their strengths and weaknesses revealed during teaching. This is due to insufficient allowances to accommodate them following the large number of students and few days given to conduct assessment due to shortage of funds. The study conducted by Mahende and Mabula (2014) in Tanzania revealed that some supervisors there were no discussions before and/or after the classroom teaching, the student teachers had to learn on their own from the written comments in their assessment forms. Hence, the student teachers lack immediate and constructive feedback from supervisors as the supervision role has to serve as a catalyst to the science and mathematics student teachers' process of learning to teach. Lastly, the study



conducted by Njiku (2016) in Tanzania revealed during teaching practice exercise in the southern highland of Tanzania, there were major variations in writing specific objectives, assessment activities and remarks among the student teachers.

Different scholars have tried to give out how mentorship and supervision help prospective science and mathematics teachers to improve their teaching professions during teaching practice exercised if it is applied as it is required, this is by providing guidance and constructive feedback to the prospective teachers. However, many challenges have been revealed by different scholars on mentoring and supervision areas which made the prospective science and mathematics teachers to be ineffective in their teaching profession during teaching practice exercise.

These raised doubt to whether the mentoring and supervision achieve its efficacy to prospective science and mathematics teachers during teaching practice exercise in school which is to improve their teaching profession. Studies have been conducted in different countries including Tanzania on teaching practice exercise in general to investigate other parameters. There is no study conducted so far specifically to investigate the efficacy of mentoring and supervision toward improving teaching profession of the prospective science and mathematics teachers during teaching practice exercise in Tanzania secondary schools. This study aimed to fill the gap

### General and Specific Objectives

The general purpose of this study was to investigate the efficacy of mentoring and supervision during teaching practice exercise. Specifically the study intended to investigate the efficacy of mentoring and supervision toward improving teaching profession of the prospective science and mathematics teachers during teaching practice exercise in schools. The specific objective followed by the key research questions which were; To what extent do mentoring help prospective science and mathematics teachers to improve teaching profession during teaching practice exercise?; To what extent do supervision help prospective science and mathematics teachers to improve their teaching profession during teaching practice exercise?

### Methodology

Study Area: This study was conducted at Morogoro Teachers' college, Lupanga practicing school and Morogoro secondary school. Morogoro Teachers' college was obtained through simple random sampling and Lupanga and Morogoro secondary schools were obtained through purposively sampling since were the schools with large number of teachers. Eight science and mathematics college tutors, two heads of secondary schools, four heads of science and mathematics department in secondary schools and twenty four science and mathematics student teachers were purposively selected.

Research Design and Data Collection: The study employed a qualitative research approach where a case study research design was used. Qualitative data were collected by using observation, key informant interviews and focus group discussions.

### Data Analysis

Content analysis was used to analyse data which were obtained through observation, interviews and focus group discussion. In depth descriptions of specific themes based on research objectives and their related questions were provided as most of the data were in form of words.

### Results and Discussions

Mentoring During Teaching Practice: During teaching practice exercise in the practicing schools, the student teachers have to be guided on how to teach by the host teachers (mentors) as mentors are full and experienced teachers. In this part the researcher investigated how the prospective science and mathematics teachers were mentored during teaching practice sessions in secondary schools toward improving their teaching profession

During observation of the teaching practice sessions in practicing schools by researcher, the researcher come into contact with poor and minimal of mentoring to the student teachers. When observed students interviewed on why there was minimal and poor mentoring, one of the biology student teacher responded that:

*"...the heads of departments are very busy with their own preoccupations and sometimes are not available, and they treated us as qualified teacher that is why they are not with us in the classrooms..."*

During interviews with the heads of departments in the secondary schools, one of the head responded that:

*"...my teachers provide mentoring to the student teachers if they want or ask for any assistance; otherwise they are left on their own to continue their TP..."*

During the interviews with the heads of schools, one of the head argued that:

*"...our school teachers provide mentorship if the student teachers need them, because they are at school and very few teachers provide mentoring although we insist all teachers to cooperate with students teachers when they come..."*

The responses are also supported by the focus group discussions where one student teacher explained that;

*"...only few teachers provide mentorship to students, others hand all activities to student teachers and run away. Also in some schools few student teachers get mentors as other schools have no science and mathematics teachers at all when we go for teaching practice hence no assistance in the difficult topics"*

All quotes imply that mentoring were minimal provided or very poorly conducted during teaching practice sessions in



secondary schools as other prospective teachers did not received any help from mentors to shape their teaching profession. These findings are in line with the findings of Kyriacou and Stephens (2010) in Canada, Kiggundu and Nayimuli (2009) in South Africa and Njiku (2016) in Tanzania who revealed that experienced teachers were leaving all the work to the student teachers, hence the student teachers failed to cope with the heavy workload. Also the student teachers did not get any support from the school based mentors and some of the student teachers saw it as exploitation and abuse by the mentors who imposed exorbitant demands on student teachers in terms of workload.

Supervision during Teaching Practice exercise: During teaching practice exercise the student teachers have to be assessed by their tutors (supervisors) in order to realize their strengths and weaknesses through the feedback given by their supervisors on what went on in the classroom during the teaching process in their classrooms. In this part the researcher investigated on how the student teachers were assessed during teaching practice toward improving their teaching profession.

During teaching practice sessions the researcher observed two assessments of the student teachers, the first one involving the 'table assessment' as the student teachers were invigilating midterm test and the second was in the classroom. Table assessment is the assessment which is done by looking at the scheme of work and lesson plan of the student teachers or any other prepared teaching and learning resources and marks are awarded to the student teacher without actual teaching in the classroom.

The first assessment which was a 'table assessment' was not helpful to the student teachers as it was just the review of lesson plans and scheme of works. In this case the supervisors did not observe some important skills in the classroom such as mastery of subject matter, teaching methods, classroom management and other skills which would have been useful for the student teachers to get feedback on them.

The comments from the supervisors were written in an assessment form such a way as if they entered in the classroom and observed the student teacher teaching. Such comments explained that the student teacher did well in all areas including mastering of subject matter, appropriate use of teaching methods, very creative in using teaching and learning aids, quality and quantities of learners activities as well as high ability to manage classroom, to mention few. This kind of supervision is very bad as it kills the student teachers' initiatives following the good comments given while it was not true in the reality. Student teachers should be given a real feedback from real observations which would improve their teaching skills in the teaching profession. Hence, this type of supervision which is table assessment should be prohibited and the real supervision in the

classroom should be promoted so as to observe different teaching skills of the student teachers.

The second assessment was done one day after the opening of the school as both students and student teachers were earlier on midterm break. The exercise was also less helpful to the student teachers as there were no any proper preparation since they had just come from holidays. Supervisors took 15-25 minutes out 80 minutes in the classroom due to a large number of student teachers who needed to be assessed per day. The process pushed the supervisors to the wall, and they managed time by observing some important skills the student teachers had in very few minutes and left the classrooms. The feedback was then given in groups for most student teachers and sometimes individually and it took mostly 5-10 minutes depending on someone's comments. No discussion was made before the teaching.

The findings from the observations were also supported by tutors' interviews and focus group discussions where six tutors out of eight viewed that the number of days given for student teachers' assessment were not enough as there were so many student teachers to be assessed, that is why they assessed them using 10-15 minutes so as to finish the exercise but rarely giving valuable feedback. The other two argued that due to the limited funds they just assessed in a hurry with no time to give overall feedback whether before or after the assessment other than students finding it in their assessment form and their lesson plans. Also all interviewed tutors revealed that no overall feedback was given to the student teachers after coming back to the college due to the fixed timetable and also there was no such plan given by the college management.

During focus group discussions student teachers argued that the tutors assessed them in classroom in a range of 10-15 minutes while others did not enter the classrooms as they just took their lesson plans and schemes of work, flipped through them and concluded were enough. They also argued when they got variations in assessments from different supervisors they got confused due to the contradictions of the supervisors especially in the area of stating specific objectives.

For example the researcher observed a lesson plan prepared by one biology student teacher where the first supervisor found the student teacher had written the specific objective that "By the end of 40 minutes every student should be able to define the term neurone and describe the structure of neurone i.e. sensory neuron", and complained that the word 'should be able' was not correct and instead the student teacher was instructed to use 'is expected to'. Then the student teachers changed and start to use "is expected to". During the second assessment a different supervisor came and crossed the word 'is expected to' and indicated that the



correct one was 'should be able to'. These make the student teachers to be confused as tutors themselves do not talk the same language on the same thing. The researcher argued that the word 'should be able to' be considered more correct because each student has to achieve the specific objective by the end of the 40 minutes through the guidance of the teacher.

During interviews with the heads of departments on whether they assessed student teachers who came in their departments before the supervisors visited them they revealed that they did not do so as they were not informed whether they were also allowed to supervise the student teachers as one of their responsibilities. These findings imply that during teaching practice the student teachers got the type of assessment which couldn't improve their teaching profession following the poor assessment strategies done by their supervisors and the heads of subject departments in the practicing schools. These findings are in line with the findings of Kiggundu and Nayimuli (2009) in South Africa and Kirbulut, Boz and Katucu (2012) in Scotland who revealed that during TP there were no discussions provided to some of the student teachers after assessment instead of saying it was fine even if it was not fine. Also the findings are in line with the findings of Mahende and Mabula (2014) in Tanzania who argued that some supervisors were not discussing with student teachers before and/or after the classroom teaching, the student teachers had to learn on their own from the written comments in their assessment forms.

### Conclusion and Recommendations

The findings of this study revealed that the efficacy of mentoring and supervision to prospective science and mathematics teachers was not achieved to improve teaching profession of the student teachers during teaching practice exercise. This is because during teaching practice, the mentoring provided to prospective science and mathematics teachers by host teachers were minimal and poor for a student to improve his or her teaching profession as well as improper assessments conducted by supervisors, for example table assessment, short duration of time in class, contradiction among supervisors themselves in stating specific objectives as well as failure of to give constructive feedback to the prospective teachers.

The researcher recommended that there is a need of raising awareness to the host teachers in practicing schools so that they can understand that mentoring to prospective teachers are part and parcel of their responsibility during teaching practice. Also teachers colleges and tutors should review the assessment part either by increasing resources so as to get enough days to be in the field to assess student teachers and also to plan the time in which students will be in the classroom so as to avoid the table assessment that is the review of lesson plans and schemes of work only leaving the real classroom implementations.

### References

- Athanases, S.Z., & Achinstein, B. (2003). Focusing new teachers on individual and low performing students: The centrality of formative assessment in the mentor's repertoire of practice. *Teachers College Record*, 105(8), 1486-1520.
- Chase, C.I. (1999). *Contemporary assessment for educators*. New York: Longman.
- Gujjar, A.A. (2009). *Teaching practice: Concept, stages, objectives and suggestions*. Retrieved from <http://www.addthis.com/bookmark.php?v=20>
- Holloway, J. (2001). The benefits of mentoring. *Educational Leadership*, 58(1), 85-86.
- Kiggundu E., & Nayimuli, S. (2009). Teaching practice: A make or break phase for student teachers. *South African Journal of Education*, 29(3), 345-358.
- Kiggundu, E. (2007). Teaching practice in the greater Vaal triangle area: The student teachers experience. *Journal of College Teaching and Learning*, 4(6), 25-36.
- Kirbulut, Z.D., Boz, Y., & Katucu, E.S. (2012). Pre-service chemistry teachers' expectations and experiences in the school experience course. *Australian Journal of Teacher Education*, 37(3), 41-57.
- Komba, S.C., & Kira E.S. (2013). The effectiveness of Teaching practice in improving student teachers' teaching skills in Tanzania. *Journal of Education Practice*, 4(1), 157-163.
- Komba, W.L., & Nkumbi, E. (2008). Teachers professional development in Tanzania: perceptions and practices. *Journal of International Cooperation*, 11(3), 67-83.
- Kyriacou, C., & Stephens, P. (2010) Student teachers' concerns during teaching practice, *Evaluation and Research in Education*, 13(1), 18-31.
- Mahende, G.A., & Mabula, N. (2014). Is teaching practice for grading or improvement? Examining student teachers' perception and experience at the University of Dar es Salaam, Tanzania. *African Education Research Journal*, 2(1), 1-11.
- Maphosa C., Shumba, J., & Shumba, A. (2007). Mentorship for students on teaching practice in Zimbabwe: Are student teachers getting a raw deal? *South African Journal of Higher Education*, 21(3), 296-307.
- McLinnis, J. R., & Devlin, M. (2002). *Assessing learning in Australian Universities*. Canberra: Centre for the Study of Higher Education.
- Njiku, J. (2016). School based professional support to student teachers in preparation of teacher professional documents. *Voice of Research*, 5(3), 1-5
- Oppong, C.A (2013). Supervisors' remarks in teaching practice: The perspectives of history student teachers. *Journal of Education and Practice*, 4(17), 154-161.
- Ranjan, R. (2013). A study of practice teaching programme: A transitional phase for student teachers. *Voice of Research*, 1(4), 24-28.



## EFFECTIVENESS OF PROGRAMME LEARNING MATERIAL FOR TEACHING PHYSICS IN CLASS X

**Vandana Singh**  
Assistant Teacher, Nagpur

Voice of Research  
Volume 5, Issue 4  
March 2017  
ISSN 2277-7733

### Abstract

*The study investigated the effectiveness of programme learning material over traditional teaching method of X class students in teaching physics. The main objectives of the researcher is to develop programme learning material for teaching physics to the students of X std and also compare the effectiveness of programmed learning material and traditional method on the achievement of students. In the study total 60 students participated. The researcher selected the two groups randomly where each one was composed of 30 students & were labelled as experimental group & Control group. Students in the experimental group was subjected to treatment using programme learning material respectively while students in the control group were taught using the traditional method of teaching. The researcher administered pre test and post test in both the groups before teaching commenced and after the teaching. The mean of post test of control group is 25.03 and standard deviation is 3.48. The mean of post test of experimental group is 32.27 and standard deviation is 4.11 and the t value is 7.59. The study reveals that students learned with programme learning material performed better than the students taught with traditional method. Result revealed a statistical significant effect of programme learning material over traditional teaching method on academic achievement of students.*

**Keywords:** Programme learning material, traditional method, physics

B. F. Skinner introduced programmed instruction at Harvard in 1954, and much of this system is based on his theory of the nature of learning. Programmed instruction allows students to: answer questions about a unit of study at their own rate; check their answers without their teacher's assistance; and advance only after answering correctly. Programmed learning material is concerned with the selection and arrangement of educational content based upon what is known about human learning. It is a process of constructing sequences of instructional material in a way that maximize the rate and depth of learning. Every child can learn, but some do so more or less easily, and retain the information or skills longer or less well. When knowledge is introduced in a carefully programmed sequence that begins with a global story, it tends to attract initial interest. Today's classes are overcrowded and individual attention is not possible. There is also difficulty in covering the syllabus. Problem of maintaining discipline in the class also becomes difficult in overcrowded classes. Large quantum of knowledge to be imparted to a large population. What is needed is education explosion and it is here that the programmed instruction comes into being as an innovation step in this new direction towards individualisation of instruction.

### Features Of Programme Learning

In programme learning material the subject matter is broken into easy steps and each step is presented in several sentences each called frame. The frames are arranged sequentially. The frames require that the learner makes some kind of response an answer to a question, an activity to demonstrate the understanding of the material i.e frequent response is required of the student. There is immediate confirmation of the right answer or correction of a wrong answer given by the pupil. Units are arranged in a careful sequence which shapes the behaviour. The content and sequence of the frames are subject to the actual try out with the pupil and are revised on the basis of data gathered by the programmer. Goals to be achieved are evaluated and stated specifically. Revision of programmed material is based on the response of the learner. In Programmed learning the suitability and appropriateness of the material presented depends upon the learner. If the learner makes many mistakes the programmed material should be rejected. Each pupil responds at his/her own pace without any threat of being exposed to any humiliation in a heterogeneous class the learner is free to vary his/her own rate of learning independent of other learner.

### Principles

There are five basic principles of programming  
Principle of small steps - According to this principle we need to set small steps in order to prevent a learner from stumbling as much as possible. When he makes a mistake, there is the risk of being labeled a failure.

Principle of Immediate feedback - Let a learner know whether his/her answer is correct or incorrect immediately. Give the learner the subsequent question after he/she knows whether his/her response is right or wrong

Principle of Active responding - To what extent a learner can understand is judged by making him/her answer questions. The extent of a learner's understanding is ascertained from what is demonstrated in the responses.

Self Pacing - Let the learner decide the speed of learning so that he/she can learn at his/her own pace. Consider that an appropriate speed varies from learner to learner.

Student testing - Whether the program is good or bad is judged not based on a specialist's opinions, but whether learning is actually established or not. To that end, get learners who have yet to learn the subject matter to try the program under development. Based on the trials, improve the material as necessary.

### Need of Programme learning material

In India teaching physics has been oral in character with the some demonstrations thrown, in schools there are either have been talked much about but most of these are not implemented. The curriculum is not organised psychologically and text books are written traditionally without keeping in view the process of learning. Methods of teaching physics are dull and generally ineffective. Teaching is aimed at performance by the students in examinations and not at real learning of the subject matter learning in scientific method of working, problem solving, creative thinking and development of scientific skills, interests, attitudes and application of the knowledge remains in the stage of neglect. There is lack of research in teaching physics the contents are old and the condition is still deteriorated by the different media of instructions throughout the country.

The teacher's initiative is often crushed by the traditional curriculum and his teaching becomes dull and lifeless due to the pressure of the dead weight of examinations which often demands little more than good memory. Programmed learning of physics will develop curiosity of the student to acquire the aim of democratic education.



Sample - For the present study sample of 60 students was taken from X grade students from two schools at Nagpur Tools - Self developed test, Programme learning material

In self developed test, researcher asked objective questions to the students of class X. Pre-test & Post-test was employed for the study .Researcher made test of 40 marks from the topics. In the test each question had four options & child had to tick the correct answer

In programme learning material researcher has divided the topic into small frames and in the last of each frame asked question.It has been prepared according to the principle of programme learning.

#### Data Collection & Analysis

The study is experimental nature and two group design The comparison between distribution of scores by Experimental Group & control group was obtained which shows that the performance of Experimental group was better than the performance of Control group Researcher compared mean & standard deviation. The calculated value of mean of experimental group of pre test is 24.93 and post test is 32.37 and standard deviation is of pretest is 3.54 and post test is 4.11. The experimental group's mean-post test score was statistically lower than the experimental group's mean-posttest scores In addition, the standard deviation of pre test was statistically lower than the post test of experimental group's.The t test was also administered and score is 5.96.

Table 4.1

| Group              | Test      | Number of students | Mean  | Standard deviation | T value |
|--------------------|-----------|--------------------|-------|--------------------|---------|
| Experimental Group | Pre test  | 30                 | 24.93 | 3.54               | 5.96    |
|                    | Post test | 30                 | 32.37 | 4.11               |         |

The calculated value of  $t'$  score is 5.96 which is significant at both the levels. Table no 4.1 indicates that the calculate value is bigger than the T table value and thus  $t'$  value is significant at .01 & .05

The calculated value of mean of post test of experimental group is 32.27 & control group is 25.03. The calculated value of experimental group of standard deviation is 4.11 & control group is 3.48.The control group's mean-posttest score was statistically lower than the experimental group's mean-posttest scores In addition, the control group's standard deviation was statistically lower than the experimental group's

Table 4.2

| Group              | Test      | Number of students | Mean  | Standard deviation | T value |
|--------------------|-----------|--------------------|-------|--------------------|---------|
| Control Group      | Post test | 30                 | 25.03 | 3.48               | 7.59    |
| Experimental Group | Post test | 30                 | 32.27 | 4.11               |         |

The calculated value of  $t'$  score is 7.59 which is significant at both the levels. Table no 4.2 indicates that the calculate value is bigger than the T table value and thus  $t'$  value is significant at .01 & .05

There is a significant difference between the post test score of experimetnal group and post test score of control group. T test is applied to check the significance between mean achievement scores of post test of experimental and control group.The students of the experimental group achieved more score at post test than control group hence it proves the effectiveness of programme learning material in terms of achievement.

#### Conclusion

The developed programme learning material for teaching physics to the students of class X has proved effective on the achievement of the students than the traditional method.It has been concluded that the content of the programme learning material was appropriate for the grade level of the students, according to syllabus, fulfills the objectives of physics subject arranged in logical sequence, subject matter is presented in interesting manner, subject matter is developed on the previous knowledge of the student, broken into small stps, subject matter was properly compiled,and students become more prompt .It develops the awareness about importance of application based skill in students.It also helps to develop scientific attitude and logical reasoning in students.It also enable the teacher to derive and use of imnnovative method .

#### References

- Andrews, R. H. (1990). The development of a learning style-program in a low socio-economic, underachieving North Carolina elementary school. *Journal of Reading, Writing, and Learning Disabilities International*, 6(3), 307–14.
- Bascome, G. E. (2004). Effects of learning-styles instructional resources on short-and long-term vocabulary retention and attitudes of seventh- grade language arts students. (Doctoral dissertation, St. John's University, 2003). *Dissertation Abstracts International*, 65(02), 439.
- Bauer, E. (1991). The relationships between and among learning style perceptual preferences, instructional strategies, mathematics achievement, and attitude toward mathematics of learning-disabled and emotionally handicapped students in a suburban junior high school (Doctoral dissertation, St. John's University, 1992). *Dissertations Abstracts International*, 53(06), 1378.
- Braio, A., Dunn, R., Beasley, T. M., Quinn, P., & Buchanan, K. (1997). Incremental implementation of learning style strategies among urban low achievers. *Journal of Educational Research*, 91, 15–25. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- DeBello, T. (1990). Comparison of eleven major learning styles models: Variables, appropriate populations, validity of instrumentation, and the research behind them. *Journal of Reading, Writing, and Learning Disabilities International*, 6, 203–222.
- De Paula, R. M. (2004). Learning styles of Brazilian students. In R. Dunn & S. A. Griggs (Eds.), *Synthesis of the Dunn and Dunn learning-style model research: Who, what, where, and so what?* (pp. 131–135). New York: St. John's University's Center for the Study of Learning and Teaching Styles.
- Dunn, R. (1990). Understanding the Dunn and Dunn learning styles model and the need for individual diagnosis and prescription. *Journal of Reading, Writing, and Learning Disabilities International*, 6, 223–247.
- Dunn, R., Bruno, J., Sklar, R. I., & Beaudry, J. S. (1990). Effects of matching and mismatching minority developmental college students'hemispheric preferences on mathematics scores. *Journal of Educational Research*, 83, 283–288.
- Dunn, R., & DeBello, T. C. (Eds.). (1999). *Improved test scores, attitudes, and behaviors in America's schools: Supervisory success stories*. Westport, CT: Bergin & Garvey.



## SUPPLEMENTING THE PRE-SERVICE TEACHER'S TRAINING THROUGH MOOCS

Yogesh Punia

TGT (Maths), Kendriya Vidyalaya Harsinghpura, Karnal, Haryana

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*A Massive Open Online Course is a web based distance learning program that is designed for the participation of large numbers of geographically dispersed student having Open Access and interactive participation by means of the bed the participants are provided with those materials that are normally used in a conventional educational setting letters Vision study materials and problem sets.*

**Keywords:** Pre-service, Training, Teacher Training

### Historical Background

Following on from the development of Open Educational Resources(OER) and the Open Education Movement(Yuan ,et al. 2008), the term Massive Open Online Courses was first introduced in 2008 by Dave Cormier to describe Siemens and Downes 'Connectivism and Connective Knowledge' course. This online course was initially designed for a group of 25 enrolled, fee paying students to study for credit at the same time was opened up to registered only learners worldwide. As a result, over to 300 people participated in the cold without paying fees or getting credit.

In 2011, Sebastian thrun and his colleagues at Stanford opened access to the course they were teaching at the University 'Introduction to Artificial Intelligence' and attracted one 160,000 learners in more than 190 countries. Since then, MOOCs have become a label for many recent online course initiatives from institutions, individuals and Commercial organizations.

### MOOCs in India

NPTEL(National Program on Technology Enhanced Learning) was founded in 2006 under the expertise of IIT's a IISC's and provides online video lectures to the students. There are no user registration fees and the content is available for free to all.

In October 2013 SWAYAM(Study Web Off Active Learning For Young Active Minds) platform was launched by the Ministry of Human Resources and Development and launched three different courses - Introduction to Computer Programming by IIT-Bombay; Introduction to Thermodynamics by IIT-Bombay; Quantum Mechanics and Quantum computation by UC Berkeley

### Significance of the study

A traditional teaching practice includes classrooms where teaching is provided in a set manner with limited resources in terms of exploration of concepts that are to be dealt in the class. The need to cover the syllabus in stipulated time and the fixed duration of a class always knocks out

the possibility to have knowledge imparted by Constructivist and Activity Centred approach.

With this ideological clash , it is proposed to have such a course that will be an improvement to the traditional teaching practices with certain extra elements for the learner such as audio-visual aids content with the ease to access the course content at his/her own convenience.

### Objectives of the study

To compare the learning of teacher training through traditional teaching and teaching through MOOCs.

### Hypothesis

Teaching method results in a significant difference in learning of Pre-Service teacher trainees.

### Methodology

The present study is a two group design experimental study. A Sample of 60 students was selected for the experiment. They were equally divided into two groups. Both the groups were taught motivation, thrice in a week on alternate days by using two different teaching approaches.

MOOC group was provided access to the course through Blackboard CourseSites MOOC platform. In order to ensure smooth access to the course the students were given the option to register via Facebook, Twitter or any email ID. Students were also provided with video that shows an animation Clips to enhance their learning experience.

Another group was taught the same topic or content by providing lecture and Discussion method under the conventional teaching approach.

After completing the three days teaching Schedule of each group, a pre-planned test was administered on the students of both the groups at the same time. The scores of all the groups were compared by applying t-test for testing the hypothesis.

Significance of the Difference between mean scores of trainees taught by conventional method and trainees taught by using MOOCs



| Students group    | N  | Mean | SD   | SED   | t' Ratio |
|-------------------|----|------|------|-------|----------|
| Traditional group | 30 | 19   | 3.74 | 1.090 | 2.47     |
| MOOC group        | 30 | 21.7 | 2.91 |       |          |

It is revealed from the above table that interference of MOOCs in classroom teaching results in a significant difference in the learning of Pre-Service teacher trainees. The obtained t-values between the mean scores if two groups was found to be 2.47 which was significant at .01 level of significance (at degree of freedom (df) =58).

The mean scores of two groups were 19.00 and 21.70 respectively. As a result of the given interpretation the Teaching method results in a significant difference in learning of Pre-Service teacher trainees was retained.

**Conclusion**

The advent of MOOCs in the classroom helps in getting the student move towards the knowledge section rather than the information. The inclusion of MOOCs as a medium of Instruction, either solely or as a supplement does result in better achievement of the students.

**Bibliography**

Downes, S. (2001) Learning Objects: Resources for Distance Education Worldwide. *The International Review of Research in Open and Distance Learning*

Du, J., Ge, X., & Zhang, K. (2012). Graduate Students' Perceptions and Experiences of Online Collaborative Learning in Web-Based and Web-Supplemented Learning Environments. *International Journal of Information and Communication Technology Education*, 8(4), 62-74.

*Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. U.S. Department of Education.

Exploring the Issues and Challenges. *New Review of Academic Librarianship*. 20 (1), pp. 4–28.

Eynon, R. (2014). *Conceptualising Interaction and Learning in MOOCs*

Garrison, D. R. and Cleveland-Innes, M. (2005) Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough. *The American Journal of Distance Education*. 19 (3), pp. 133–48.

Gilbert, J. A., & Flores-Zambada, R. (2011). Development and Implementation of a “Blended” Teaching Course Environment. *MERLOT Journal of Online Learning and Teaching*, 7(2), 244–60.

Yuan, L. and Powell, S. (2013) *MOOCs and Open Education: Implications for Higher Education* [Internet]. CetusPublications

EVALUATION IN 21<sup>ST</sup> CENTURY: A HOLISTIC APPROACH

Jeenu John

Research Scholar, Sardar Patel University

Varmala T. Bhamwari

Retired Principal, Anand Education College

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

**Abstract**

*Evaluation is widely acknowledged as a powerful means of improving the quality of education. It is the means by which development of an individual, course can be monitored to see if it achieves the desired outcomes. In order to take the evaluation in a desirable manner, the purpose of the teaching learning activities and their desired outcomes must be specified. The present examination system in India is predominately focusing only on the intellectual skills, the psycho motor and affective domains of holistic learning have not received their due importance. But the aim of education is developing the 'whole child'. Holistic education demands development of all aspects of individual's personality including cognitive, affective and psycho motor domains. In the present scenario it is very stressful for the parents, teachers and students only to be working on cognitive aspects without understanding the processes of learning. In order to bring about the improvement in the quality of the education and the holistic development of the child who is tomorrow's global citizen, evaluation process should focus adequately on both scholastics and non-scholastic areas of development. In this paper, the focus is essentially on evaluation of students' performance and to some extent of the system at large. Evaluation, a way of enabling everyone involved in it to develop and need to be conceived holistically, as a whole framework, building on the interdependence of its parts in order to generate complementarities, avoid duplication, and prevent inconsistency of objectives.*

**Keywords:** Evaluation, 21<sup>st</sup> century classroom, holistic approach

21<sup>st</sup> century learners need to be equipped with skills which are required to succeed in the information age. Success in the 21<sup>st</sup> century requires knowing how to learn. Education plays a key role in the development of a nation and individual. The education system in vogue in a country reflects the ethos, aspirations and expectations of a particular society. As aspirations and expectations of each generation vary with time, constant review of curriculum and evaluation system becomes an essential exercise. Evaluation is very important component of the education system. It can make or destroy the purpose of education. Evaluation is a critical component of an individual's growth and development. Evaluation is a systematic determination of a subject's merit, worth and significance, using certain criteria governed by a set of standards. It helps in decision-making; or to ascertain the degree of achievement and results of any such action that has been completed. The primary purpose of evaluation is to gain insight into prior or existing initiatives, to enable reflection and assist in the identification of future change. Evaluation is the means by which development of an individual is assessed. For an evaluation to take place, the purpose of every event and the expected outcomes must be specified. In the present scenario, that is in 21<sup>st</sup> century importance is given to the development of child as a 'whole'. In order to develop the individual as a whole, the evaluation processes need to be focused on both scholastic and non-scholastic aspects of the individual.

**Concept of Evaluation**

Evaluation perhaps is the most complex term. The term evaluation is derived from the word 'Valoir' which means to be worth. Evaluation is a decision making process that leads to suggestions for actions to improve participants' effectiveness and program efficiency. When we evaluate we are engaged in some process which in turn provide information that will help us to make a judgement for any situation. Generally any evaluation process requires

information regarding the situation. Teachers, in particular, are constantly evaluating students, and such evaluations are usually done in the context of comparisons between what was intended (learning, progress, behavior) and what was obtained. Educational evaluation should be part and parcel of all phases or stages of educational plan, policy and program. It should be neither only summative evaluation nor formative evaluation but evaluation should go beyond this level.

"Evaluation is a process of ascertaining or judging the value or amount of something by careful appraisal." (Good)

"Evaluation is an assignment of symbols to a phenomenon in order to characterize the worth of value of the phenomenon usually with reference to some social, cultural or scientific standards." (Bradfield and Moredock)

In one sentence evaluation is concerned with the measurement of all the three domains of learning- cognitive, affective and psychomotor. The result of evaluation is always expressed in terms of behavioural changes of the person being evaluated.

**Holistic Evaluation**

Holistic evaluation focuses on the fullest development of persons encouraging individuals to become the very best or finest that they can be and enabling them to experience all they can from life and reach their goals.

**Why Holistic evaluation is important?**

Teachers/educators have limited insight into the whole of student life experience. As a result, educators are unable to intervene efficiently or effectively where students are falling behind or indeed failing, often because they're unable to accurately pinpoint the headwaters from which failure flows.

**Holistic Approach to Evaluation: A Pathway**

The holistic approach seeks to develop students. The holistic learning and evaluation leads to a stimulating learning

environment, which influences and inspires critical learners. Holistic approach is sympathetic to improving the teaching situation and other recent developments in learning and teaching.

Research says that the students acquire 21<sup>st</sup> century skills that help the students to go beyond the four walls of the skills. There are different types of evaluation methods which help to evaluate the learners. They are: Process evaluation, content evaluation, outcome evaluation, Impact evaluation, Program evaluation.

**Process (Formative) Evaluation-**The purpose of this evaluation is to make adjustments in an educational activity as soon as they are needed, whether those adjustments be in personnel, materials, facilities learning objectives, or even attitude. Adjustments may need to be made after one class or session before the next is taught, so process evaluation occurs more frequently during and throughout every learning experience than any other type. This ongoing evaluation prevent problems before they occur or identify problems as they arise

**Content Evaluation-**The purpose of content evaluation is to determine whether learners have acquired the knowledge or skills taught during the learning experience, as taking place immediately after the learning experience to answer the question "To what degree did learners achieve specified objectives?"

**Outcome (Summative) Evaluation-**The purpose of outcome or summative evaluation is to determine the effects or outcomes of teaching efforts. Its intent is to sum what happened as a result of education. Outcome evaluation occurs after teaching has been completed or after a program has been carried out, it is focusing on measuring long-term change that persists after the learning experience.

**Impact Evaluation-**The purpose of impact evaluation is to determine the relative effects of education on the institution or the community obtain information that will help decide whether conducting an educational activity is worth its cost. The scope of impact evaluation is broader, more complex, and usually more long term than that of process, content or outcome.

**Program Evaluation-**The purpose of total program evaluation is to determine the extent to which all activities for an entire program over a specified period of time meet or exceed goals originally established.

#### **Innovations brought about in the evaluation techniques**

**Evaluation Rubrics:**Evaluation rubrics are the scoring rubric used to evaluate the student's performance. Scoring rubrics includes certain criteria on which performance is rated. Scoring rubrics may help the students to become thoughtful evaluator of their own and others work.

**Student's portfolio:**A student portfolio is a systematic collection of student work and related material that depicts a student's activities, accomplishments, and achievements.

The collection should include evidence of student reflection and self-evaluation, guidelines for selecting the portfolio contents, and criteria for judging the quality of the work. There are two types of portfolio and they are: Product Portfolio and process portfolio. A process portfolio documents the stages of learning and provides a progressive record of student growth. A product portfolio demonstrates mastery of a learning task or a set of learning objectives and contains only the best work. Through the portfolio process, students develop the self-awareness, goal-setting, and decision-making skills essential for lifelong self-determination.

**Observation:** Observation checklists are lists of criteria a teacher determines are important to observe in students at a particular time. Beside each of the criteria, a notation is made as to whether that particular criterion was observed.

**Rating Scale:** Rating scales have the same usage as observation checklists. The essential difference lies in what is indicated. Observation checklists record the presence or absence of a particular knowledge item, skill, or process. Rating scales record the degree to which they are found or the quality of the performance. Therefore, a long term view is necessary in designing educational initiatives and their evaluation.

#### **Conclusion:**

Evaluation as a gateway of enabling everyone involved in it to develop and need to be conceived holistically, as a whole framework, building on the interdependence of its parts in order to generate complementarities, avoid duplication, and prevent inconsistency of objectives. Evaluation is the means by which overall development of an individual takes place and it is an effective tool to enhance the quality of teaching learning processes. The emphasis is now ensuring that every child not only acquire the knowledge and skills but also the ability to use these competencies in real life situations.

#### **References:**

- EMI (Ecosystem Management Initiative). (2004). *Measuring Progress: An Evaluation Guide for Ecosystem and Community-Based Projects*. School of Natural Resources and Environment, University of Michigan.
- Patton, M.Q. (1987). *Qualitative Research Evaluation Methods*. Thousand Oaks, CA: Sage Publishers.
- Thomson, G. & Hoffman, J. (2003). *Measuring the success of EE programs*. Canadian Parks and Wilderness Society.
- Sharma, R.A. (2006). *Advanced Statistics in Education and Psychology*. Surya Publication, New Delhi.
- Aggarwal, J. C. (2005). *Essentials of Examination System*. New Delhi : Vikash Publishing House.
- Cronbach, L. J. (1984). *Essential of Psychology Testing*. New York : Harper & Row.
- Srivastava, K. S. (1989). *Comprehensive Evaluation in School*. New Delhi : NCERT.



## INDIA: HIGHER EDUCATION IN TWENTY-FIRST CENTURY VISION AND ACTION

**K. Manitombi Devi**

Mayai Lambi College, Imphal

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*Higher Education provides people with an opportunity to reflect in the critical social, economic, cultural, moral and spiritual issues facing humanity. It contributes to national development through discrimination of specialized knowledge and skills. It is therefore a crucial factor for survival. Being at the apex of the educational pyramid, it has also a key role in producing teachers for the Education System. In the context of the unprecedented explosion of knowledge in the last few centuries, higher education has to become dynamic as never before, constantly entering uncharted areas.*

**Keywords:** Higher Education, RUSA, RMSA, NPE.

Higher Education in India has a longer tradition than Europe and North America. It is in Bologna in Italy that the oldest university in the world was created in 1088. Paris followed three years later, in 1091. Other citadels of higher learning soon emerged in different countries in Europe, including Oxford University in 1167 and Cambridge University in 1209. There is a tendency across the world- reflected in India as well- to assume that higher Education is somehow a quintessentially Western contribution to the world. The history of the last millennium tends to confirm that understanding, and yet it is important in this context to remember and be inspired by the fact that India has, in some ways, an even longer heritage of higher education.

Nalanda University, which served as a pan-Asian university, which drew students from all over Asia, seen by a Buddhist foundation to which others, including Hindu Kings, contributed support. When the oldest European university, Bologna, was founded in 1088, Nalanda was already more than six hundred years old, attracting students from many countries in the world, for example China, Korea, Japan, Thailand, Indonesia, Sri Lanka and the rest of Asia, but as far as the West as Turkey. At its peak, Nalanda, a residential university, had ten thousand students in its dormitories.

The curriculum at Nalanda was comprehensive and catholic. Though the establishment belonged to the Mahayana School of Buddhism, the work of the rival school, the Hinayana one, were also taught. Subjects like grammar, logic, literature, Vedas, Vedanta, Samkhya philosophy, Dharmasatra (sacred law), Puranas, astronomy, astrology including medicine Chikitsasatra were also taught. The subjects that were taught in Nalanda are still being investigated, as the old university is being re-established under a joint initiative of the East Asia Summit; it is not an easy search, since the documents in Nalanda were discriminately burnt by Bakhtiyar khilji and his conquering army at the end of the twelfth century. Contemporary accents tell us that Nalanda's large and distinguished library- apparently housed in a nine-story building burnt for three days in the flames of destruction. From "Tabakat-i-Nasiri", we learnt that not only building was burnt or destroyed but also whole of the monk population was put to the sword.

While Nalanda lingered on for some time more after it had regrouped and recognized itself following the devastation, it would never regain the former size, quality or reputation. But putting together all the accounts we have, especially the memories of former students of Nalanda (particularly for China) we do know that the subjects taught and researched

there included religion, history, law, linguistics, medicine, public health, architecture and sculpture, as well as astronomy. There is circumstantial evidence that mathematics must have been taught too. Closely linked as it is to astronomy, and this would have been natural given the proximity of Nalanda to the old haunt of Indian mathematicians in Kusumpur at Pataliputra- what is now Patna. Inspired by Nalanda, Vikramshila, also in what is now Bihar and which was also a Buddhist foundation came to compete with Nalanda in terms of educational offerings and reputation for excellence.

But all this was a long ago, and while all Indian universities to-day, including the newly re-established Nalanda University, can be inspired by the long history of higher education in India, the fact remains that the achievements of contemporary Indian universities are rather limited. The quality of higher education is hard to judge, but if we go by the list of 200 top-ranking universities prepared by the "The Times Higher Education Supplement in October, 2011" an overwhelming proportion of the leading institutions of higher education in the world are based in the United States. Indeed, the top five are all in America: Harvard, Caltech, MIT, Stanford and Princeton, in that order. The British followed just behind, and in the top ten we also find Cambridge, Oxford and Imperial College, London. There are none from Asia in the top 20 and while some elite universities in Asia do get below that, including Hong Kong, Tokyo, Pohang, Singapore, Peking, Hong Kong University of Science and Technology, Kyoto, Tsinghua and a few others, together they form only a small minority of the top universities on the globe. It is particularly sticking that there is not a single university in India in this list of top 200 in the world. But given India's academic potential and its long history in higher education, it would be natural to expect a much better performance from the Indian university sector than we actually see today.

The ranking presented by 'The Times Higher Educational Supplement' which could be, it has been alleged that it is culturally biased. There is plenty of other evidence pointing to the same conclusions. Even the assessment by students themselves, in particular which universities they try to get into tend to confirm an important problem of quality deficiency. Indian students do spectacularly well once they enter any of the leading universities in the world, in a way that is hard for them to achieve within the confines of Indian universities. The situation can certainly be changed, and may, to some extent, already be changing. Many of the leading Indian universities have excellent areas of instruction

and training in particular subjects, even when the overall achievement of the particular universities is pulled down by the low or indifferent quality of other departments. The quality of higher education offered in specialist institutions, such as the Indian Statistical Institute, or the Indian Institute of Technology, or some Institutes of Management has, by and large, been very high, and there is maintenance of quality in them that the Indian universities in general do not have.

The problems of Indian Universities, including academic arrangements and facilities, recruitments and emoluments, can be critically assessed. The limitation of intake is, however, a major drag on the reach and performance of Indian higher education and to improve this it is critically important to reform, indeed to make, the entire system of school education in the country.

On the eve of 21<sup>st</sup> century, two major developments in school education took place as Universalization of elementary education and Universalization of Secondary Education in India. The success of Sarva Siksha Abhiyan (SSA) and Rashtriya Madhyamik Siksha Abhiyan (RMSA) has laid a strong foundation for primary and secondary education in India. In recent decades, higher education in India has gone through a phase of unprecedented expansion, marked by a huge increase in the volume of students, an exponential increase in the number of institutions and quantum jumps in the level of public funding. The increase however has not been commensurate with the growth of the population and its diverse needs.

Today, higher education system as a whole faced with many challenges such as financing and management, access, equity, relevance and reorientation of policies and programs for laying emphasis on values, ethics and quality of higher education together with the assessment of institutions and their accreditation. These issues are of vital importance for the country, since higher education is the most powerful tool to build knowledge based society for the future. The enormity of the challenges for providing equal opportunities for quality higher education to an ever growing number of students is also historic opportunity for correcting sectoral and social imbalances, reinvigorating institutions, crossing international benchmarks of excellence and extending the frontier of knowledge.

The institution of higher learning have to perform multiple roles like creating new knowledge, acquiring new capabilities, producing an intelligent human resource pool, at the same time Indian higher education system has to brace itself to address global challenges by channelizing teaching, research and extension activities and maintaining the right balance between need and demand.

Higher Education needs to be viewed as a long term social investment for the promotion of economic growth, cultural development, social cohesion, equity and justice. To fulfill the aim of inclusive growth and ensure genuine endogenous and sustainable development along with the social justice and equity, the higher education sector has to play a pivotal role especially in generating research-based knowledge and development of critical mass of skilled and educated personnel.

The globalized era has necessitated inculcation of competitive spirit at all levels. This can be achieved only by bringing

quality of higher standard to every sphere of work. Therefore the quality of higher education has become a major concern today. Needs and expectation of society are changing very fast and the quality of higher education needs to be sustained at the desired level. The quality of higher education rests on the quality of all its facets, be it the faculty, staff, students or infrastructure. As such, all policies, systems and processes should be clearly directed towards attaining improvements in all the relevant facets for an overall rise in the quality of education.

The policy for the development of higher education has been mainly governed by the "National Policy on Education" of 1968 (as modified in 1986 and 1992) and its Programme of Action adopted in 1992. The 1986 policy and its Programme of Action of 1992 were based on two landmark reports namely the "University Education Commission Report" of 1948-49 (Popularly known as the Radhakrishnan Commission Report), and the "Education Commission Report" of 1964-66, (Popularly known as the Kothari Commission Report). These two Reports, in fact, laid down the basic framework for the National Policy of 1968 for higher education in the country.

The National Policy on Higher Education (1986) translated the vision of Radhakrishnan Commission and Kothari Commission into an actionable policy by setting five main goals for higher education-

**Access:** Greater Access requires an enhancement of the education institutional capacity of the higher education sector to provide opportunities to all who deserve and desire higher education.

**Equity:** Equity involves fair access of the poor and socially disadvantaged groups to higher education.

**Quality and Excellence:** Involves provision of education in accordance with accepted standard so that students receive available knowledge of the higher standards that helps them to enhance their human resource capability.

**Relevance:** Involves promotion of education so as to develop human resources keeping pace with the changing economic, social and cultural development of the country and

**Value Based Education:** Involves inculcating basic moral and spiritual values among the youth.

The Action Plan of 1992 included schemes and programs that were directed towards the expansion of intake capacity in general, and with respect to the disadvantaged groups such as the poor, SCs, STs, minorities, girls, physically challenged persons, and those in the educationally backward regions in particular. The scheme/Programs were designed to improve quality by strengthening academic and physical infrastructure in order to promote excellence in those institutions which have exhibited potential for excellence, and develop curriculum to inculcate right value among the youth.

#### **Rastriya Uchatar Shiksha Abhiyan (National Higher Education Mission, 2013)-**

Keeping in view the recommendation of Planning Commission XIIth Plan the need for reform in state higher education sector, using central funds in a strategic manner to ensure holistic planning at the state level and enhancement of allocations for the state institution a new centrally



sponsored scheme called RUSA is proposed. The scheme would spread over the two plan periods (XII and XIII) and would be an over arching scheme for funding the state universities and colleges to achieve the aims of equity, access and excellence.

It is an umbrella mission mode project scheme that would subsume other existing schemes in the sector.; The central funding would flow from HRD/DGC to institutions through State Councils of Higher Education.; The funding of states would be made on the basis of critical appraisal of state plans of higher education. The plan would address each state's strategy to address issues of equity, access and excellence in higher education.; All funding under RUSA would be norm based and future grants would be outcome dependent. Certain academic, administrative and governance reforms will be a precondition for receiving funding under RUSA.

Centre State funding will be in the ratio of 90:10 for North Eastern States & J&k, &5:25 for other special category States (Sikkim, Himachal Pradesh and Uttarakhand) and 65:35 for other States and UTs,. Funding will be available to even private-aided institutions, subject to their antiquity, for permitted activities (not all) based on certain norms and parameters, in a ratio of 50:50.

Objectives: The Objective of RUSA would be to achieve the target of GER (age group 18-23) of 30%, which the central Government has set for itself by the year 2020 (2010= 18.8%) against would GER of 29%) GOI aim to improve the quality of state university and colleges and enhance existing capacities of the institutions to become dynamic demand-driven, quality education, efficient and toward looking, responsive to rapid economic and technological development occurring at the local, state, national and international levels.

The salient objectives of the scheme are as under: Improve the overall quality of existing state institutions by ensuring that all institutions conform to prescribed norms and standards and adopt accreditation as mandatory quality assurance framework. Usher transformative reform in the state higher education system by creating a facilitating institutional structure for planning and monitoring at state level, promoting autonomy in state universities and improving governance in institutions. Ensure academic and examination reforms in the higher education institutions. Enable conversion of some of the universities into-institutions of excellence at par with the best in the world. Create opportunities for state to undertake reforms in the affiliating system in order to ensure that the reforms and resonance requirements of affiliating colleges are adequately met. Ensure adequate availability of quality faculty in all higher education institution and ensure capacity building at all levels of employment. Create and enabling atmosphere in the higher educational institution to devote themselves to research and innovations. Expand the institutions base by creating additional capacity in the existing institutions and establishing new institutions to achieve enrolment targets. Correct required imbalances in access in higher education by facilitating access to higher quality institutions in urban & semi-urban areas, creating opportunities for students from rural areas to get access to better quality

institutions and setting up institutions in unserved of underserved areas. Improve equity in higher education by providing adequate opportunities of higher education to socially deprived communities; pro-mote inclusion of women, minorities, SC/ST and differently able persons.

Scope: Project will support all state universities and colleges both 12B and 2F and non 12B and non 2f universities. It will cover 316 state universities and 13,024 colleges.

India would Need More Research Universities to Compete successfully

India has one of the lowest of researchers per million as compared to developed economies. A matter of greater concern is the poor performance of the university sector in fostering research. To compete successfully in the knowledge-based economy of the 21st century, India needs enough universities with high end research facilities that would not only produce bright graduates but also support sophisticated research in various scientific and scholarly fields and invent knowledge and technology needed for an expanding economy. India shows very poor status in Research and Development like researcher per million is just 119 which is very low compared to other countries, Table- A depicts the details about the other countries. India's share has of the total Global R&D spending is just 3.7%, a percentage which

Table A - Researcher per million in different countries

| Sl. No. | Country | Researcher per million |
|---------|---------|------------------------|
| 1.      | Japan   | 5287                   |
| 2.      | USA     | 4484                   |
| 3.      | Russia  | 3319                   |
| 4.      | China   | 663                    |
| 5.      | Brazil  | 344                    |
| 6.      | India   | 119                    |

(Source: KPMG, "Future of education: Education, skills development & employability" Pan IIT Conclave 2010)

has remained constant from 2005 till 2008 in contrast China's share increased from 13.5% to almost 18%. India spends approximately 1% of its GDP on R7D, compared to 2.47% by the US and 3.3% by Japan.

#### References

- GOI (2005), *National Sample Survey, 2014-15*.  
 UGC (2006), *Annual Report 2005-16*.  
 Attbach, Philip G. (2005) *Higher Education in India, The Hindu, Apr. 12, 2005*.  
 GOI, *Ministry of Human Resource Development (2008) Annual Report- 2007-08*.  
 GOI, *National Knowledge Commission (2009) "Report to the National 2006-09*.  
 UNESCO (2009) *Global Education Digest 2009*.  
 UGC (2008) *Higher Education in India: Issues related to Expansion, Inclusiveness, Quality & Finance*.  
 KPMG (2010) "Future of Education: Education, Skills development & employability" Pan IIT Conclave 2010.  
 Altekar, A.S.: *Education in Ancient India, Nandakeshore & Bros. Varaneshi 1965*.  
 Elloit & Dowson, *History of India 11p. 303*.  
 Jean Drize & Amartya Sen; 2013 , *An uncertain Glory, India and its contradictions, Allen Lane, Penguin Book London*.

IN PURSUIT OF PERSONAL EXCELLENCE:  
DEVELOPMENT OF LIFE SKILLS

Anjali Dave

Department of Education, Gujarat University

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

## Abstract

*Personal excellence is the pursuit of developing, refining and mastering the skills that help us become the best that we can, with all that we have. It is the reaching for and realizing our full potential as human beings. To pursue personal excellence, development of life skills is indispensable. Life skills are the competencies that help to function appropriately in the environment. Life skills are essentially those abilities that help promote mental well-being and competence in young people as they face the realities of life. When targeting life skills it includes development through various aspects under three headings that is head, heart and hand. When focussing on development of skills through head, it includes managing and thinking. Similarly through heart it includes relating and caring and through hand it includes giving and working. Thus Life skills encompasses problem solving, critical thinking, effective communication skills, decision-making, creative thinking, interpersonal relationship skills, self awareness building skills, empathy, and coping with stress and emotions. Researcher has discussed life skill approach to teaching. These strategies or approaches in teaching are discussed focussing on 2 life skills, that is, Communication skills and critical thinking. Ways to enhance communication skills and critical thinking have been encompassed in this study. The present study may lead to the enhancement of practices and approaches for the progress and evolution of children.*

**Keywords:** Personal excellence, Life skills

For the progress of a country the prime requirement is talented pool of people. The talent pool requires being adequately skilled and on which depends the growth of economy, social development and global competence. India has gradually evolved as knowledge based economy. To establish its distinctive position in the world there is need to develop skilled manpower to address the mounting needs of the economy. Skill development is a priority and is evident from the progress India has witnessed under the National Policy on Skills (2009). The National Skill Development Policy is aimed at empowering all individuals through improved skills, knowledge and internationally recognised qualifications to enable them to access decent employment, to promote inclusive national growth and to ensure India's competitiveness in the global market. We live in a world of rapid scientific and technological change. Our workforce can be globally competitive only when it embraces this policy.

Personal excellence is the pursuit of developing, honing and mastering the skills that help us become the best that we can, with all that we have. It is the reaching for and realizing of our full potential as human beings (Chorn, 2010). Personal excellence incorporates communication, leadership, interpersonal and life skills. Life skills are essentially those abilities that help promote overall wellbeing and competence in young people as they face the realities of life. Life skills are the beginning of wisdom which focuses on behaviour change or developmental approach designed to address a balance of three areas- knowledge, attitude and skills. Participation in the 4-H program is positively related to perceived leadership life skill development. The research study indicated that the level of leadership life skill development increased as the level of 4-H participation increased. (Boyd, Herring & Briers, 2004). Research also indicated that acquisition of life skills will be through adventure based activities and programs. (Moote, Wodarski & John S). Research indicated that Emotional intelligence will predict life skills. (Bastian, Burns & Nettelbeck, 2005). Hence the researcher has taken up the present study to discuss the development of life skills.

What are life skills?

The World Health Organization has defined life skills as, "the abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life". (WHO, 1993).

'Adaptive' means that a person is flexible in approach and is able to adjust in different circumstances. 'Positive behaviour' implies that a person is forward looking and even in difficult situations, can find a ray of hope and opportunities to find solutions.

The terms 'Livelihood skills' or occupational/vocational skills refer to capabilities, resources and opportunities to pursue individual and household economic goals and relate to income generation. Thus, Life skills are distinct from livelihood skills.

UNICEF defines life skills as "a behaviour change or behaviour development approach designed to address a balance of three areas: knowledge, attitude and skills". (UNICEF, 2012). The UNICEF definition suggests that shifts in risk behaviour are unlikely if knowledge, attitudinal and skills based competency are not addressed. Life skills encompasses problem solving, critical thinking, effective communication skills, decision-making, creative thinking, interpersonal relationship skills, self awareness building skills, empathy, and coping with stress and emotions. With life skills we can distinguish between pros and cons and can make decisions accurately. Life skills are the competencies that help to function appropriately in the environment.

Why do we need life skills?

When we are unable to tackle pain, anxiety, conflicts and frustration only the skill for life helps us tackle undesirable actions and to act in an appropriate manner. It helps us reflect what to do, how to do and the right thing to do. Life skills help us cope challenging situation in life. It also promotes overall wellbeing, managing emotions and development of psychosocial competence. Psychosocial competence is the ability to deal effectively with the challenges of everyday life and adapt to a positive behaviour while



interacting with others in the environment. It promotes our mental, physical and social well being.

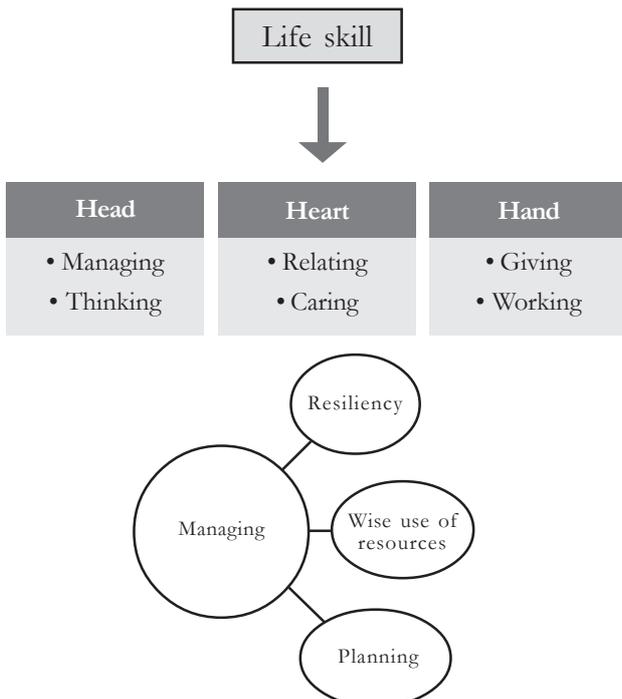
**Components of life skills**

The ten components of life skills as laid down by WHO are: (WHO, 1993).

1. Self awareness: It is being able to recognise ourselves. It means to be able to know and realise our instincts, desires, strengths and weaknesses.;
2. Decision making: It is being able to weigh options available and wisely make decisions and also know and be prepared for the consequences of the actions.;
3. Problem Solving: It is being able to resolve conflict causing situation and deal effectively with problems.;
4. Critical Thinking: To analyse effectively the situation, information and experiences this helps us to encounter any problem.;
5. Creative thinking: It is divergent way of thinking that gives novel ways of perceiving situation and experiences.;
6. Empathy: To be able feel oneself in the place of others or in others shoes so that it nurtures relationships and be accept others and elicit support from others.;
7. Effective communication: To be able to effectively express opinions, views and desires verbally and non verbally and also decode information that is passed on.;
8. Interpersonal relationship: To nurture relationships by relating, understanding others and strengthening bond constructively.;
9. Coping with stress: being able to recognise the sources that cause stress and effectively learn to unwind by changing our environment or conditions that causes stress.;
10. Coping with emotions: To recognise emotions and deal effectively with intense emotions like anger, frustration and sadness.

**Development of Life Skills**

When targeting life skills it includes development through various aspects under three headings that is head, heart and hand. (Hendricks, Pat. 1998).



Head: Under the head managing and thinking are involved. Managing includes resiliency, wise use of resources, planning or organising and setting goals. Thinking involves critical thinking, problem solving and decision making. It means management through scheduling the tasks and best use of available means and assets.

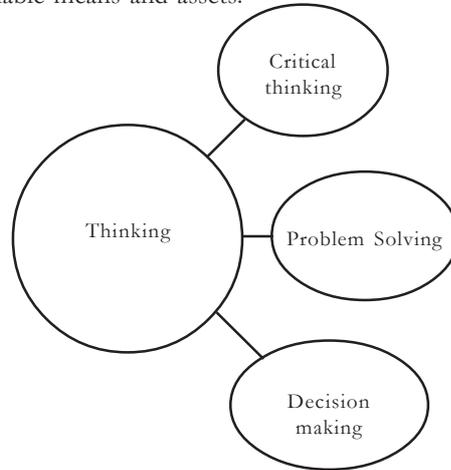


Figure 1: Development of Life skills by Head.

Heart: Under the heart there are two aspects that is relating and caring. Relating includes accepting differences or conflict resolution, cooperation and communication. Caring includes concern for others, empathy, sharing and nurturing relationships.

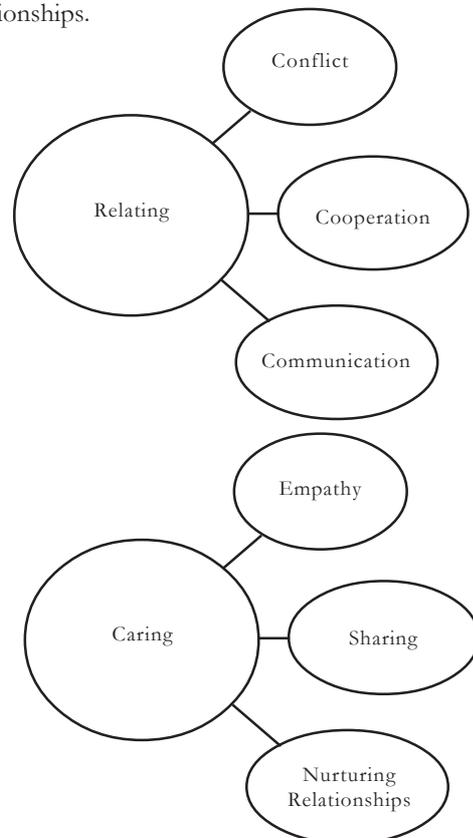


Figure 2: Development of Life skills by Heart

Hands: Under the hands giving and working are involved. Giving includes community service volunteering, leadership

and responsible citizenship. Working includes teamwork and self motivation.

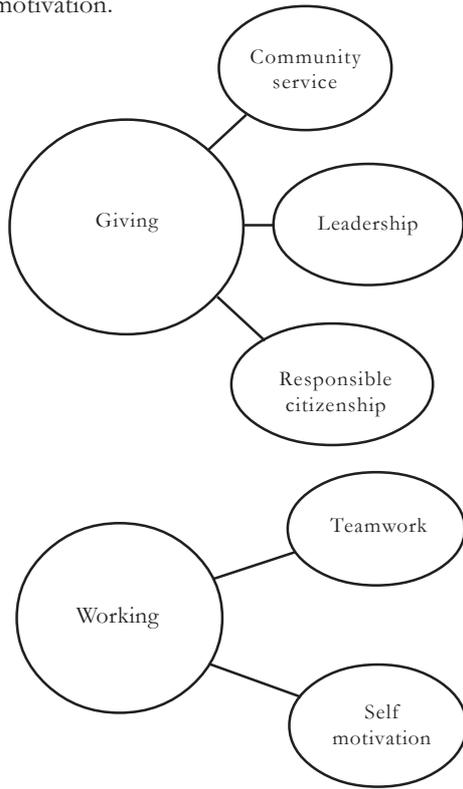


Figure 3: Development of Life skills by Hand

**Life skills Education**

For the inculcation of life skills, life skills education is indispensable. It is acquired by adopting teaching techniques that the learner can learn from his own experiences or others by observation and realising the consequences that arise from certain behaviours. In life skill education learner is actively involved in the process of teaching and learning. It can be put in practise by involving in questioning, discussion, storytelling, riddles, poem, brainstorming, role play and group discussions. It involves presenting a situation and exploring various ways of solution, viewpoints by the children and use of a particular or combination of life skills. School is the place where life skills education is imparted because of access of children on large scale, it being the agent of socialisation, having trained teachers and linkage with community and members of society.

Thus life skills teaching are crucial and have to be introduced as it supports the learning of abilities that contribute to good health, interpersonal relationships and behaviour.

**Life Skills Approach to Teaching: Communication skills and critical thinking**

Life skills education can be imparted by accepting and

implementing various strategies in teaching, these strategies affect children having varied type of intelligences. It helps them to relate to outside world and making them capable to face circumstances that have dire outcomes. It will enhance their abilities as well. The teacher can implement such approaches. These strategies or approaches in teaching are discussed focussing on 2 life skills, that is, Communication skills and critical thinking.

**Communication skills**

Successful leaders are effective communicators. Communication skills hone our personality. It is important for success in life as a person who is able to effectively communicate will stand out than others and can articulate and convey his message.

Communication is composed of words, voice, tone and non verbal cues. The non verbal cues are 55% effective, tone of voice is 38% effective and words are 7% effective (Bloomer, K. & McIlroy C. (2012). The channels of non verbal communication comprise the major part. Non verbal communication consists of para language, body language, facial expressions and objectors which is the way we dress or define ourselves.

**Ways to enhance communication skills**

Enacting postures, gestures and emotions or showing pictures of people with varied gestures and emotions. The children can identify the message being conveyed and what the people in each picture are feeling and the reason and how they have made their choices.; Asking children to tell a story without using words conveying excitement, sadness, fear and so forth. Discussing differences between children’s interpretations and meanings.; Role play of a situation. Listener will grade the act and suggest ways for better conveyance.; Random observation of one child by the other and notable viewpoints and what he has observed along with inference.; Discussion of a national or global problem. Voting suggestions on a debate.; Place the children in mixed ability groups of around five. Remind them of the agreed ground rules for discussion and listening. Select a chairperson and a scribe for each group, according to ability. Give each group a photo of a piece of playground equipment, e.g. a skipping rope, a large hoop. The children make a list of questions they could ask another child about how to make best use of that equipment in the playground.; Let the children go through a situation in which they speak in a



warm and friendly tone of voice and also in a situation where children sound rude, give order, shout. Compare the difference; Observe the way actors on television use their eyes to convey meaning and the differences in them.

### Critical thinking

It is the ability to think constructively. We need critical thinking to believe or not to believe based upon evidence. It is required to perform independent inquiry to discover reliable knowledge. People possessing critical thinking can take correct decisions based on reason and value. It will enable us to think and analyse both about ourselves and others as well. It will help us develop ability to imaginatively put ourselves in the place of others and understand the view points of others.

### Techniques to enhance critical thinking

Giving students opportunity to identify and state reason for their opinions; Group discussions where each member of the group is willing to reconsider their own opinion and judgement; Give students exercises in which they must identify if critical thinking is there and how do they now, where there is no critical thinking and how it can be added; Read stories and ask children to analyse it, relate his/her feelings and experiences to those of characters, do character analysis, anticipate actions of characters and express findings; Open ended questions and sufficient time to answer them; Reflective thinking to be encouraged; Encouraging questions from students; Role play in which assumptions, previous experience and results to be analysed by the students; Debate in class with counterarguments; Making predictions of activities; Brainstorming sessions to be inculcated in classroom practise.

### References

- Bastian, A. V., Burns, R. N. & Nettelbeck T. (2005). Emotional intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and Individual Differences*, 39(6), 1135-1145
- Bloomer, K.. & McIlroy C. (2012). *Developing Skills*. Retrieved from [http://www.educationscotland.gov.uk/Images/DevelopingSkills28May\\_tcm4-719271.pdf](http://www.educationscotland.gov.uk/Images/DevelopingSkills28May_tcm4-719271.pdf)
- Boyd, L.B., Herring, R. D. & Briers, E. G. (2004). Developing Life skills in Youth. *Journal of Extension*, 30(4)
- Brown, A. (2009) Higher skills development at work: A Commentary by the Teaching and Learning Research Programme. London: ESRC,TLRP
- Central Board of Secondary Education. *Life Skills Education and CCE*. Retrieved from [http://www.cbse.nic.in/cce/life\\_skills\\_cce.pdf](http://www.cbse.nic.in/cce/life_skills_cce.pdf)
- Chorn, N. (2010). *In Pursuit of Personal excellence*. Retrieved from <http://www.centstrat.com/wp-content/uploads/2010/07/in-pursuit-of-personal-excellence-li.pdf>
- Department of Mental Health. World Health Organisation. (1999). *Partners in Life Skill Education*. Retrieved from [http://www.who.int/mental\\_health/media/en/30.pdf](http://www.who.int/mental_health/media/en/30.pdf)
- Federation of Indian Chambers of Commerce & Industry. (2010). The Skill Development landscape in India and Implementing Quality Skills Training. Retrieved from <http://ficci.in/spdocument/20073/IMaCS.pdf>
- Federation of Indian Chambers of Commerce & Industry. (2012). Knowledge paper on skill development in India: Learner first.
- Hendricks, Pat. (1998). "Targeting Life Skills Model."
- Maclean, R., Jagganathan, S. & Sarvi, J. (2007). *Skills development for Inclusive and Sustainable growth and in developing Asia-Pacafic*.
- Moote, G.T., Wodarski, John S. (n.d). The acquisition of life skills through adventure-based activities and programs: A review of the literature. *Adolescence*, 32 (34), 143-67.
- National Policy on Skill Development, 2009. Retrieved from <http://www.skilldevelopment.gov.in/assets/images/NationalSkillDevelopmentPolicyMar09.pdf>
- Sanghi, S. (2007). *Towards Personal Excellence* (2<sup>nd</sup> edition). New Delhi: Response Books : A Division of Sage Publications. Technical and Vocational education and Training: Issues, Concerns and Prospects.
- United Nations Children's Fund. (2012). *Global Evaluation of Life Skills Education Programmes* Retrieved from [http://www.unicef.org/evaldatabase/files/UNICEF\\_GLS\\_Web.pdf](http://www.unicef.org/evaldatabase/files/UNICEF_GLS_Web.pdf)
- Whetten, A.D. & Cameron, S.K. (2011). *Developing management Skills* (8<sup>th</sup> edition). New Jersey: Prentice Hall
- World Health Organisation. (1993). *Life Skills Education in Schools*. Retrieved from [http://apps.who.int/iris/bitstream/10665/63552/1/WHO\\_MNH\\_PSF\\_93.7A\\_Rev.2.pdf](http://apps.who.int/iris/bitstream/10665/63552/1/WHO_MNH_PSF_93.7A_Rev.2.pdf)



REVIEW OF THE BOOK 'A BETTER INDIA A BETTER WORLD' BY N.R.MURTHY

Bharti Rathore

Assistant Professor, Waymade College of Education, VVnagar, Anand

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

Abstract

*Narayan Murthy, really a man of vision as well as action, a remarkable person who meticulously transformed his dreams into reality through his assiduousness, leadership skills and unquestioning trust and faith in the miraculous capacity of techno savvy Indian youngsters, who were pillars of strength in his ICT company INFOSYS. As all visionaries, Krishnamurthy Narayan Murthy is not a self-centered corporate who likes to revel in the pleasures of the success of his brainchild but has a vision for India as a glorious, economically progressive, educationally advanced developed country. Though a staunch believer in globalisation, he wants India to be powerful and strong. Present article is review of his well-researched book 'A Better India A Better World'. Key words are Entrepreneurship and Globalisation.*

**Keywords:** India, Murthy, Better India, Better World

Narayan Murthy, really a man of vision as well as action, a remarkable person who meticulously transformed his dreams into reality through his assiduousness, leadership skills and unquestioning trust and faith in the miraculous capacity of techno savvy Indian youngsters, who were pillars of strength in his ICT company INFOSYS. These people helped him to bring the company in the world map. His IT Company demonstrated the spectacular success of a philanthropic, compassionate and generous entrepreneur who brought a change in the mindset of energetic youngsters as they felt convinced that they could match the skills of any world-class technocrat.

As all visionaries, Krishnamurthy Narayan Murthy is not a self-centered corporate who likes to revel in the pleasures of the success of his brainchild but has a vision for India as a glorious, economically progressive, educationally advanced developed country. Though a staunch believer in globalisation, he wants India to be powerful and strong.

In the series of lectures compiled in the book, Narayan Murthy presented his views about globalisation, values, empowered India, important national issues, education, leadership challenges, corporate and public governance, corporate social responsibility and philanthropy, entrepreneurship, globalisation and his brainchild Infosys. A brief overview of these points are presented below:

Secularism: According to him, secularism is respecting all religions

Lessons to be learnt: India is considered as the growing economy. Despite being a large country and second largest in population, our country is backward in many areas. It is 127th in human development index. India caters to majority of illiterates. In India there are problems like intellectual dishonesty, corruptions and indiscipline. There is need to remove them. India is well-known for family ties but these

maladies should be removed. West can be a role model for Indians as Indians can learn honesty, sincerity, punctuality, time management, accountability, civic sense. India should give harsh punishments to violators of discipline. Fairness, transparency and accountability should be encouraged. Lessons can be learnt from a less corrupt country like Singapore where even a minister had to commit suicide due to corruption charges.

In, our country even investigating agency like CBI is not doing its job. For empowering the country competent bureaucracy, high performers, reduced difference between haves and have nots is required. India has the benefit of low cost skilled labour as there is high growth rate of working population. But high population growth and density led to overloaded systems. China progressed in comparison to India. In this country there is unsustainable economic and population growth. There has been economic growth but enough jobs are not created. India requires proper urban planning, conservation friendly policy, radical immediate reforms, proper housing for development and advancement.

Eight Visions which changed the face of India: According to Murthy India has gone through a sea-change and spectacular rise in recent times. Following factors contributed for that.; Green Revolution: It made the country self-sufficient in food.; White Revolution: Kurien's White Revolution empowered women and farmers.; Telecom Revolution: It made the communication fast.; Space Technology: India is now one of the leading nations in space technology.; Atomic Energy: It also brought a revolution of a sort.; Software Revolution: India's progress in software is internationally recognized.

Importance of Education: According to Murthy only by bettering education system, good citizens can be produced.



According to Aristotle, 'civilized society is one where good people become citizens.' For betterment of education system, the writer advocates interactive class, less size of the class and skilled citizens as teachers who are role models. The writer gives examples of U.S. and South Korea. U.S. has world class education system where world class incubators of innovative and knowledge creation are produced. Seventy percent of Nobel laureates are employed in U.S. universities. The seeds of growth of new technology are sowed in these universities. South Korea also encouraged knowledge intensive investment. Actual progress comes from thinking, articulating, debating and executing ideas in an environment of respect for pluralism. According to Benjamin Disraeli, "A university should be a place of light, of liberty and of learning." According to Clark Kerr, "On a global scale, wealth and prosperity have become more dependent on the access of knowledge than the access of natural resources."

Research has shown that the countries that have higher levels of literacy and have invested steadily in raising the educational levels of their labour force have sustained high levels of economic growth.

But the deplorable fact is that India's Ph.D. is 1/10 of U.S. pool. India spends only 1.9% of the GDP on higher education. In India, only 9% people are university educated whereas in China the percentage is 15. According to Amartya Sen access to basic education is human right. Even primary education is not of good quality as there are cases of dropouts. The saddest part of this is that some of our institutes which were internationally reputed in past have lost their shine due to our wrong policies. He quotes the example of Kanpur IIT, which used to attract even foreigners for Ph.D. and produce world-class research papers in mid sixties is now failing to do that. Indian universities should have an environment of openness. It is required to raise aspirations, confidence, energy and enthusiasm of our educational institutions.

**Leadership :** In 1981, INFOSYS was established by seven software engineers. In that company, professionals progressed in an environment of energy, enthusiasm, happiness, joy, satisfaction and confidence. They had a great vision, a purpose which was noble, lofty and inspirational. They had courage, commitment to values, openness and fairness. According to him good leadership translates a great vision

into productive results through the instrument of effective public governance.

**Entrepreneurship:** It requires a great idea, ability to face challenges and strong team. Shared vision, marketable idea, sound strategy, implementable action plan, a layer of competent management, shared values, professionalism, separating control from professionalism, spirit of sacrifice, pride in creation of wealth, leadership by example and finance are important ingredients for a successful entrepreneur. The writer quotes Jr. Luther King, "The ultimate measure of a man is not where he stands in moments of comfort but where he stands at times of challenge and controversy."

**Globalisation:** According to Nehru, "We have to fight poverty as stoutly and as bravely as we fight any enemy who invades our country. We can build our nation when we build our people and make them happy and contented."

Globalisation is necessary to help others intellectually, to provide technical help, to increase competitiveness and to expand the market geographically. To bring globalisation, we should be open minded and stop arguing about isms and philosophy. We should stop using democracy as an excuse for failure, embrace intellectual integrity, embrace speed of decision making in government, stop using democracy as an excuse for failure, become reliable, practise what one preaches, make the bureaucracy accountable, make a transparent system, welcome foreigners, create public-private partnership, follow discipline, improve quality of education.

**Corporate World:** According to Murthy sound predictability, sustainability, profitability, derisking are necessary. Corporate should be trustworthy and contribute to society. Openness to new ideas, meritocracy, speed, imagination and excellence in execution are the attributes of a successful corporation.

**Suggestion by Murthy:** The technocrat is livid in praise of the magic movie Chak De that he highly appreciates for positive message to empower and strengthen India. Murthy provides an excellent suggestion to youngsters "Choose a worthy dream for yourself. Go after it confidently. Create a life that you will be proud of in the years to come. But always, without fail ensure that you follow your bliss."

## Reference

Murthy, N.R (2009) *A Better India A Better World* Penguin Books India



## WOMEN ENTREPRENEURSHIP AND EDUCATION

**Akanksha Srivastava**Assistant Professor, P. G. Department of Education  
Pestle Weed College of Information Technology, Dehradun**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

**Abstract**

*Entrepreneurship refers to an individual's ability to turn ideas into action. Entrepreneurship is a combination of mindsets, knowledge and skills. At higher education level, the primary purpose of entrepreneurship education should be to develop entrepreneurial capacities and mindsets. Crossing boundaries between disciplines, and multidisciplinary collaboration, are essential elements in building enterprising abilities. In terms of entrepreneurship, this socially formed world favors the masculine ideal over the feminine, and while the impact is powerful, most people are not aware of its creation, refreshment, and/or use. Social construction is not a deterministic process; it is perpetuated by institutions and institutional forces but what is socially constructed can change. There is a need for greater flexibility in course design. Work placements, alternation between full- and part-time study, organization of intensive courses, and accreditation of informal and non-formal learning all have a role to play.*

**Keywords:** *Women Entrepreneurship, Entrepreneurship Education, Teaching Methods*

The domain of entrepreneurship education is now faced with ever more interesting choices about what to be, who to serve and from what principles to profess. Opportunities and challenges in teaching and training related to globalization, technology, political organization and shifting demographics and social views have created entirely new understandings of what is important and where attention should be directed. Entrepreneurship is exciting and valued and most agree that while academics and others can't help every person to be an entrepreneur, but can help those who are interested with tools, skill acquisition and ideas. The emergence and growth of women-owned businesses have contributed to the global economy and to their surrounding communities. The presence of women around the world driving small and entrepreneurial organizations has had a tremendous impact on employment and on business environments worldwide. Women-owned firms comprise between one-quarter and one-third of all the businesses in the formal economy, and are expected to play an even larger role in informal sectors (Delaney, 2002).

Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives.

To achieve success, growth and employment, we need to stimulate the entrepreneurial mindsets of young women, encourage innovative business start-ups, and foster a culture that is friendlier to entrepreneurship and to the growth of small and medium-sized enterprises (SMEs). The important role of education in promoting more entrepreneurial attitudes and behaviors is now widely recognized. Entrepreneurial programmes and modules offer students the tools to think creatively, be an effective problem solver, analyze a business idea objectively, and communicate, network, lead, and evaluate any given project. Students feel more confident about setting up their own business as they can now test their own business ideas in an educational, supportive environment. However, the benefits of entrepreneurship education are not limited to boosting start-ups, innovative ventures and new jobs. Entrepreneurship is a competence for all, helping young people to be more creative and self-confident in whatever they undertake.

**Few Schemes by the Government to Promote Women Entrepreneurship:** Some important schemes by the government are-Trade Related Entrepreneurship Assistance and Development (TREAD)

The main objectives of the scheme are - To provide assistance to women entrepreneurs through NGOs.; To build up capacity of Entrepreneurship Development Institutions like National Institute for Small Industry Extension & Training (NISIET), Small Industries Service Institutes (SISI), State level EDIs, etc., by providing financial support in the form of Government of India grant; To create entrepreneurship development training facility through NGOs by providing financial support for conducting training programmes.

*Mahila Udyam Nidhi*-An exclusive scheme for providing equity to women entrepreneurs implemented by the Small Industries Development Bank of India (SIDBI).

*Mahila Vikas Nidhi* - It offers developmental assistance for pursuit of income generating activities to women.

*Prime Minister's Rozgar Yojana (PMRY)*- During 2006-07, the participation of women in terms of employment generation under Prime Minister's Rozgar Yojana (PMRY), was 16.5 per cent. The government made several relaxations to women to facilitate the participation of women beneficiaries.

**Changes in Women Entrepreneurs in India**

In the fifties compulsive factors led to the creation of women entrepreneurs. Women entrepreneurs of the sixties began to aspire but also accepted the social cultural traditions. The women in seventies opened up new frontier. They had not only aspiration but ambition. Women entrepreneurs of the eighties were educated in highly sophisticated technological and professional education. They became equally contributing partners. During the nineties, this was the first time when the concept of best rather than better than the male heir was talked about and the women entrepreneurs of the 21st Century have become the Jill of all trades.

**Entrepreneurship Education**

Entrepreneurship education should not be confused with general business and economic studies. Its goal is to promote creativity, innovation and self-employment, and may include the following elements: developing personal attributes and



skills that form the basis of an entrepreneurial mindset and behaviour (creativity, sense of initiative, risk-taking, autonomy, self-confidence, leadership, team spirit, etc.); raising the awareness of students about self-employment and entrepreneurship as possible career options; working on concrete enterprise projects and activities; providing specific business skills and knowledge of how to start a company and run it successfully

#### *Entrepreneurship and Higher Education*

Higher education is not isolated from previous levels of education. It should reflect what is done at school. Entrepreneurship is a combination of mindsets, knowledge and skills. As mindsets take shape at an early age, entrepreneurship is something that should be fostered already at school. At higher education level, the primary purpose of entrepreneurship education should be to develop entrepreneurial capacities and mindsets. In this context, entrepreneurship education programmes can have different objectives, such as: a) developing entrepreneurial drive among students (raising awareness and motivation); b) training students in the skills they need to set up a business and manage its growth; c) developing the entrepreneurial ability to identify and exploit opportunities.

Universities and technical institutions (e.g. polytechnics) should integrate entrepreneurship as an important part of the curriculum, spread across different subjects, and require or encourage students to take entrepreneurship courses. Students in all fields, including Humanities, Arts and Creative studies, may greatly benefit from learning about — and gaining experience of — entrepreneurship.

A perceived lack of relevant experience and a lack of self-confidence are two often cited reasons for new graduates not engaging in entrepreneurship soon after graduation. The university experience should be capable of addressing both these needs. The learning experience needs to build depth and breadth in awareness, understanding and capacity. Although not applicable in all cases, the general approach would be to provide broad exposure and positive and motivational experiences during the early stages of university life. This then provides a platform from which to build depth and capability in preparation for an entrepreneurial career at the point of exit. The important point here is one of progression, not only through university, but also through the whole education system at all levels. Integration of entrepreneurship into the curriculum needs to be the vision for a higher education institution as part of its wider mission. Provision should be accessible for Arts and Humanities students as it is for Business/Social Science and Science/Engineering students. Educators should be comfortable and skilled in addressing a diversity of student groups, from different cultural backgrounds, by providing examples and role models that relate to their contexts.

Available data show that the majority of entrepreneurship courses are offered in business and economic studies. However, it is questionable whether Business Schools are

the most appropriate place to teach entrepreneurship: innovative and viable business ideas are more likely to arise from technical, scientific and creative studies. So the real challenge is to build inter-disciplinary approaches, making entrepreneurship education accessible to all students, creating teams for the development and exploitation of business ideas, mixing students from economic and business studies with students from other faculties and with different backgrounds.

Most of the possible contents of entrepreneurship courses are relevant for students from all fields of studies. However, in order for the teaching to be tailored to the specific needs of different categories, more emphasis is placed on one aspect or another.

The demand for learning about entrepreneurship is increasing. However, there is a shortage of human resources and funding for this type of education; therefore it is not possible to meet this demand fully. Action-oriented teaching is labour-intensive and costly, and requires specific training. There are currently too few professors of entrepreneurship. There is a need to graduate enough PhD students in entrepreneurship who can become teachers. Moreover, there is very little in terms of incentives to motivate and reward teachers for getting involved in entrepreneurial teaching and interaction with students. It is currently difficult to build a career in entrepreneurship, as research remains the main promotion criterion.

#### *Teaching Methods for Developing Entrepreneurship*

The best way to encourage entrepreneurship among students is by giving examples from the relevant technical area. As regards current teaching methods, there are a wide range of techniques to supplement lectures as the most basic teaching tool. However, there seems to be a gap between the methods actually used and those that are viewed as the most effective and appropriate. Using experience-based teaching methods is crucial to developing entrepreneurial skills and abilities. Traditional educational methods (like lectures) do not correlate well with the development of entrepreneurial thinking. There is a need for more interactive learning approaches, where the teacher becomes more of a moderator than a lecturer. Crossing boundaries between disciplines, and multidisciplinary collaboration, are essential elements in building enterprising abilities. Getting real entrepreneurs involved in the teaching can make up for the current lack of practical experience among professors. Although entrepreneurs and business practitioners are in general involved in the teaching, there are few examples of entrepreneurial practitioners engaged in the full curricula experience. Most frequently, they come to give short presentations to students (e.g. as personal testimonials or guest lecturer) or as judges in competitions.

Also, mobility of teachers and researchers between higher education institutions and business is in general very low, and this practice is not actively encouraged. There are in many cases few or no incentives, and in some cases outright disincentives.

Most appropriate or effective techniques in delivering entrepreneurship programmes and courses, in particular to non-business students are methods based on “group and team techniques for creating new business ideas” and for the use of “case studies”. Following these two main categories, other tools highlighted as particularly effective were “business planning workshops”, “inviting guest speakers” (namely entrepreneurs) and “business simulations”. Also, methods based on undertaking some practical entrepreneurial activity and creativity exercises leading to the development of ideas were among other tools whose effectiveness was underlined.

Through appropriate methods of delivery, programmes and courses should be geared to the acquisition of generic and horizontal skills, aiming to make students: more creative/innovative; highly motivated; pro-active; self-aware; self-confident; willing to challenge; better communicators; decision-makers; leaders; negotiators; networkers; problem solvers; team players; systematic thinkers; less dependent; less risk averse; able to live with uncertainty; capable of recognizing opportunities.

Experts emphasized the importance of crossing boundaries between disciplines, and of working in teams. Whatever the level of students, a powerful way of teaching entrepreneurship is to mix business and non-business students. This is always valued by the participants, who consider that they learn from each other and discover new ways of thinking.

Presentations by entrepreneurs in lessons are not only important because they impart knowledge, but also because they provide an example which can be followed by students. It is therefore very important that as many student entrepreneurs as possible (or at least those who started their enterprise as students) report on their successes at higher education institutions. It is harder for some students to imagine becoming the next famous entrepreneur. However, it is much easier for students to imagine that they can also do that which other students succeeded in doing several years ago.

### **The Difference between Women and Men**

If what we teach is based on what we know, we must begin with the state of the art in research on women and entrepreneurship. Conclusions now being drawn on more than a 20 year history of research show that overall: Women entrepreneurs are very much like men entrepreneurs: within-gender differences are more meaningful than between-gender differences (Ahl, 2002; Brush, et al, 2004); In terms of new and early stage high growth ventures, there are some documented facts that correlate the gender of the lead person (male or female) with certain variables of interest as regards business launch, ownership and growth. Such facts include, for example: more men than women own businesses; women and men-owned ventures are distributed unevenly as a percentage of businesses across industry sectors, with women-owned businesses concentrated in the services sector; and women-led ventures receive less venture capital funding than men-led ventures.

### **Entrepreneurship Education for Women (and Men)**

If teaching is based on good research, synthesis and a point of view, then as regards women and entrepreneurship education, following points should be considered: Women and men should be taught the same knowledge and skills of entrepreneurship; Women and men should be informed about the gendered landscape and its norms of Masculinity and femininity, and associated implications; Careful analysis should be conducted to determine how gendered institutions influence women in regard to their preparation for and activities of entrepreneurship, including business schools and other learning environments; The findings of research on differences between the decisions, behavior and outcomes of men and women entrepreneurs and their businesses should be thoughtfully considered and presented in a fashion cognizant of the tendency to impose stereotypical views; New research to expose women’s experience of the gendered landscape should be undertaken; Women, in particular, should be informed and helped to strategize how to negotiate the gendered landscape they will encounter as entrepreneurs, given their institutionalized “onedown” position in the world of work.

Sociologist Joan Acker (1990) tells us that in modern Western society, men have charge of production and women of reproduction. With this simple phrase Acker calls out the social construction of men and women’s expected place in life. When women “cross over” into the world of production, they are different than the norm, and to a greater or lesser degree, unexpected. Understanding the social construction of gender is a powerful tool for our age as it allows us to place both men and women as actors in the creation of the taken-for-granted. In terms of entrepreneurship, this socially formed world favors the masculine ideal over the feminine, and while the impact is powerful, most people are not aware of its creation, refreshment, and/or use. Social construction is not a deterministic process; it is perpetuated by institutions and institutional forces though what is socially constructed can change (Berger & Luckmann, 1966). That means by calling out current patterns and norms and instilling new ones, we can change the landscape and its assumptions over time.

### **Suggestions for Developing Entrepreneurship Education**

Considering the importance and lack of awareness about entrepreneurship education we need to take certain urgent steps like setting up a task force to determine how entrepreneurship can be integrated into primary, secondary, and higher education, adopting legislation, supporting relations between private business and universities, allowing professors to work part-time with business; help develop an accreditation system to validate non-formal learning and practical activities that favor entrepreneurship development; establishing awards for entrepreneurial universities, teachers and students, and promote positive examples of academic spin-offs.



Higher education institutions could set up a strategy and an action plan for teaching and research in entrepreneurship, embedding practice-based activities, and for new venture start-ups and spin-offs, create an entrepreneurship education department, which would serve as an entrepreneurial hub within the institution and spread the teaching of entrepreneurship across all other departments, offer an introduction to entrepreneurship and self-employment to all undergraduate students during their first year. In addition, give all students the opportunity to attend seminars and lectures in this subject, set up incentive systems to motivate and reward faculty staff in supporting students interested in entrepreneurship, and acknowledge the academic value of research and activities in the entrepreneurial field, award academic credits for practical work on enterprise projects outside the established courses. Business associations could help to get their members more involved in teaching entrepreneurship at educational establishments.

#### **Educational Requirements of Women already in Entrepreneurship**

In a study of the information needs of 311 women entrepreneurs (Gundry, 1997), those who were just starting their ventures requested assistance and training in implementing the business idea, identifying initial sources of financing, and advertising/promotion. The entrepreneurs who were already established had a somewhat different set of needs, including identifying financing for expansion and increasing sales. Sexton et al. (1997) identified the ten most important areas for further learning needed by fast-growth entrepreneurs: using cash flow to make operational decisions; financing growth; increasing the value of the business; compensation for self and associates; hiring, training, and motivating for growth; succeeding in a rapidly changing world; successful selling; sales force management; management success; and problems and pitfalls of growth.

In summary, the literature seems to suggest that the learning needs of women entrepreneurs in growth firms differ from the needs of women entrepreneurs in start-up or slower-growth firms.

#### **Conclusion**

An important conclusion is that traditional educational methods do not correlate well with the development of entrepreneurial traits and attributes, and that multi-disciplinary collaboration is an essential element of building enterprising abilities. There is a need for greater flexibility in course design. Work placements, alternation between full- and part-time study, organization of intensive courses, and accreditation of informal and non-formal learning all have a role to play.

Regardless of this emerging dialectic on the actual state of sameness and difference in entrepreneurship engagement by gender, there is still a pervasive and unsubstantiated story

that continues to influence entrepreneurship research and education succinctly titled by DuRietz, and Henrekson (2000) as: “The Female Underperformance Hypothesis”. As Ahl (2002, p. 603) recounts the story lines: women have less motivation for entrepreneurship and/or for growth of their businesses, less desire to start a business, less self confidence, less preparatory education and more risk aversion; they use less optimal feminine management practices, behave irrationally by turning to unqualified family members for help and they do not network optimally. But this overall picture of women entrepreneurs and students of entrepreneurship is not based in a science of truth, but in perspective, social construction and research process. We argue that rationalism roots our field in a foundation that postures the masculine man entrepreneur as an ideal: decisive, ambitious, courageous, risk embracing. Once such a foundational view is in place, comparisons to the feminine or woman, and in fact to many men, are by definition less than the ideal.

Considering this, we realize that the posture for education not only concerns successful entrepreneurship, the differences exist between men and women entrepreneurs and their ventures, but also the perception of differences and the values that direct the investigation and evaluate outcomes determined. We turn again to the facts that distinguish women led businesses from men led businesses in meaningful ways. How do we explicate them? Feminist analysis offers a liberal and social construction framework to examine found differences that still allows for men and women to be considered mostly the same. In the first case, women and men are equal but barriers prevent women from full expression. In the second case, what humans do and how we perceive is enacted socially – we create the “truth” through convention and social experience; we act continually though institutional forces to sustain historical views.

#### **References**

- “Entrepreneurship in Higher Education, Especially in Non-Business Studies”, Final Report of the Expert Group, Final version, March 2008
- Kickul, Jill R., Lisa K. et al,” Women entrepreneurs preparing for growth: the influence of social capital and training on resource acquisition”, *Journal of Small Business and Entrepreneurship*, Vol(20)(2)ISSN: 0827-6331.
- Nelson Teresa and Duffy Susan ,” Men, Women, Sex and Gender in Entrepreneurship Education”, Simmons School of Management, Boston.
- “Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a More Responsible and Inclusive Globalization”, 2nd OECD Conference of Ministers Responsible for Small and Medium-Sized Enterprises (SMEs) ,Istanbul, Turkey 3-5 June 2004.



## SELF-HELP GROUPS AND THE ROLE OF WOMEN IN HOUSEHOLD DECISION MAKING: CASES OF SC, OBC AND MIXED GROUPS'

Shashi Pandey

Guest Lecturer, Department of Sociology, S.S.Khanna Girl's PG College, Allahabad

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

## Abstract

*The paper attempts to understand the role of women of self help groups (SHGs) of OBC, SC and Mixed membership in the household decision -making before joining the groups and ten years of after joining the groups. A sample of six self help groups belonging to OBC, SC and mixed group membership has been selected from three villages of Allahabad district of Uttar Pradesh. Data are collected through focus group discussions and interviews of members of SHGs. Analysis of data reveals that the role of women in making decisions like schooling of children specially for girls, family planning, casting votes, and decisions on moving alone to places located far from the village has increased after joining the group. It was also found that the SC women are participating more in household decision making in comparison to other groups. A trend of taking consensus decision making is emerging and domination of men in such decisions is slowly declining.*

**Keywords:** Self-Help Groups, Family Decision-Making and Women Empowerment.

The concept of empowerment has been the subject of much intellectual discourse in the recent times to describe the process by which powerless and marginalized people organize collectively to gain greater access to public service and the benefits of economic growth. Empowerment is a multi-dimensional process that people gain control over their lives and in their society, by acting on issues that they define as important. Empowerment occurs in different spheres within social, psychological, economic spheres and at various levels, such as individual, group and community. In this paper efforts are made to understand the impact of participation of women in SHGs women in family decision-making such as sending their children specially girls to schools, family planning, casting votes, and decisions on moving alone to places located far from the village after and before joining the group in SC, OBC and mixing castes members of group. This study is based on primary data collected from interviews and focus group discussions. For the purposes of the assessing impact of the SHGs members, comparing on some issues of decision making in all six groups.

The studies related to empowerment define different dimensions of empowerment. Hashemi and Schuler (1993) identified six dimensions of empowerment based on activities women identified as important for their day-to-day functioning: 1. Sense of Self and Vision of the Future; 2. Mobility and Visibility; 3. Economic Security; 4. Decision Making Power in the Household; 5. Participation in Non-Family Groups; 6. Interact Effectively in the Public Sphere. They discuss these dimensions as interrelated, noting that a change in one dimension would likely affect other dimensions. Malhotra et al. (2003) provide considerable review of this debate. They explained many ways in which empowerment can be measured with six dimensions: economic, socio-cultural, familial-interpersonal, legal, political and psychological. Friedmann (1992) Kumar and Sreedhara (2004) discussed about kinds of empowerment. Fayyaz (2002) divided women's empowerment into three categories as economic, social and political. S.L.Sharma, (2002) argues that, There are two conceptions of empowerment: uni-

dimensional and multidimensional. Uni-dimensional conception of empowerment focuses on political empowerment. Crucial to the concept of political empowerment is the notion of power as command. There are at least three distinguishable usages of power as command: a) command over one's own body and actions; b) command over others' actions; and c) command over institutional resources such as decision-making bodies. Multi-dimensional includes social, economic, and psychological. Social empowerment connotes promotion of social capacities such as -health, education, freedom and opportunities for realizing one's potentialities, lack of discrimination against daughters, women access to social space, increased social prestige, increasing outside contacts and free geographical mobility, ability to solving the social issues, and decision-making within and outside of the family. Economic empowerment includes women's control over income, relative contribution to family support, access to and control on family resources like land, house etc. This will increase women's earning capacity, bargaining power, control over resources, and role in household economic decision-making, meeting the basic needs and altogether improving self-reliance, thereby reducing women's economic subordination. Psychological empowerment signifies confidence building, possession of a sense of efficacy and ability to overcome feeling of helplessness and debunking the value of gender discriminations. The definition of knowledge, self respect and other elements related to human beings may be culture specific. However, invariable of society the concepts of strong determination, assertive nature, motivation etc, revealed the psychological empowerment of the individual. The political empowerment indicators considered their basic political rights, role in decision making bodies of the state, leadership quality and ability to politicize their problems. Thus it could be said that empowerment can be observed at different dimensions and different levels. The paper tries to understand the social empowerment in terms of decision -making at family level such as schooling of children specially for girls schooling, family planning, casting votes, and decisions on



moving alone to places located far from the village after and before joining the group.

The reviews related to Self-Help Groups and women empowerment reveals the most recent approach to Empower women is the organizational approach adopted both by government and non government machinery. The organizational approach for empowering rural poor women was emphasized to increase the capacity of the poor and improved their social and economic status. Empowerment of women through SHGs would lead to benefits not only to the individual women and women groups but also for the family and community as a whole through collective action for development. Self-Help Groups is the beginning of a major process of empowering women and to provide increased access to resources and control over factors contributing to women empowerment particularly in the area of education, skills, income generating activities and decision making power at different levels. The Self-Help Group to save and contribute to a common fund from which small loans are provided to the needy members in the group. These SHGs have become appropriate community based organizations that hold key for participatory development.

So this study takes six different casts self help groups for the comparing on some issues at family level. The present study would try to understand the process of empowerment in SHGs women before and after joining the group. The study is undertaken with some specific objectives.

To study the role of women in family decision making before and after joining the group in different castes group's women.; To assess the role of the SHGs in social empowerment of group's women.

**Methodology**

This study was conducted in three villages of Allahabad district of Uttar Pradesh. For the purpose of the study six sample Self-Help Groups were selected from different cast groups, promoted by block. In six SHGs two each SHG selected from three villages namely Rampur, Hathiganha and Tikri. The sample SHG categorized into three groups, OBC group, Scheduled Caste group and Mixed group. This study is based on primary data collected from interviews and focus group discussions. For the purpose of the assessing impact of the SHGs members, comparing on some issues of decision making such as decision on schooling of children, family planning, casting votes, and decision on moving alone to places located far from the village before and after joining the group in family level among the SHGs members in all three castes group.

**Sample Characteristics**

It is found that the OBC member's husbands are usually vegetable cultivator who produces vegetables in own fields

and there after go to the market for selling vegetables at every morning and return back in afternoon and rest of the time they spend in their houses. So all the major decisions like education of children especially girl's education, casting votes, family planning and going to outside decisions are affected by their husbands. OBC women work on their own field to provide assistance to their husbands and they do not work on other's field. They belong to traditional society, that's why they do not go outside lonely and usually decision on going outside are taken by their husbands. On the other side Scheduled Castes women's husband are manual labour who comes in city for seeking work and returned back in evening and SC women work on other's field for livelihood. Thus SC women have to take more decisions in absence of their husbands. While mixed groups are categorized into two types: one is mixed group of Patel (OBC) and Pasi, of middle aged women and second is old aged group which consists of- thakur, nayee, gaderia and chamar. In middle aged group, member's husbands are also manual labour and visit the city for employment. So, women of this group spend more time in domestic duties and sometimes they work in the fields for wages. On the other side some old aged group members husband engaged from petty shops like barber shop while some husbands engaged from agriculture. Old aged women do not work in other's field because of oldness. Mostly they are widowed so they depend on their son for saving credit in group.

**Findings and Discussion**

Schooling of children: The scheme of micro financing through Self Help Groups (SHGs) has transferred the real power in the hands of women. The changes on the decision making for schooling of boys and girls could be seen after becoming the member of group. Group's women are taking more decision on education of children after joining the group. Table -1 shows the decision on boys and girls education before and after joining the group. Which given below-

**Table 1 - Family Member's Decision Regarding Schooling of Children**

**SC Group**

| Decision of Family Members | Before SHGs |       | After Two Years Of SHGs |       | After Ten Years Of SHG |       |
|----------------------------|-------------|-------|-------------------------|-------|------------------------|-------|
|                            | Boys        | Girls | Boys                    | Girls | Boys                   | Girls |
| Husband                    | 11          | 12    | 09                      | 09    | 04                     | 05    |
| Wife                       | 05          | 04    | 08                      | 07    | 12                     | 10    |
| Joint                      | 02          | 02    | 02                      | 02    | 04                     | 5     |
| Mother in law              | 02          | 02    | 01                      | 02    | 00                     | 0     |
| Total                      | 20          | 20    | 20                      | 20    | 20                     | 20    |

Source: from field

**OBC Group**

| Decision of Family Members | Before SHGs |       | After Two Years Of SHGs |       | After Ten Years Of SHG |       |
|----------------------------|-------------|-------|-------------------------|-------|------------------------|-------|
|                            | Boys        | Girls | Boys                    | Girls | Boys                   | Girls |
| Husband                    | 13          | 14    | 10                      | 10    | 08                     | 09    |
| Wife                       | 04          | 03    | 05                      | 08    | 08                     | 08    |
| Joint                      | 01          | 01    | 04                      | 02    | 04                     | 03    |
| Mother in law              | 02          | 02    | 01                      | 0     | 0                      | 0     |
| Total                      | 20          | 20    | 20                      | 20    | 20                     | 20    |

Source: from field



**Mixed groups**

| Decision of Family Members | Before SHGs |       | After Two Years Of SHGs |       | After Ten Years Of SHG |       |
|----------------------------|-------------|-------|-------------------------|-------|------------------------|-------|
|                            | Boys        | Girls | Boys                    | Girls | Boys                   | Girls |
| Husband                    | 14          | 13    | 12                      | 12    | 09                     | 08    |
| Wife                       | 01          | 01    | 03                      | 05    | 08                     | 09    |
| Joint                      | 03          | 04    | 04                      | 02    | 03                     | 03    |
| Mother in law              | 02          | 02    | 01                      | 01    | 0                      | 0     |
| Total                      | 20          | 20    | 20                      | 20    | 20                     | 20    |

Source: from field

Table-1 shows the involvement of SHGs women in decision making for education of children before and after joining the group. It is found that all the group women were less involved in decision making on education of children before joining the group. In OBC group, it was found that OBC women had little geographical mobility in the village because of the tradition before joining the SHGs. So, the social network was nominal in the village, consequently they had little knowledge about quality of education and also about better schooling for children. But when they joining the group they come out from the houses and interact with the other women of village. When they come in meetings they discuss with other members that in which school your children are studying? And which school is good for education of girls and boys? Then, they discuss with their husband on these issues. After the discussion with husbands, they decide that where their children should be admitted.

On the other side it is found that SC group women and mixed group women were not sending their girl child in school because of economic problems and unawareness and if admitted in school, they were dropped out from the school to get domestic assistance in the houses. But after becoming the member of group they come in meetings regularly and negotiate by other member about better education of children. Thus these processes enable them to make decision on these issues.

Family member's decision regarding casting votes: Human development report 1995 identifies the significance of active involvement of women in political decision-making for the empowerment. The field study revealed that Scheduled Caste women are taking more decision about casting votes compare with OBC and mixed groups.

**Table 2 - Family Member's Decision Regarding Casting Votes**

Human development report 1995 identifies the significance of active involvement of women in political decision-making for the empowerment. The field study revealed that Scheduled Caste women are taking more decision about casting votes compare with OBC and mixed groups.

**SC Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 13          | 07                      | 03                     |
| Wife                       | 01          | 07                      | 10                     |
| Joint                      | 04          | 04                      | 05                     |
| Mother in law              | 02          | 02                      | 02                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

**OBC Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 15          | 09                      | 04                     |
| Wife                       | 02          | 06                      | 07                     |
| Joint                      | 01          | 03                      | 07                     |
| Mother in law              | 02          | 02                      | 02                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

**Mixed Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 14          | 09                      | 05                     |
| Wife                       | 03          | 06                      | 05                     |
| Joint                      | 01          | 03                      | 09                     |
| Mother in law              | 02          | 02                      | 01                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

It was found that, overall SHGs women were politically more aware and involvement in decision related casting voting has consequently increased than past. Table-2 shows that SC group women are taking more decision on casting votes than OBC and Mixed group women after joining the group. Here, important to understand, the process of empowerment that how group's women taking more decision on casting votes. It was found that SHGs women had little knowledge about legislative assembly and parliament election and they did not carry much importance of these elections, but after joining the group, they were giving importance and negotiated with husbands about these elections.

It was also found that, in panchayat election they had little knowledge that who were standing in local panchayat election and to whom they should vote. But after joining the group they interact with other women of the group and discuss about village problems like water supply, road construction, and electricity problem of village and also discuss about recent political activities like who are standing in election, what had been done for development in village by earlier elected person. After discussion in group, when they come back to home and again negotiate with their husband about own village problems and merit and demerit of standing candidates, after the long discussion with husbands about the existing problems of village, they take final decision to whom they should vote. So this process give them the capability to take decision that whom to vote. It is also found that SC women are more

involved in political decision making than OBC and Mixed group. OBC member's husbands are vegetable cultivator they spend more time at home as a result husbands are more involved in local politics So OBC group women are taking less decision on casting votes. On the other side Scheduled Caste member's husbands and mixed caste group



members husbands usually wage laborers, who come in the city for seeking work and return in night. So in the absence of their husbands and negotiation with other members, SC group’s members and mixed group members take more decision on casting votes.

**Table 3 - Family Member’s Decision Regarding Family Planning**

The women’s role in household decision making was examined based on their involvement in decision making at household level. It is observed that the participation of women in the decision making on family planning is increasing after joining the group than past. Which given below-

**SC Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 12          | 06                      | 04                     |
| Wife                       | 02          | 07                      | 11                     |
| Joint                      | 03          | 04                      | 04                     |
| Mother in law              | 03          | 03                      | 01                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

**OBC Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 07          | 05                      | 02                     |
| Wife                       | 02          | 05                      | 09                     |
| Joint                      | 02          | 06                      | 08                     |
| Mother in law              | 09          | 04                      | 01                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

**Mixed groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 07          | 05                      | 02                     |
| Wife                       | 02          | 05                      | 09                     |
| Joint                      | 02          | 06                      | 08                     |
| Mother in law              | 09          | 04                      | 01                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

It is found that, when the women were not the member of group they were unconscious about their health. Their husbands and mostly mother in-law used to take decision on number of children, even number of son and gaps between two children. In rural areas there were limited hospitals and other health facilities and poor women have limited mobility so they can’t go easily in hospital for terminated pregnancy because of economic problems and family interrupt both. But when the women are joining the group, they come in meeting and discuss about their health problems and solutions both. After that they discuss with their husbands about the hospital and give the references of those women who had gone hospital for their health problems and termination of pregnancy. After several discussions with husbands they decide to go hospital. In some time their husbands forbid for termination pregnancy

but women go to hospital with their neighbor in oppositions of husbands. So it could be said that the increased network of women able them to take decision on family planning.

**Table 4 - Family member’s decision regarding going to outsides**

Membership of SHGs promotes women to make more interaction from outside world. Geographical mobility of group’s women has been increased after joining the group. Thus increased geographical mobility has enhanced decision making capability of group’s women to go to outside of the village. Increased capabilities on decision making is given below in table-4

**SC Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 09          | 05                      | 03                     |
| Wife                       | 05          | 09                      | 12                     |
| Joint                      | 02          | 02                      | 03                     |
| Mother in law              | 04          | 04                      | 02                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

**OBC Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 10          | 09                      | 05                     |
| Wife                       | 01          | 04                      | 09                     |
| Joint                      | 02          | 02                      | 04                     |
| Mother in law              | 07          | 05                      | 02                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

**Mixed Groups**

| Decision of Family Members | Before SHGs | After Two Years Of SHGs | After Ten Years Of SHG |
|----------------------------|-------------|-------------------------|------------------------|
| Husband                    | 10          | 05                      | 06                     |
| Wife                       | 02          | 08                      | 10                     |
| Joint                      | 03          | 03                      | 03                     |
| Mother in law              | 05          | 04                      | 01                     |
| Total                      | 20          | 20                      | 20                     |

Source: from field

It is found that SHGs women had little geographical mobility before joining the group, but after joining the group they come out from the houses for SHGs activities such as meetings, and block activities. A greater proportion of members reported visiting new places after joining the group. Here important to know that who were taking decision on going to outside before joining the group. It is found that OBC group women belong from traditional family where usually husbands or mother-in-law take decision on going to outside, but after joining the OBC women are more involved in such this decision (see table-4). On the other side SC and Mixed group women are more involved in decision on going to outside. It is found that SC group women and mixed group women had little movement within a village from home to field but they did not go to outside of the village because they were unknown from



outside world, but after joining the group they come in meeting and sharing our problems with other members and also have to go new places such as panchayat house, block, district rural development office, bank etc. because of SHGs. Thus increased network make them able to take decision on going to outside.

### Conclusion

The present study on Self-Help Group women in Allahabad reveals that, in meaningful involvement of SHGs women in decision making in family, majority of the members said that the decision regarding education of children, family planning, casting votes and decision on moving alone to places has increased after joining the group. In present study it is seen that decision on education of children all group's women were sending their children specially girls to schools. Even they preferred English medium school for their children. In some cases OBC group women were choose the school for good education of their children. SC group women were taking girl's education, seriously and tried to give them good education and also went to school for submission of school fee. Its shows the awareness of group's women for education of children. The analysis also shows that the awareness of women about their health. It is found that all the group women were more conscious about their health after joining the group. All the women preferred small family size and went to hospital for terminated pregnancy in opposition of their husbands. Thus it shows that women taking more decision on family planning than past. Decision on casting votes, majority of the group women were participating more on casting votes decision. When they were not the member of group, it was totally on the hand of men but after joining the group their knowledge about political activities of village has increased and they were talking more with their husbands on this issue, consequently they were taking more decision after joining the group. The data shows the decision on going to outside, majority of the members were going alone of outside of the village for SHG related work. It was found that the network of the women was minimal before joining the group. But after joining the group interaction with other group women make them able to take decision on going to outside of the village.

### References

Burra, N, Deshmukh- Ranadive .J. Murthy, R. K, (2005) Micro-credit, Poverty and Empowerment, Linking the Triad , sage publication, New Delhi.

Dasgupta, Rajaram (2005). "Microfinance in India: Empirical Evidence, Alternative Models and Policy Imperatives", Economic and Political Weekly, 19 March.

Friedmann. J. 1992, "Empowerment: the policies of alternative development" Blackwell publishers, oxford, U.K.

Fayyaz, A. (2002), " Successful Community Development : Pakistan. Report of the APO Symposium on Integral Local Community Development in Tokyo" 17-22 April, Asian Productivity Organization, Tokyo Japan, pp 267-284.

Hashemi, Syed Mesbahuddin and Sidney Ruth Schuler. (1993), "Defining and Studying Empowerment of Women: A Research Note from Bangladesh." in JSI Working Paper No.3. Arlington, Virginia.

Kumar, M.A.U and T.N. Sreedhara (2004), "From Passive Participation to Effective Leadership: Study on the Advances in Women Leadership in Dakshina Kannada, India" Sixth International Conference of International Society for Third Sector Research (ISTR) Ryerson University and York University Toronto, Canada. July 11-14. Pp1-12.

Malhotra, A., Schuler, S. and Boender, C. (2003), "Measuring women's empowerment as variables in international development" paper presented at the International Council for Research on Women (ICRW) Insight and Action Seminar, Washington, DC 12 November 2003.

Ramesh, D. (2006), "Self- Help Groups and Emancipation among Vulnerable Rural Women in Telangana Region: A Study" SEDME 33.2, pp 43-50. • Sahu and Tripathy (2005), Self-Help Groups and Women Empowerment, Anmol Publications Pvt. Ltd., New Delhi.

Sharma. S.L. (2002), "Empowerment Without Antagonism: A Case for Reformulation of Women's Empowerment Approach" Sociological Bulletin, 49(1), March, PP 19-38.

Sultana. N. and N. Islam (2009) "NGOs in Bangladesh: Are They Successful in Increasing Awareness Among Vulnerable Women?" Indian Journal of Gender Studies, 16:1 pp 77-98.

Vasudeva Rao. D. (2004), "Emancipation of women through self-management -A study in Andhra Pradesh" Man and Development, March.

Venkatarao. P. (2009) "Role of SHGs in the Empowerment of Women, SEDEME 36.1, March, pp. 29-45.



## EXERCISE- A DRUG FREE WAY TO REDUCE THE CHANCE OF HEART DISEASE

**Ramesh Chand Chauhan**

Assistant Professor (Physical Education) Govt. Degree College, Chail- Koti, Shimla

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*Heart disease is the non-communicable disease which is the leading cause of death globally and in India also.. The causes and prevention of heart disease have been studied for years, and new information is emerging. The coronary artery diseases can play a crucial medico- legal role to decide the cause of sudden death whether natural or unnatural. There are certain occasions, when a person dies on the operating table or soon after surgery, and a coronary attack is probably the cause of death. A final coronary episode may sometimes be associated with an operative procedure supposedly due to hypertensive state. These conditions indicate that intervention of Forensic Pathologist is significant to decide the actual cause of death apart from injury or disease of vital organs. For the last several decades, saturated fat and cholesterol have been thought to be major contributors to coronary artery disease. However, recent studies are indicating that it may not be wise to strictly limit the intake of dietary saturated fatty acids or replace them with polyunsaturated fatty acids when taking other health conditions into consideration. Depending on a person's genetics, diet may or may not be an important factor in preventing heart disease. Exercise is also the drug free way in preventing heart disease. When considering human development, humans still have a lot to learn about the human body and the interaction of diet, the environment, and genetics.*

**Keywords:** *Angina, atherosclerosis , Coronary artery disease, cardiovascular disease, Heart Attack.*

Human development can be defined as changes in the interactions between an individual and their environment across the lifespan. There are many factors that can affect healthy development, but perhaps none is so devastating globally as cardiovascular disease. The term cardiovascular disease refers to a variety of ailments that affect the heart as well as all of the blood vessels in the body. Atherosclerosis is one of these ailments, and is caused by a buildup of plaque in a person's arteries, this buildup can accumulate to the point that a clot forms and clogs the artery completely, leading to either a stroke or a heart attack. When atherosclerosis occurs in the heart, it is then called Coronary Artery Disease (CAD) and CAD is the leading cause of death amongst people with heart disease.

Coronary artery diseases constitute the most important single disease state that is likely to become a serious cause of disagreement on either side of the bench, in a court of law. When an apparently normal healthy individual, dies all of a sudden, more so in the absence of any medical examination before his death, innumerable doubts may erupt up in the minds of not only the family physician and close relatives but also of the enquiring police officers. The medico-legal opinion may be asked about the state of coronary artery in sudden death in road accidents, operations, and occupational diseases. Coronary artery disease is responsible for over 70% of sudden cardiac deaths. In the young, the primary cause of death is the non-atherosclerotic coronary abnormalities. In the older patients; the most prevalent cause is atherosclerotic Coronary disease.

Among athletes, the occurrence of sudden death is calculated at 0.46 deaths per 1 lakh athletes per year. Although most of these are incidental with little clinical relevance, a number do present with cardiac symptoms and tragic sudden death. The causes and prevention of heart disease have been studied for years, and new information is always emerging.

Symptoms of CAD: If your coronary arteries narrow, they can't supply enough oxygen-rich blood to your heart —

especially when it's beating hard, such as during exercise. At first, the decreased blood flow may not cause any coronary artery disease symptoms. As plaque continues to build up in your coronary arteries, however, you may develop coronary artery disease signs and symptoms, including:

Chest pain (angina). Angina—also sometimes called angina pectoris—is a symptom of an underlying heart condition. It means that the heart is not getting enough blood and as a result, not enough oxygen. This decrease of oxygen being delivered to the muscle of the heart happens if one or more coronary arteries are narrowed or blocked, a condition called atherosclerosis. This type of blockage may result in chest pain. And while angina does not usually damage the heart, and the pain might only last a few minutes, it is a warning sign that you should not ignore. Your body is telling you that your risk for a heart attack or cardiac arrest is increased. Very simply, angina is your heart's way of getting your attention. An angina attack is not the same as a heart attack, although many of the symptoms are the same. An angina attack may be provoked by extremes in emotion (being very angry or upset), eating a large meal or eating it very quickly, doing more exercise than usual (overexerting yourself), being exposed to extremes in temperature (too hot or too cold), or smoking. If the angina is a result of physical activity, stopping the activity generally stops the pain. But no matter what the cause of the chest pain or discomfort, it is important that you get medical attention as soon as possible. There are several different kinds of angina. These are explained here.

Different types of angina Five different kinds of angina have been identified, with the two most common being stable angina and unstable angina. Stable angina occurs when the heart has to work harder than normal, during exercise, for example. It has a regular pattern, and if you already know that you have stable angina, you will be able to predict the pattern. Once you stop exercising, or take medication (usually nitroglycerin) the pain goes away, usually within a few minutes. Unstable angina is more serious, and may be



a sign that a heart attack could happen soon. There is no predictable pattern to this kind of angina; it can just as easily occur during exercise as it can while you are resting. It should always be treated as an emergency. People with unstable angina are at increased risk for heart attacks, cardiac arrest, or severe cardiac arrhythmias (irregular heartbeat or abnormal heart rhythm). Less common kinds of angina include:

- variant angina
- microvascular angina
- atypical angina

Shortness of breath. If your heart can't pump enough blood to meet your body's needs, you may develop shortness of breath or extreme fatigue with exertion.

Heart attack. A completely blocked coronary artery may cause a heart attack. The classic signs and symptoms of a heart attack include crushing pressure in your chest and pain in your shoulder or arm, sometimes with shortness of breath and sweating.

**Causes of coronary artery disease**

Development of atherosclerosis: Coronary artery disease is thought to begin with damage or injury to the inner layer of a coronary artery, sometimes as early as childhood. The damage may be caused by various factors, including: Smoking, High blood pressure, High cholesterol, Diabetes or insulin resistance, Sedentary lifestyle.

Once the inner wall of an artery is damaged, fatty deposits (plaque) made of cholesterol and other cellular waste products tend to accumulate at the site of injury in a process called atherosclerosis. If the surface of the plaque breaks or ruptures, blood cells called platelets will clump at the site to try to repair the artery. This clump can block the artery, leading to a heart attack.

**Basic Categories of Risk Factors of coronary artery disease include:**

| Category                   | Risk Factors   |
|----------------------------|--|
| Nonmodifiable risk factors | Age, sex, family history, genetic  |
| Modifiable risk factors    | Smoking, atherogenic diet, alcohol intake, physical activity, dyslipidemias, hypertension, obesity, diabetes, metabolic syndrome |
| Emerging risk factors      | C-reactive protein (CRP), fibrinogen, coronary artery calcification (CAC), homocysteine, lipoprotein(a), and small, dense LDL    |

Risk factors often occur in clusters and may build on one another, such as obesity leading to type 2 diabetes and high blood pressure. When grouped together, certain risk factors put you at an even greater risk of coronary artery disease. Sometimes coronary artery disease develops without any classic risk factors. Researchers are studying other possible factors, including:

Sleep apnea. This disorder causes you to repeatedly stop and start breathing while you're sleeping. Sudden drops in blood oxygen levels that occur during sleep apnea increase blood pressure and strain the cardiovascular system, possibly leading to coronary artery disease.

High sensitivity C-reactive protein. High sensitivity C-reactive protein (hs-CRP) is a normal protein that appears in higher amounts when there's inflammation somewhere in your body. High hs-CRP levels may be a risk factor for heart

disease. It's thought that as coronary arteries narrow, you'll have more hs-CRP in your blood.

High triglycerides. This is a type of fat (lipid) in your blood. Lipids are "...oily or fatty biological substances that are not soluble in water. Lipids include fatty acids as well as cholesterol (which is a steroid), and other substances such as fat soluble vitamins. There are two types of fatty acids: saturated and unsaturated. Unsaturated fatty acids are further broken down into two subcategories: polyunsaturated and monounsaturated. Saturated fatty acid molecules have a hydrogen atom for each carbon atom in the molecule, hence they are called saturated. Polyunsaturated fatty acid molecules have one carbon to carbon bond (or double bond), meaning that additional hydrogens can be added; monounsaturated fatty acid molecules have two or more double bonds. High levels may raise the risk of coronary artery disease, especially for women.

Cholesterol. Cholesterol levels were also linked to atherosclerosis. Cholesterol is only found in animal sources not in plant sources and it is also supposed to be limited in the diet since the human body makes its own cholesterol.

Homocysteine. Homocysteine is an amino acid your body uses to make protein and to build and maintain tissue. But high levels of homocysteine may increase your risk of coronary artery disease.

Complications: Coronary artery disease can lead to:

Chest pain (angina). When your coronary arteries narrow, your heart may not receive enough blood when demand is greatest — particularly during physical activity. This can cause chest pain (angina) or shortness of breath.

Heart attack. If a cholesterol plaque ruptures and a blood clot forms, complete blockage of your heart artery may trigger a heart attack. The lack of blood flow to your heart may damage your heart muscle. The amount of damage depends in part on how quickly you receive treatment.

Heart failure. If some areas of your heart are chronically deprived of oxygen and nutrients because of reduced blood flow, or if your heart has been damaged by a heart attack, your heart may become too weak to pump enough blood to meet your body's needs. This condition is known as heart failure.

Abnormal heart rhythm (arrhythmia). Inadequate blood supply to the heart or damage to heart tissue can interfere with your heart's electrical impulses, causing abnormal heart rhythms.

Diagnosis: If coronary heart disease is suspected a thorough physical assessment will be undertaken. This will include an assessment of risk factors and current symptoms. Additional tests to assist with making an accurate diagnosis may also be undertaken. Tests may include: Blood tests, Electrocardiogram (ECG), Exercise ECG/ Exercise Tolerance Test (ETT), Echocardiography, Stress Echocardiography, Angiogram, CT Angiography, Nuclear Isotope Imaging, Coronary Angioplasty and Stenting, Coronary Artery Bypass Surgery (CABG), Coronary Angioplasty and Stenting, Coronary Artery Bypass Surgery (CABG)

**Make the Effort to Prevent Heart Disease:**

Get Active. You don't have to join a gym or run in a 5K. Start small by incorporating physical activity into your daily routine more and more: Take the stairs instead of the elevator, park at the farthest end of the parking lot or use



your lunch break to take a quick walk. For a healthy heart, aim for at least 2 ½ hours of moderate physical activity each week. Up for an intense workout? You'll get heart-pumping benefits with at least 75 minutes of vigorous exercise throughout the week or a combination of both.

Along with gaining strength and stamina, regular physical activity can lower blood pressure, keep body weight under control and lower your LDL — otherwise known as “bad” cholesterol. Regular physical activity is also associated with lower risk of type 2 diabetes, reduced depression, improved bone density, and improved sleep quality for adults.

**Control Cholesterol.** We all have cholesterol, a waxy substance in the bloodstream and in the cells of our body. But despite its reputation, cholesterol isn't all bad. In fact, it plays an important role in keeping us healthy. But a balance must be struck to prevent too much cholesterol in the blood. There are two types: the “good” kind (HDL) and the “bad” kind (LDL). High levels of bad cholesterol can clog your arteries, increasing your risk of heart attack and stroke. This is where good cholesterol comes into play: HDL cleans out that bad cholesterol from the arteries.

Regular physical activity, limiting saturated fat by limiting red meats and choosing low-fat dairy, and including healthier fats such as certain vegetable oils can help adults who need to lower LDL cholesterol levels. It's also important to limit *trans* fats, too. For some people, diet and lifestyle changes alone aren't enough. Your doctor may prescribe cholesterol-lowering medication to keep your cholesterol levels in check. If you don't know your cholesterol levels, talk to your doctor about scheduling a cholesterol screening.

**Eat Better.** Eating the right foods can help you control your weight, blood pressure, blood sugar and cholesterol. Follow a dietary pattern that includes fruits, vegetables, whole grains, and other healthy choices. It's important to choose fruits and vegetables over empty-calorie foods.

**Manage Blood Pressure.** About 33 percent of American adults has high blood pressure — yet about 14% of adults 60 years and older don't even know they have it. That's because high blood pressure, “the silent killer,” has no symptoms. Keeping your blood pressure in a healthy range starts with eating a heart-healthy diet. Other important factors are exercising regularly; maintaining a healthy weight; limiting salt and alcohol; and taking medication prescribed by your doctor.

**Maintain a Healthy Weight.** Overweight and obesity are risk factors for cardiovascular disease. In the US, 69% of adults are either overweight or obese. Higher body mass index (BMI) is associated with higher risk of type 2 diabetes and obesity is a strong predictor of sleep disordered breathing. For overweight or obese adults with other cardiovascular risk factors (such as high blood pressure), maintaining a weight loss of 3-5% of body weight can produce clinically meaningful results. Greater weight loss can produce even greater results on BP, cholesterol levels, and blood sugar. Learn more about losing weight.

**Reduce Blood Sugar.** Diabetes is a risk factor for cardiovascular disease. Heart disease death rates among adults with diabetes are 2 to 4 times higher than adults without diabetes. You can minimize the impact of diabetes on your body — and even prevent or delay the onset of diabetes — by eating right, controlling your weight, exercising and taking medication prescribed your doctor. In some cases, lifestyle changes result in less need for medication.

**Stop Smoking.** It's time to kick the habit. Going smoke-free can help reduce risk of heart disease and stroke, but also cancer and chronic lung disease. The payoff is almost immediate. Quit smoking and you'll lower your excess risk of developing heart disease and stroke within only a few years.

**Treatment:** Depending on test results, various treatment options will be considered. Treatment may include medication, coronary angioplasty (with or without coronary artery stenting), or coronary artery bypass surgery (sometimes abbreviated to CABG). Treatment is aimed at reducing or eliminating symptoms and reducing the risk of having a heart attack.

**Medications:** Classes of medications commonly used to treat coronary heart disease include: Beta Blockers - These medications slow the heart rate and reduce the blood pressure thus reducing the heart's workload.; Nitrates - These medications dilate (widen) the arteries making it easier for blood to be pumped through.; Calcium Channel Blockers/ Calcium Antagonists - These medications work by slowing the entry of calcium into the heart and blood vessel walls. This relaxes the arteries causing them to dilate. This lowers the blood pressure and reduces the heart's workload.; ACE Inhibitors - These medications prevent the constriction of peripheral blood vessels thereby reducing the pressure against which the heart must pump.; Aspirin will also be prescribed (unless there's a medical reason not to) as it helps to prevent the formation of blood clots. Some people require medication to lower their blood cholesterol levels, thereby reducing plaque build-up in the arteries and reducing the risk of having a heart attack. Common cholesterol lowering medications include Lipex and Lipitor.

**How exercise reduce the Cholesterol level:** Sometimes it may seem like it takes all of your energy just to drag yourself out of bed for your morning jog or your evening workout at the gym. But let's face it: exercise has many, amazing health benefits. Not only can it keep your weight down, build up your muscles, and reduce your risk of developing certain medical conditions, exercising regularly also has beneficial effects on the heart - including your cholesterol levels.

But exactly how does exercise affect your cholesterol? Unfortunately, the way exercise works in improving your cholesterol levels is still not very clear. Although there have been studies examining the effects of exercise on cholesterol, these studies have also been coupled with other cholesterol-lowering lifestyle changes, such as following a healthy diet or losing weight. Because all of these factors can have an impact on cholesterol, researchers are not exactly sure how much of a contribution exercise makes to lowering your cholesterol. However, more recent studies examining the effect of exercise alone reveal a few ways that exercise may help improve your cholesterol levels.

**Lipoprotein particle size:** Some studies have shown that exercise can affect the size of your LDL. Smaller lipoproteins, such as small, dense LDL, have been associated with contributing to cardiovascular disease. Having larger LDL particles does not carry this same risk. Studies have shown that moderate exercise can increase the size of your LDL particles, which can help to reduce your risk of developing cardiovascular disease. In one study, a 12-week endurance exercise program reduced small, dense LDL by up to 17%.

**Reverse cholesterol transport:** A few studies in mice have suggested that exercise can enhance the transport of



cholesterol from the bloodstream to the liver, where it will eventually be removed.

**Absorption:** A few studies have shown that 8 to 12 weeks of endurance exercise may slightly reduce the absorption of cholesterol from the small intestine into the bloodstream. The amount of cholesterol made by the liver does not appear to be affected by exercise.

Although researchers are still trying to determine exactly how exercise affects your cholesterol, the bottom line is clear: moderate exercise appears to have favorable effects on your cholesterol levels:

Moderate exercise may reduce LDL cholesterol by up to 10% in some studies. There are a few studies that suggest that exercise may have a slightly positive or neutral effect on LDL. Exercising regularly can increase your HDL cholesterol by between 3 and 6%.

Although this may not seem like much, combining exercise with other lifestyle changes can help keep your cholesterol levels - as well as the rest of your body - healthy.

Cleveland Clinic offers fitness, nutrition and wellness programs that can help you lower your cholesterol.

Check with your doctor to ensure safety before starting an exercise program. Do not take part in any activity that causes chest pain, excessive shortness of breath, dizziness, or lightheadedness. Stop immediately if you have any of these symptoms.; Wear comfortable clothes with sneakers or flat shoes with laces. It is important to wear a shoe with good support so that you can reduce the risk of orthopedic problems.; Exercise has the greatest effect on triglycerides (lowers them) and HDL, the good cholesterol (increases it). Exercise does not have much impact on LDL unless it is combined with changes in diet and weight loss.; Start slowly. The American Heart Association and the American College of Sports Medicine recommend that people exercise most days of the week in an aerobic fashion. This type of exercise is repetitive in nature and uses multiple muscle groups. Examples of aerobic exercises include cycling, swimming, walking, elliptical machines, and step machines.; Start out with 15 to 20 minutes; in some cases, you may have to do 10-minute intervals. Try to build up over time so that the exercise lasts at least 30 minutes or your intervals add up to 30 minutes. Do not forget to include a warm-up and a cool-down of about five minutes each. These periods are in addition to your 30 minutes. The ideal goal is to achieve approximately 200 minutes of exercise per week. This can be accomplished by doing 30 minutes of exercise seven days per week, or doing 40 minutes of exercise five days per week. The exercise should feel moderate to somewhat heavy so that you can still carry on a conversation without being too breathless; however, you should not be able to sing comfortably.; It is important to remain well-hydrated during exercise. A good guideline is to drink eight ounces of water for every 20 minutes of exercise.; Make exercise a regular part of your healthy lifestyle, and try to exercise at the same time of day so that it becomes a habit.; Use caution when exercising right after meals, when it is very hot or humid, or if you do not feel up to exercising; Ask family and friends to join you to help keep you motivated. This also can help them to start or continue on the road to a healthy lifestyle.; Note your activities on a calendar or in a record book. Record the type of exercise, distance/amount of time,

and how you felt during the activity. This will help you keep track of your progress.; Use a variety of exercises to keep up your interest. Try things such as yoga, Tai Chi, Pilates, or kickboxing. Join an exercise group, health club, or the YMCA. Many churches and senior centers also offer exercise programs.; Look for chances to be more active during the day. Some examples would be walking the mall before shopping, parking your car farther away from your destination than necessary, choosing a flight of stairs over an escalator, or taking 10- to 15-minute walking breaks while watching TV or sitting for some other activity.; If there is a break in your exercise due to illness or other factors, remember that your body adapts to whatever level of exertion is put on it. You might have to restart at a slightly slower level than before the break.

### **Conclusion**

The cardiovascular diseases and its risk factors are increasing with a rapid pace in Asian Indian population. Though the prevalence of CVD risk factors is found higher in urban population, yet it is increasing at an alarming rate in rural population also, which is a serious threatening to the nation. Since majority of the Indians live in rural area, CVD may lead to epidemic proportions. We need health promotion and awareness programs and reorientation of primary health care to improve CVD detection in earlier stage and its management.

### **References**

- American Heart Association. Get Moving: Tips to get active Accessed 11/2/2016.
- De Milto. L; Odle. T. G (2006) Coronary Artery Disease. The Gale Encyclopaedia of Medicine. Third Edition. Jacqueline L. Longe, Editor. Farmington Hills. MI. Thompson Gale.
- Dietary guidelines for Americans, 2010. (n.d.). Dietary Guidelines for Americans, 2010. Retrieved April 15,2014.
- Heart Foundation of New Zealand (2013) General Statistics. Heart Foundation of New Zealand. Auckland <http://www.heartfoundation.org.nz/know-the-facts/statistics>.
- Heart Foundation of New Zealand (2013) Treatments. National Heart Foundation of New Zealand. Wellington.<http://www.heartfoundation.org.nz/know-the-facts/treatments>.
- Healthy Living. Managing Cholesterol with Exercise Accessed 11/2/2016
- Global Strategy for the Prevention and Control of Noncommunicable Diseases. WHA A53/14. Geneva, World Health Organization, 2000.
- Maron, B.J., Gohman, T.E. and Aeppli D. Prevalence of sudden cardiac death during competitive sports activities in Minnesota high school athletes. *J. Am. Coll. Cardiol.* 1998; 32: 1881-1884.
- MedicineNet (2011) Heart Disease. Foothill Ranch: MedicineNet Inc.[http://www.medicinenet.com/heart\\_disease/article.htm](http://www.medicinenet.com/heart_disease/article.htm)
- Physical activity guidelines for Americans: be active, healthy, and happy! (pp. 7-14). (2008).
- Preventing chronic diseases: a vital investment. Geneva, World Health Organization, 2005.
- Taylor. A.J., Byers J.P., Cheitlin M.D. and Virmani R. Anomalous right or left coronary artery from the contralateral coronary sinus: "high risks" abnormalities in the initial coronary artery course and heterogenous clinical outcome. *Am Heart J.* 1997; 133: 428-435.

## RETENTION OF ACADEMIA AT MAKERERE UNIVERSITY : A TIME-TO-EVENT ANALYSIS

**Keneth Muhwezi**

School of Statistics and Planning, Makerere University, Uganda

**Robert Wamala**

School of Statistics and Planning, Makerere University, Uganda

**Leonard K. Atuhaire**

School of Statistics and Planning, Makerere University, Uganda

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*The study investigated the dynamics of the service duration of academic staff at Makerere University basing on the administrative records of 1,486 academic staff at the university, recruited in the period 1987–2012. The period from the date of first appointment to the date of exit was adopted as a measure of the service duration at the university. A time-to-event approach in a Cox model was adopted in the analysis. The results, show that the median duration among academic staff who had left the university service by December 2012 (N = 213) is 4.56 years (range, 0.22–23.32). This figure points to a low retention of academia at the university. The rate of exit from the university service reduces significantly with higher academic ranks and increase in age at the time of recruitment. The findings point to a need to scale-up measures in retaining staff particularly those at lower levels.*

**Keywords:** *Retention, Academia, Makerere University, Time-to-event Analysis.*

For any organization to thrive, retaining and maintaining staff is essential because they are considered a valuable asset to the organization (Harting, 2010; Tettey, 2010). Undesirable employee turnover is associated with both recruitment and fresher training costs; it also creates an additional burden on the existing staff. Thus, Harting's (2010) argument of inefficiency at work due to undesirable employee turnover is supported. In the literature, retention in academia has been attributed to a combination of factors comprising, although not limited to: (i) benefits (e.g., Giles, 2004; Metcalf, Rolfe, Stevens, & Weale, 2005; Muceke, Iravo, & Namusonge, 2012; Ssesanga & Garrett, 2005); (ii) socio-demographic characteristics of teaching staff (e.g., Luekens, Lyter, & Fox, 2004; Roessler, 2002); (iii) remuneration (e.g., Amutuhair, 2011; Aswathappa, 2005; Giles, 2004; Kanamwangi, 2005; MUASA, 2003; Roessler, 2002; Tettey, 2010); and (iv) academic qualification and/or rank (Mamdan, 2007). Likewise, motivators such as recognition at work and symbolic rewards play a critical role in enhancing employee intentions to stay (Giles, 2004). Although all employees value money, these non-monetary rewards are a great motivator to ensure retention.

At Makerere University, attracting and retaining staff was listed as a major challenge in its 2008 annual report (Makerere University, 2008, 2009). Evidence from Ssesanga and Garrett (2005), Xiaoyang (2004), as well as Shicherman (2005) does not reveal otherwise with regards to job retention at the university; these studies reveal a setback in job retention among the teaching staff. This evidence does not augur well for the university's vision of being a leading institution for academic excellence and innovation in Africa. In other words, the university's excellence would largely depend upon the people it is able to enlist and retain in its academic units. Persistence of this situation is certain to affect the learning outcomes (NCHE, 2004).

Although related studies on the employee situation at Makerere University point to low job retention, particularly

among teaching staff (e.g., Amutuhair, 2011; Makerere University, 2008; Shicherman, 2005; Ssesanga & Garrett, 2005; Xiaoyang, 2004), these do not provide any statistics to support their allegations. These studies provide no assessment of the duration and pattern of service at the university. In addition, these studies are limited in scope and coverage. Certainly, this leaves a lot unanswered with regard to staff retention, particularly among academic staff at the university. This study provides an assessment of the duration, pattern, and rate of service of the academic staff. The investigations in this study cut across all the academic units at the university.

### Data and Methods

The assessment is based on the administrative records of 1,486 academic staff at the university, recruited in the period 1987–2012. The data was extracted from the Integrated Tertiary System (ITS), an information system used by the university at the time of data compilation (December, 2012). In particular, the data was obtained from two main sub-systems of the ITS, namely the Human Resource Information System (HURIS) and the Financial Management Information System (FINIS). For the investigations, the period from the date of first appointment to the date of exit from the university service was adopted as a measure of service duration.

In light of the right-skewed nature of service duration, a time-to-event approach in a Cox-Proportional Hazard model was adopted in the investigation. The analysis was done in three stages: A descriptive summary of the duration and status of service at the university was made using summary statistics and frequency distributions, respectively. Furthermore, the probability of service to the university, which is the persistence function, is determined using the Kaplan-Meier (1958) estimator. Differentials in persistence of academic staff by their characteristics (academic rank, discipline area, marital status, academic qualification, gender,

and age) were investigated using the log-rank chi-square test (Mantel, 1966; Peto, 1972).

The Cox PH Regression was adopted to investigate the rate of exit from university service. The time-variant aspect of some variables in the investigation was addressed by splitting the duration of service whenever there was an exit (Cleves, Gould, Gutierrez, & Marchenko, 2010). However, only variables that yielded a small probability value (0.25 or less) in the analysis, which employed the log-rank test, were considered for further investigation in a multivariate Cox PH model (Hosmer, Lemeshow, & May, 2008).

### Results

The academic staff examined were predominantly male (72.9%), recruited into science disciplines (65.3%), and married (61.2%). The highest proportion of the staff at recruitment was of assistant lecturers (36.9%), followed by lecturers (28.3%), senior lectures (12.6%), and teaching assistants (11.9%), while the rest were associate professors and professors. Regarding academic qualifications, slightly more than half (53.0%) had a master's degree at the time of recruitment; the rest had either a doctorate (28.4%) or a bachelor's degree (18.6%). The vast majority (85.7%) were recruited into the university service below the age of 40.

**Duration of Service**—In light of the skewed nature of the service duration, the assumed normality of the variable would be unrealistic. All the same, the variable does not span the entire real line. Thus, the variable was subjected to the Shapiro-Wilk non-normality test (Shapiro & Wilk, 1965). The normality assumption was violated in the assessment of the entire dataset ( $N = 1,486$ ;  $p < 0.01$ ) and the analysis based on academic staff who had left the university's service at the time of the study ( $N = 213$ ;  $p < 0.01$ ). The evidence certainly disqualifies the application of OLS following a linear regression to analyze such data, despite the fact that it can be used to deal with right-censoring – censored normal. In other words, the application of a time-to-event approach in the analysis is highly supported. To this end, Tables 1 and 2 present a descriptive summary of the duration and pattern of service, respectively. Of the 1,486 staff recruited during the period 1987–2012, a total of 213 had left the service by the time of the study, representing a 14.3% attrition rate. According to Table 2, the one-year attrition rate of the university staff is 3% ( $N = 44$ ); the two-year and three-year rates are 4.6% ( $N = 68$ ) and 5.5% ( $N = 81$ ), respectively. Based on the total number of academic staff who had left the university by the time of the study ( $N = 213$ ), the median duration of service is 4.56 years (range, 0.22–23.32). The findings point to a low retention of academia at the university.

**Rate of Exit from the University Service**—As stated earlier, the rate of exit from the university was modeled in a multivariate analysis using a Cox-PH regression. Although the variables discipline area, marital status, and gender yielded large probability values during the log-rank test ( $p > 0.25$ ), these variables were incorporated in the analysis at the

multivariate stage because of their relative importance in the literature. Table 3 represents an assessment of the rate of exit from university service based on the Cox PH regression.

**Regression Diagnostics**—Three diagnostic tests were run. First, the proportionality assumption of the hazards using the Schoenfeld and scaled Schoenfeld residuals and log-log plots were satisfied; the parallel line of the log-log plots suggested that the variables did not violate the proportionality assumption of the Cox model. Second, the specification errors of the link function (log hazard) indicate that the log-hazard function was well-specified, as predicted by the hat statistic ( $\hat{h}$ :  $p < 0.05$ ). The hat-square statistic ( $\hat{h}^2$ ) reveals that no additional variables were significant ( $p > 0.05$ ), as shown in Table 4. Third, the goodness of fit was evaluated using the Cox-Snell residuals. According to Figure 1, the cumulative hazard function closely followed the 45° line. Thus, the final model fitted the data relatively well.

**Summary of the Findings**—The results presented in Table 2 indicate that rank, academic qualification and age were significantly associated with the duration of service ( $p < 0.05$ ). These findings are summarized below:

*The rate of exit from university service reduces with higher academic ranks at the time of recruitment. This rate was the highest among academic staff at the rank of teaching assistant (HR = 17.2) and lowest among the lecturers (HR = 1.7), as compared to staff at the rank of associate professor and above.; Academic staff with a bachelor's degree at the time of recruitment had a 32% reduced rate of exit from university service compared to those with a doctorate (HR = 0.67).; The rate of exit from university service reduces with an increase in age at the time recruitment. The rate was the highest among academic staff below the age of 29 (HR = 11.9) and lowest in the category 33–39 (HR = 1.6), as compared to those above 40 years of age.*

Conversely, gender, marital status, and discipline area did not vary significantly by duration of service ( $p > 0.05$ ). In other words, the duration of service of academic staff at the university did not vary significantly by these variables.

### Discussion and Conclusions

The overall turnover rate of academic staff (14.0%) in the results points to a low retention of academia at the university. The figure presented for the one-year turnover rate of staff at the university (3%) does not show otherwise. However, the one-year turnover rate of staff at the university compares favorably with estimates reported among selected universities in the developed countries. Harrigan (1999) reports the following one-year turnover rates among universities in the United States of American in 1996: 4.9% at Cornell University, 4% at University of Iowa, 5.4% at University of Minnesota, 5.5% at Ohio State University, and 5.9% at University of Wisconsin-Madison. In the United Kingdom, Metcalf, Rolfe, Stevens, and Weale (2005) report an annual turnover ranging between 2.8 and 5.3 percent. An assessment of the duration of service for academic staff who had left the university by the time of the study ( $N = 213$ ) does not reveal otherwise with regards to job retention at the



university. In the results, the median duration of service is 4.56 years (range, 0.22–23.32). The situation is made worse by the academic staff shortfall of 41% reported in the university's Strategic Plan 2000/01–2004/5 (Makerere University, 2009). Recent evidence published by The Independent presents a staff deficit of 49% according to findings by the office of the auditor general (Asinja, 2012). In affirming the magnitude of staffing problems at Makerere University, Tettey (2006, 2010) reports deficits of 54%, 57%, 62%, and 62% in the School of Public Health, Medical School, East African School of Library and Information Science, and Institute of Psychology, respectively. These deficits demonstrate a large gap in the university's human resource capacity and consequently point to a low ability of the existing academic staff to carry out research and teaching responsibilities (Tettey, 2010). In light of the staffing capacity deficit in the university's academic units, Mugimu et al.'s (2009) argument of a heavy teaching and supervisory workload for teaching staff at the university is highly supported. In other words, academic staff growth has not matched student enrollment growth at the university (Tettey, 2010). Likewise, many African Universities have experienced a significant growth in student enrollment over the past decade (Tettey, 2010). Certainly, it would not be a surprise to find that the academic staff in these institutions are facing a heavy teaching and supervisory workload as well. Nevertheless, Wamala and Ssematya (2013) are justified in attributing the low scholarly productivity of academia in Uganda to the heavy teaching and supervisory workload. A similar explanation is likely to hold for the low scholarly productivity of academia in many other African institutions of higher learning.

In the multivariate assessment, the rate of exit from the university service was significantly higher for staff with lower academic ranks and ages at the time of recruitment. The lower academic ranks of exiting staff points to an undesirable withdrawal of these individuals from university service. From the short duration of service (4.56 years) estimated in the results, it is clear that a large number of staff exiting from the university are young academic staff. These findings are in line with Amutuhaire's (2011) study that suggested a reduced rate of leaving university service among academic staff with higher ranks. The fact that salary scales are based on one's academic rank lends credence to the argument of poor remuneration being a key factor for staff turnover at the university (e.g., Tettey, 2008; Mugimu, Nakabugo, & Katunguka, 2007). The situation with regards to remuneration and/or welfare is likely to be much worse for staff at the lower ranks. It is no surprise that the results of this study reveal higher rates of exit from the university among academic staff at the lower ranks and those younger in age at the time of recruitment.

With regards to gender, the results of this study revealed no significant variations in the rate of exit from the university's service ( $p > 0.05$ ). A related assessment of intentions to stay in service among academic staff at Makerere University

(Amutuhaire, 2011) supports these findings; no significant difference in intentions to continue lecturing between male and female academic staff at the university. However, the findings run counter to the evidence provided by Luekens et al. (2004), Boyd et al. (2002), and Ingersoll (2001) that identified gender as a predictor of time spent in teaching service. These studies reveal a higher likelihood of staying in service for the males compared to the females. With regards to age, the consensus is that the rate of exit from service increases with age (e.g., Hanushek, Kain & Rivkin, 2004; Ingersoll, 2001). The assessment by Murnane et al. (1991) regarding gender and age revealed that female teachers over the age of 30 were more likely to stay than the younger teachers of either gender.

In summary, the findings of this study point to a need to step-up measures to retain academic staff at the lower levels. This is because academic staff at the lower ranks constitutes a pool from which the future generation of academics will be drawn. In other words, retaining staff at the lower ranks is important for the university in achieving its goal of becoming a leading institution for academic excellence and innovation.

**Table 1 - Descriptive Summary of the Duration of Service (Years)**

| N   | Min  | Max   | Median | Std. Err | 95% CI (Median) |       |
|-----|------|-------|--------|----------|-----------------|-------|
|     |      |       |        |          | Lower           | Upper |
| 213 | 0.22 | 23.32 | 4.56   | 0.75     | 3.61            | 6.66  |

*Note: Summary statistics are based on staff who had left the university for reasons other than retirement or death*

**Table 2 - Pattern of Persistence of Academic Staff**

| Interval (Years) | Total <sup>a</sup> | Leaving <sup>b</sup> | Censored <sup>c</sup> | Persistence Function | Std. Error |        |
|------------------|--------------------|----------------------|-----------------------|----------------------|------------|--------|
| 0                | 1                  | 1,486                | 44                    | 103                  | 0.9693     | 0.0046 |
| 1                | 2                  | 1,339                | 24                    | 68                   | 0.9515     | 0.0057 |
| 2                | 3                  | 1,247                | 13                    | 89                   | 0.9412     | 0.0063 |
| 3                | 4                  | 1,145                | 13                    | 83                   | 0.9301     | 0.0070 |
| 4                | 5                  | 1,049                | 15                    | 139                  | 0.9159     | 0.0078 |
| 5                | 6                  | 895                  | 8                     | 58                   | 0.9074     | 0.0083 |
| 6                | 7                  | 829                  | 5                     | 134                  | 0.9015     | 0.0086 |
| 7                | 8                  | 690                  | 11                    | 54                   | 0.8865     | 0.0096 |
| 8                | 9                  | 625                  | 9                     | 51                   | 0.8732     | 0.0104 |
| 9                | 10                 | 565                  | 6                     | 25                   | 0.8637     | 0.0110 |
| 10               | 11                 | 534                  | 7                     | 51                   | 0.8518     | 0.0117 |
| 11               | 12                 | 476                  | 10                    | 38                   | 0.8332     | 0.0129 |
| 12               | 13                 | 428                  | 4                     | 49                   | 0.8249     | 0.0134 |
| 13               | 14                 | 375                  | 7                     | 46                   | 0.8085     | 0.0145 |
| 14               | 15                 | 322                  | 9                     | 16                   | 0.7854     | 0.0160 |
| 15               | 16                 | 297                  | 7                     | 11                   | 0.7665     | 0.0171 |
| 16               | 17                 | 279                  | 4                     | 36                   | 0.7547     | 0.0178 |
| 17               | 18                 | 239                  | 7                     | 42                   | 0.7305     | 0.0195 |
| 18               | 19                 | 190                  | 4                     | 25                   | 0.7140     | 0.0207 |
| 19               | 20                 | 161                  | 2                     | 33                   | 0.7042     | 0.0216 |
| 20               | 21                 | 126                  | 1                     | 30                   | 0.6978     | 0.0223 |
| 21               | 22                 | 95                   | 1                     | 29                   | 0.6892     | 0.0236 |
| 22               | 23                 | 65                   | 1                     | 21                   | 0.6765     | 0.0264 |
| 23               | 24                 | 43                   | 1                     | 17                   | 0.6569     | 0.0321 |
| 24               | 25                 | 25                   | 0                     | 13                   | 0.6569     | 0.0321 |
| 25               | 26                 | 12                   | 0                     | 12                   | 0.6569     | 0.0321 |

<sup>a</sup> Denotes academic staff recruited in the period 1987–2012

<sup>b</sup> Denotes academic staff leaving university service for reasons other than retirement or death

<sup>c</sup> Denotes existing academic staff at the university

Table 3 - Rate of Exit from University Service

| Staff Characteristics                      | $\beta$ | HR(95% CI) <sup>a</sup>  | Std. Err | P-value |
|--|---------|--------------------------|----------|---------|
| <b>Rank</b>                                |         |                          |          |         |
| Associate Professor and above <sup>†</sup> | .       | 1                        | .        | .       |
| Senior Lecturer                            | 0.644   | 1.903<br>(1.102-3.286)   | 0.530    | 0.021   |
| Lecturer                                   | 0.548   | 1.729<br>(1.012-2.956)   | 0.473    | 0.045   |
| Assistant Lecturer                         | 1.234   | 3.435<br>(1.769-6.670)   | 1.163    | 0.000   |
| Teaching Assistant                         | 2.847   | 17.229<br>(7.005-42.375) | 7.911    | 0.000   |
| <b>Discipline</b>                          |         |                          |          |         |
| Sciences <sup>†</sup>                      | .       | 1                        | .        | .       |
| Arts                                       | -       | 0.812<br>(0.588-1.121)   | 0.134    | 0.206   |
| <b>Gender</b>                              |         |                          |          |         |
| Male <sup>†</sup>                          | .       | 1                        | .        | .       |
| Female                                     | 0.012   | 1.012<br>(0.712-1.438)   | 0.181    | 0.947   |
| <b>Marital Status</b>                      |         |                          |          |         |
| Married <sup>†</sup>                       | .       | 1                        | .        | .       |
| Not Married                                | -       | 0.791<br>(0.553-1.130)   | 0.144    | 0.198   |
| <b>Academic Qualification</b>              |         |                          |          |         |
| Doctor of Philosophy <sup>†</sup>          | .       | 1                        | .        | .       |
| Masters                                    | -       | 0.832<br>(0.560-1.235)   | 0.168    | 0.361   |
| Bachelors                                  | -       | 0.677<br>(0.310-1.478)   | 0.270    | 0.032   |
| <b>Age</b>                                 |         |                          |          |         |
| 40 Years and above <sup>†</sup>            | .       | 1                        | .        | .       |
| 33-39 Years                                | 0.492   | 1.635<br>(1.010-2.647)   | 0.402    | 0.046   |
| 29-32 Years                                | 0.836   | 2.308<br>(1.378-3.866)   | 0.609    | 0.001   |
| Below 29 Years                             | 2.480   | 11.941<br>(7.233-19.172) | 0.054    | 0.000   |

Note: Likelihood Ratio (LR) chi-square = 140.18, p < 0.001, N = 1,443

<sup>†</sup> Reference category

<sup>a</sup> HR (95% CI) represents hazard ratio and corresponding Confidence Interval

Table 4 - Specification Errors of Link Function

| Log Hazard Function | Coefficient | Std. Err | P-value |
|---------------------|-------------|----------|---------|
| _hat <sup>a</sup>   | 1.4861      | 0.4002   | 0.000   |
| _hatsq <sup>b</sup> | -0.1316     | 0.1055   | 0.212   |

Note: Specification errors of Cox PH model in Table 2.

<sup>a</sup> Hat Statistic

<sup>b</sup> Hat-square Statistic

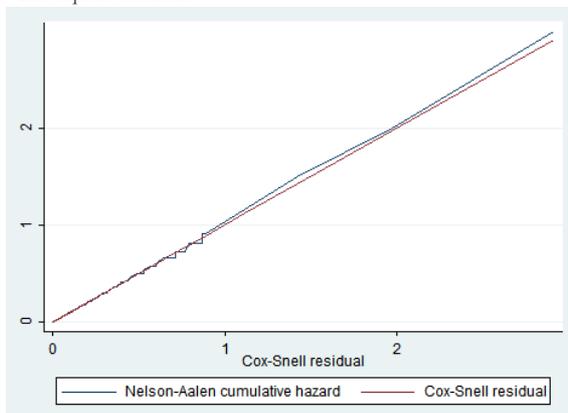


Figure 1: Goodness of Fit of Cox PH Model in Table 3

References

Adams, J. S. (1963). Towards an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67 (5), 422-436.

Amutuhaire, T. (2011). *Terms of service and job retention*. Fairford, United Kingdom: Lap Lambert Academic Publishing AG & Co Kg.

Aswathappa, K. (2005). *Human Resource and Personnel Management: Text and cases*. Noida, India: Tata McGraw Hill.

Asinja, M. H. (2012). Makerere Loses Staff Over Low Pay. *The Independent*, <http://www.independent.co.ug/news/news-analysis/5863-makerere-losing-staff-over-low-pay> viewed 24 February 2013.

Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2002). Initial matches, transfers, and quits: Career decisions and the disparities in average teacher qualifications across schools. (Unpublished manuscript). University of Albany, SUNY.

Cleves, M., Gould, W., Gutierrez, R. G., & Marchenko Y. V. (2010). *An Introduction to Survival Analysis using Stata*. Texas: Stata Press.

Giles, T. (2004). *Remuneration: Non-monetary rewards as part of the remuneration*. Auckland, New Zealand: Profile Publishing Ltd.

Gilpin, G. A. (2012). Teacher salaries and teacher aptitude: an analysis using quantile regressions. *Economics of Education Review*, 31(3), 15-29.

Harting, D. (2010). *Employees – your most valuable asset*, <[http://ezinearticles.com/?expert=Dennis\\_Harting](http://ezinearticles.com/?expert=Dennis_Harting)> viewed 24 September 2010

Hanushek, E. A., Kain, J. F., and Rivkin, S. G. (2004). Why public schools lose teachers. *Journal of Human Resources*, 39(2), 326-354.

Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.

Kajubi, W. S. (1990). *The university and development in sub-Saharan Africa; the case of Makerere in Uganda* <http://www.greenstone.org/greenstone3/nzdljsessionid=D735B1755F49FF4106CA069378F2CE1A?a=d&d=HASH01322fed82bdabc9404a2879.7.2.np&c=edudev&sib=1&dt=&ec=&et=&p.a=b&p.s=ClassifierBrowse&p.sa=> viewed 10 November 2012

Luekens, M. T., Lyter, D. M., and Fox, E. E. (2004) *Teacher Attrition and Mobility: Results from the Teacher Follow-up Survey, 2000-01*. (NCES 2004-301). Retrieved on



- November 5, 2012 from <http://nces.ed.gov/pubs2004/2004301.pdf>
- Makerere University. (2002). *The Makerere University Annual Report*. Kampala, Uganda. Retrieved from <http://pdd.mak.ac.ug/sites/default/files/archive/AnnualReport2002.pdf>.
- Makerere University. (2008). *The Makerere University Annual Report*. Kampala, Uganda. Retrieved from [http://pdd.mak.ac.ug/sites/default/files/archive/MakANNUAL%20REPORT%202008\\_final.pdf](http://pdd.mak.ac.ug/sites/default/files/archive/MakANNUAL%20REPORT%202008_final.pdf).
- Makerere University. (2009). *Fact Book on Staff Structure*. Retrieved on October 5, 2012. [http://mak.ac.ug/sites/default/files/downloads/QualificationProfileofAcademicStaff2009\\_0.pdf](http://mak.ac.ug/sites/default/files/downloads/QualificationProfileofAcademicStaff2009_0.pdf).
- Makerere University. (2009). *Makerere University Strategic Plan 2008/09–2018/19*. Retrieved February 24, 2013 from [http://mak.ac.ug/sites/default/files/downloads/STRATEGIC\\_PLAN\\_NEW.pd](http://mak.ac.ug/sites/default/files/downloads/STRATEGIC_PLAN_NEW.pd).
- Makerere University. (2009). *The Makerere University Human Resource Manual*. Kampala, Uganda. Retrieved on December 12, 2012 from <http://mak.ac.ug/about/vision-mission>.
- Makerere University Academic Staff Association. (2003). *The proposed increase in the salaries of the academic staff of Makerere University* Retrieved on November 8, 2012 from <http://docs.mak.ac.ug/letters/proposed-increase-salaries-academic-staff-makerere-university>.
- Mamdan, M. (2007). *Scholars in the market place: The dilemmas of neo-liberal reform at Makerere University (1989–2005)*. Kampala, Uganda: Fountain Publishers Ltd.
- Mantel, N. (1966). Evaluation of survival data and two new rank order statistics arising in its consideration. *Cancer Chemotherapy Reports*, 50 (3), 163–70.
- Metcalf, H., Rolfe, H., Stevens, P., and Weale, M., (July, 2005). Recruitment and retention of academic staff in higher education. *National Institute of Economic and Social Research, Research Report RR658*. ISBN 1 84478 523 8. Retrieved from <http://www.vitae.ac.uk/CMS/files/1.DfES-recruitment-and-retention-report-Jul-2005.pdf>.
- Muceke, J., N., Iravo, M. E., and Namusonge, G. S. (July, 2012). Determinants of academic staff retention in public universities in Kenya: Empirical review, *International Journal of Humanities and Social Science*, 2(13), 205–212.
- Mugimu, C. B., Nakabugo, M. G., & Katunguka-Rwakishaya, E.** (2007). *Exploring the factors affecting staff research output and completion rates of graduate students in Makerere University*. Kampala, Uganda: Makerere University.
- Murnane, R. J., Singer, J. D., Willett, J. B., Kemple, J. J., and Olsen, R. J. (1991). *Who will teach? Policies that matter*. Cambridge, MA: Harvard University Press. ISBN-13: 9780674951921.
- National Council for Higher Education. (2004). *The State of Higher Education: A report of a survey of Uganda's institutions of higher learning*. Kampala, Uganda: Axis printers Ltd.
- Osborne, J., and Elaine W. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2). Retrieved on December 13, 2012 from <http://PAREonline.net/getvn.asp?v=8&n=2>.
- Republic of Uganda. (1992). *Government white paper on The Education Policy Review Commission Report on Education for National Integration and Development*, Kampala, Uganda.
- Roessler, R. T. (2002). Improving job tenure outcomes for people with disabilities: the 3M model. *Rehabilitation Counseling Bulletin*, 45(4).
- Shapiro, S., and Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, 52 (3–4), 591–611.
- Shicherman, C. (2005). *Becoming an African University: Makerere University 1922–2000*. Kampala, Uganda: Fountain Publishers.
- Ssesanga, K., and Garrett, R. M. (2005). Job satisfaction of University academics: Perspectives from Uganda. *Higher Education* 50(1), 33–56.
- Tettey, W. J. (2006). *Staff retention in African universities: elements of sustainable strategy*. Alberta, Canada: University of Calgary. Commissioned by the World Bank.
- Tettey, W. J. (2008). Comparative Analysis of Next Generation of Academics Indicators. *The University Leaders' Forum*. Accra, Ghana.
- Tettey, W. J. (2010). *Deficits in academic staff capacity at African universities*. Partnership for Higher Education in Africa (PHEA). Retrieved on October 20, 2012 from: [www.foundation-partnership.org/pubs/pdf/tettey\\_deficits.pdf](http://www.foundation-partnership.org/pubs/pdf/tettey_deficits.pdf).
- Wamala, R. and Ssembatya, V. A. (2013). Pattern of Scholarly Productivity among Doctoral Holders in Uganda. *Contemporary Issues in Education Research*, 6(2),
- Xiaoyang L. (2004). *Uganda Tertiary Education Sector Report: Africa Region Human Development Working Paper Series*. Retrieved on September 8, 2012 from [siteresources.worldbank.org/AFRICAEXT/Resources/no\\_50.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/no_50.pdf).



## EMPOWERMENT OF ELECTED WOMEN REPRESENTATIVES IN PANCHAYATI RAJ INSTITUTIONS: A CASE STUDY OF MORADABAD DIVISION

Aarti Garg

Assistant Professor, IFTM University, Moradabad

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

## Abstract

*In India, Panchayati Raj Institutions (PRIs) assume great prominence from the point of view of democratization in the administrative system. Article 40 of the Indian constitution lays down that the state shall take necessary steps to unify village panchayats and bestow them with such powers and authority as may be necessary to enable them to function as units of self-government. The architects of PRIs visualized that not only men but also women should participate in the village panchayat. In Indian society women traditionally considered as a weaker section. The status of women has been subservient to man subjugated, exploited and oppressed. She has been discriminated from womb to tomb. They have been constantly denied the right to express their views at various levels. After independence, it was felt this negligence of women power had been one of the most essential causes of India's backwardness. The 73rd and 74th amendment act is an important event in the Indian history in which 33 percent reservation has been given to women at the Panchayat and Municipal level. The reservation for women in panchayats have provided a possibility for thrashing traditional gender, caste and religious biasness but it is a long and difficult process for bringing about societal change. The question remains: whether the constitutional amendment will be able to contribute to women's empowerment or will the existing patriarchal structures continue to dominate in the society. This paper is an attempt to understand the instance of elected women in panchayat level representation and how far these types of representation lead the way to their development and empowerment.*

**Keywords:** Elected women leaders, Participation, Panchayati Raj Institutions (PRIs)

In a country like India, PRI assume great importance from the point of view of democratization in the administrative system. As Gandhi often pointed out, India lives in villages and unless village life can be revitalized the nation as a whole can hardly come alive. After independence, Article 40 of the Indian constitution enshrines one of the directive principles of state policy, which lays down that 'the state shall take steps to unify village Panchayats and bestow them with such powers and authority as may be necessary to enable them to function as units of self-government.' The architects of PRIs predicted that not only men but also women should participate in the village Panchayat. In this race, women have been failed to involve actively in policymaking due to the existing social structure in the Indian society. As a result, they did not achieve an equal status in the society compared to their male counterparts.

In order to improve the structure of PRIs, Balwantraj Mehta Committee (1952); Ashok Mehta committee (1977); CAARD Commission (1985); Sarkaria Commission (1988); Sixty Fourth Amendment Bill were formed and finally 73rd and 74th amendment was enacted in 1992. The 73rd and 74th amendment acts are an imperative event in the Indian history in which 33 per cent reservation has been given to Indian women at the Panchayat and Municipal level. The reservation for women in Panchayat have provided a possibility for thrashing traditional gender, caste and religious biasness but it is a long and challenging process for bringing about societal change. The problem remains: whether the constitutional amendment will be able to contribute to women's empowerment or will the existing patriarchal structures continue to dominate in the society. This paper is an attempt to understand the role and participation of elected women leaders in general development process of panchayats and how far their representation helps in the way to their empowerment with special reference to Moradabad division of Uttar Pradesh.

All over the world the gender problem has augmented during the recent years. The gender issue has become a decisive point of argument. Rural women in particular did not have any voice in the family as well as the society. They have been constantly repudiated the right to take active part in the decision making process at various levels. So this negligence of women power had been one of the most significant causes of backwardness of rural India.

There is no doubt that in different countries of the world the nature of women's participation is restricted. In a country where women constitute half the population, in the administrative system which supports popular democracy and equality of gender, where both men and women are legally equally eligible for administrative participation, women participation should be equal to that to men. It conviction is not done, and then it signifies flaws within the administrative system. Representation is not only a means of certifying individual participation, but also a responsibility of the representatives to act on behalf of the citizens (voters) that include women, who elected them and to reflect the voter's ideas & aspirations. But disproportionate absence of women from administrative process would mean that the concern for half of the population of a country can't be sufficiently grace with presence to or acted upon. It is also not possible for the government to eloquent policies and programmes for women without their active and effective participation. It is true that true Indian lives in the rural villages. Its villages are as old as its civilization. The evolution and origin of village panchayat is an old system. According to H.D. Malviya - "It (Panchayat) has been so because the village is the unchanging backbone of Indian life". The word 'Panchayat' is a traditional, referring to the five elders in a village who mediated conflict and spoke on behalf of all the residents of village. The word 'Panchayat' has been retained for use after the 73rd amendment to the constitution. Panchayati raj was in existence during Vedic period in ancient India and was working well as the people



were carrying out their personal and official duties on 'Dharma'. The life of people was peaceful and faithful as there were limited desires of the people. In the medieval period Panchayati Raj lost its significance as feudal lords managed local affairs through dictatorship. They never bothered for the people and only acted in their own interest. During the British period, there were attempts to set up local government. Lord Rippon is considered to be the first person who came out with a resolution of 1882 to provide framework for local government. After this there were attempts to improve local government through the act of 1909, 1918, and 1935. However, there was no real intension of the Britishers to decentralize power. It was only an arrangement to suit their imperial requirements.

After independence, government of India under the influence of Mahatma Gandhi was committed to set up Panchayati Raj system to provide real swaraj to the people of rural area. Acc to Gandhi – "A truly independent and democratic Indian, he envisioned gram swaraj or village self-rule". For Gandhi true village autonomy meant that all adult women and men work together to ensure their villages self-reliance in meeting basic needs. A developing democracy like India needs an extensive participation of the people irrespective of caste, colour creed, sea etc. in its administrative process. In order to provide this opportunity the system of democratic decentralization through PRIs has long been introduced in our country. As the women constitute a very substantial portion of the total population of Indian, their participation at grass root entity is so essential to make the democratic governance more successful. The question of their participation arises because of their long standing neglected social status in male dominated Indian society. Immediately after framing the Indian constitution, constitutional maintain along with the provision of reservation of seats in legislative bodies, public office and institutions were provided to them for their upliftment.

With the down of the 21st century the worldview about the rural women has undergone a marine change. The rural women are now observed as hard working prolific adults. With this changed perception there is a growing realization that there can be no successful development planning without encouraging equal participation of women. Panchayatis that of government where women can enter administrative life with affluence. Panchayat are good training ground for women representatives who want to reach higher levels of elected or appointed in government. The central purpose of women's participation in Panchayat is to change their socio-economic and administrative status. Keeping these facets in mind, adequate provisions had been made in shape of constitutional amendments and rules and regulation in panchayati Raj system to encourage and ensure the participation of women in the local governance system. The 73rd constitutional amendment act 1993 has made an effort to give some special powers to women in all the three tiers of Panchayati Raj. The Act has reserved one- third of the total seats for women in PRIs. Administrative empowerment of rural women will have affiliated multiple impacts on the other sphere of social life. Empowerment of rural women

is observed as the key solution to many social problems like high population, growth rate & low status of women.

Balwant Rai Mehta Committee -: Community development programme was inaugurated in 1952. It was essential for development that the initiative should have come from the below, the masses of people and in fact from the grassroots. A committee for the review of CDP was constituted in 16 Jan. 1957. Balwant Rai Mehta, a member of parliament, headed the committee the committee's view was that without an agency at the village level real progress in rural development could not be achieved. The recommendations of the committee favoured democratic decentralization through the setting up of PRIs. The committee suggested that the villagers should be given power to decide about their own felt needs and to do planning and implementation of the programmes accordingly. The village self-sufficiency could not be attained without the active involvement of the village people. The Mehta committee suggested a three-tier structure for panchayat raj. These tiers considered of gram sabha, which was constituted on the basis of population size. This was the lowest carolled of panchayati raj. The second tier was constituted at the tehsil or taluka level. The third tier was at the district level. The pattern of panchayat raj was thus developed on the co-ordination between the officials and non-officials. While Balwant Rai Mehta committee recommended three-tier panchayati raj system for the country did not consider women's participation as an issue of considerable significance. In fact, its genesis and terms of reference gave it no scope to consider the question seriously. The committee however, considered the conditions of rural women, and argued that they should be supported to find way to increase their incomes. There was a section in the report dealing with the measures to be taken for belief purpose. It had also recommended for the appointment of gram sevika and women social extension officers to facilitate effective implementation of women's welfare programmes and co-option of two women in the panchayat bodies at the block and district levels. It seemed to have considered the women's participation in panchayat primarily for implementation of women and children development programmes. They were interested in making improvement of the housekeeping function of the women. Clearly they had taken a conservative attitude to women. Women as participants in the decision making process did not pay adequate corroboration of the committee. Following the recommendation of the committee, women joined panchayat in the same status as co-opted member. But the result was not encouraging. They were neither able to play an essential role in the decision making process in general nor in matters pertaining to women and children, women's representation become one of what may be called tokenism.

Ashok Mehta Committee-: The three tier pattern of panchayati raj began to crumble down. PRIs were dominated by the privileged section of society. It limited the utility of Panchayati raj for common villager. In view of this a 13 member committee headed by Shri Ashoka Mehta was set up in 1977 to suggest measures to strengthen the PRIs. He suggests



changes in the pattern of Panchayati raj. In 1977 Ashoka Mehta committee recommended a fundamental change in the Panchayati raj system. It asked for transformation of the panchayat from an implementing agency to administrative institution. The committee recommended a two tier set up – District level and mandal level covering the population of 15000 to 20000 and suggested the abolition of block as the unit of administration. The committee also suggested holding of regular election compulsory items of taxation in their jurisdiction and transfer of land revenues collection to them. It was also felt that a constitutional provision was necessary to strengthen Panchayati raj system. The main recommendation of committee was considered at the conference of chief minister in 1979, which advocated for the continuance of the existing three-tier-system. The committee also laid stress on the need for or recognizing and strengthening women's role in the decision-making process of panchayats. Committee recommended reservation of two seats for women in panchayat. The committee had also felt the need for an institutional arrangement in the form of committee with all women member of the mandalpanchayat represented on it. It would ensure that decision was taken by women themselves on priorities and choice in welfare and development programme specially meant for women. The Ashok Mehta Committee had acknowledged the need for associating women with the process of decision-making, but could not give a clear direction. This had resulted in a cumbersome proposal about the participation of women in panchayat. 73rd Constitutional Amendment Act:- Prime Minister P.V. Narashimha Rao decided to draw up a fresh constitutional amendment bill for PRIs. The 72nd amendment bill, 1991 came into existence. The bill was later on referred to a joint committee. The joint committee offer detailed deliberation presented its report to parliament in July 1992.

Taking into consideration the consent evolved during the meeting of joint committee, the question raised by the various leaders of different administrative parties during the debate held in December 1992, necessary amendments were made by Government. The 73rd constitutional act emerged which was passed with unanimity by Lok Sabha on 22nd Dec 1992 and by the Rajya Sabha on 23rd Dec 1992. The act came into force from 24th April 1993. The 73rd constitutional amendment act raj article 243 D and 243 T of constitution provide that not less than one third (including the number of seats reserved for belonging to SCs/STs) of the total number of seats to be free by direct election in the local bodies. (Panchayat and municipalities) would be reserved for women and such seats may be allotted by rotation to different constituents in the local bodies. This makes a beginning for effective participation of women in decision making process at grass root. It is a fact that in the election to these local bodies' one million women has been elected every five years. This portrays a very boosting development for women empowerment.

Women in Panchayati Raj and a case study of Amroha district: As may be expected, the experience of women in

panchayatiraj has been speckled. Many are substitutes for husbands and fathers who could not contest because of the reservation. Some were put in place by the wealthy and powerful, for their malleability—a kind of puppet to serve the vested interest while appearing to be an elected representative. It has led to many problems that have been extensively discussed in the literature and form the basis for an excellent film, sponsored by UNICEF, called Shansodhan. Yet, it must not be forgotten that this experiment in local self-government is being undertaken in a society that is predominantly illiterate. Many of the people elected, especially those in the reserved categories are very poor. In attending meetings of the gram panchayats, they often have to give up a day's wages. To use terms popularized by Amartya Sen, the entitlements of the actors in this great drama of democracy are way below what they should be. As a result, their capabilities to play these roles are low as these are in uncharted territory.

### Objective of the Study

To understand the case of elected women leaders in PRIs; And how far these types of representation lead the way to their development and empowerment.

### Research Methodology

The pilot study was conducted in the five districts (namely Bijnore, Moradabad, Rampur, Amroha and Sambhal) of Moradabad division, U.P. to understand the role of elected women representatives in the general development process of Panchayati raj system. Therefore, here we are presenting the field level experiences of women in panchayatiraj system in Moradabad division. To understand the participation of women and their role in general development process in PRIs, we have interviewed five women representative in five districts of Moradabad division (one from each district).

A focused group conversation was conducted with the elected women leaders so as to gather the viewpoints regarding the participation of women in panchayats and development of PRIs. The data was collected by making visits personally by the investigator during the month of October-September 2016.

The findings of these six case studies are discussed below.

Case 1-Rayabhur Gram Panchayat (GP) is a medium size village located in Thakurdwara of Moradabad district, U.P. Around 1494 population are come under the jurisdiction of this Gram Panchayat of which 763 are males and 731 are females as per population Census, 2011. The GP is divided into 07 wards. As per Constitution of India and Panchayati Raj Act, Rayabhur village is administered by Sarpanch (Head of village), who is elected representative of village. Rayabhur village has lower literacy rate compared to U.P. In Rayabhur village, male literacy stands at 51.44% while female literacy rate was 37.54%. In the recent GP election, Smt. Malti is elected as a president of Rayabhur GP because the post of GP president is reserved for an OBC woman. She passed just fifth standards. Since she is an elected president, all six members of this GP must obey her decisions. However, two female members were found not to satisfy with the



deeds of the president. They complained that president is irregular in the Panchayat and Gram Sabha meetings. Her husband was found to attend in meetings. All of the decisions of the Gram Panchayat were taken at her home. Finally, president of the Rayabhur GP call for a special meeting and raised her problem of irregularity in the Panchayat meetings. She said that her family members are not willing to go outside. Besides, shamefulness, family constraint as well as outmoded outlook were found to be the reason for irregularity. Now question is that does a mere reservation for women bring any social change? Reservation has brought to prominence a person who would never have attained such a position under "normal" conditions. Does the policy of reservation give a chance to the male members to exploit this opportunity? If so, under what conditions will they play a positive role, as in this case?

Case 2-Madhan Gram Panchayat is a medium size village located in Asmoli Tehsil of Sambhal district, U.P. In recent Panchayat term, Gram Panchayat women members were found to show their level of dissatisfaction against the government officials. They were found to state that Gram Panchayat secretary (Government official) never noticed their issues rose in the Gram Panchayat meetings. Though the current President of this Gram Panchayat is a woman (Navisha), all of the decisions of the Gram Panchayat were found to take on the advice of her husband (erstwhile president of Madhan GP) and vice-president (male). In the Gram Panchayat and Gram Sabha meetings, male members were found to be a kingmaker of all decisions. It is worth mentioning that Navisha was found illiterate. The findings of this study shows that Navisha is clearly a "dummy" candidate and she contested in the election because her husband could not contest due to the reservation of women. It also shows that in a traditional society, it is difficult for men to accept women in positions of authority.

Case 3-Razopura Gram Panchayat is located at Kotwali Tehsil of Bijnore district. The post of President was reserved for woman and Kavita Rani became the President. Other two women elected members were also found in the GP through the policy of reservation. Kavita Rani and other two women members were found to pass class tenth and eight standards respectively. During the period of field study, it was found that women members were found irregular in the Panchayat meetings. They were found to send their family members like husband, brother in the Panchayat meetings. It was also found that their family members did not have any chance to participate in the important decisions of Gram Panchayat as they are not representatives of Gram Panchayat. As a result, it can be said that women are not active in the panchayat. Regarding the causes of non-participation, it was found that women members have no salary by which they would give their service. Besides, all the financial power is concentrated in the pocket of president. So, the seats of ward member are nothing but like a designation only. Thus, it is cleared that women members are not willing to involve in voluntary works as legislation.

Case 4-In case of this study, Mrs. Manju Devi who was found to be continued her second term as a member of

Bahadargarh Gram Panchayat in the Bilaspur Tehsil of Rampur district, U.P. with total 42 houses. Bahadargarh Gram Panchayat is a small size village located 17km away from the headquarter Rampur. The Bahadargarh village has a population of 229 of which 122 are males while 107 are females as per Population Census, 2011. She was found to enthusiastic to contest the election to the legislative assembly of Moradabad. She is an unmarried woman and completed her education upto Graduation. Being a literate woman, she would like to do something for the women in her village and started a Mahila Mandal. This was the beginning phase to start her administrative career. When the policy of reservation enacted in the PRIs, the village became her base and she was elected to be a president of the GP. She completed her five-year term and learnt a great deal about the functioning of local government in the process. She established good links with officials from the local area. Women like her would have found it impossible to make a mark in the system without the reservations. Yet, she argues that this is only a first step. From this case study, it is cleared that without educational qualifications, women will find it challenging to work the system. She showed the system of reservations for women and for depressed sections of society operational at its best. But how many such cases are there? Question is that under what conditions such reservations will lead to positive results, especially where women are concerned? How will establish officials react to the emergence of representatives like her?

Case 5-Kailsa Gram Panchayat is a medium size village located in Amroha Tehsil of Amroha district, U.P. it is situated 10km away from sub district headquarter Amroha. Around 3852 population are come under the jurisdiction of this GP of which 2035 are males and 1817 are females as per population Census, 2011. There are about 665 houses in Kailsa village. A women's march from a simple housewife to a public figure can be recognized in case of Sunita Devi. She is a general category woman of 32 years of age with three children was simply a housewife concerned only with running her household property. Being a simple and homely woman with absolutely no idea of panchayat and rules, she was hesitant to do so but pressures exercised by her husband and neighbours made her to contest the seat and she was elected.

For one year, she remains completely ignorant about her duties and powers and participated in panchayat meetings as a silent spectator and listen carefully of other members of the panchayat. She began to realize the importance of being a member of the panchayat. She felt honoured when she was addressed as "membered" and realized that she also has some powers and, therefore, decided to do something that can gratify her ego and build her image among the people. She also availed opportunities to participate in panchayati raj training subsequently organized by government and non-governmental agencies. Interestingly, when she sought consent to attend training, her husband readily agreed and assured her to look after the household in her absence. The training exposure has made her aware about the role she is expected to play in panchayats, rules and procedures of



holding panchayat meetings, nature of issues being discussed in such meetings, powers and revenue sources of panchayats and the like.

Subsequently, she has made it a point to participate in all the meetings of the panchayat and took keen interest in panchayat work. She was motivated to intervene wherever things are not going well. She first took up the case of poor functioning of anganwadi, made inspection of the anganwadi and noted that the worker does not attend it frequently and the mid-day meal is also not served every day.

She along with other women members paid visits to the anganwadi and collected information about the attendance of anganwadi worker, supply of midday meal, and irregularities. She observed that the anganwadi remained closed for most days; mid-day meal is also not served regularly. Therefore, she got the warning issued to the worker who was and advised to mend ways failing which matter will be reported to the higher establishments. She along with other women members visited schools as well and the teacher in charge was cautioned about serving of burnt chapattis during the mid-day meal. Things have improved since then.

The first success she encouraged to take up other issues as well. She noted that some panchayat land was under illegal occupation of some villagers. She organized a joint action and succeeded in getting that land vacated from illegal occupation and raising on it a kitchen garden.

However, the success women members accomplished, and the activeness they displayed in panchayat affairs did not receive much appreciation from male members. She is conscious also of comments male members make against them but is feel undeterred and determined to work for the wellbeing of women, children and the village as a whole through panchayat. Now she started attending panchayat and gram sabha meetings without any escort and participates in panchayat deliberations without feeling hesitant. The community thus found in her a dedicated women leader.

### Conclusion and Recommendation

To conclude we can say that the participation of women in PRIs particularly in Moradabad division is just satisfactory and for their activities they are many times dependent on others. Most of the time, they are not in a position to take a decision on their own and are not able take constructive decision. The findings of these case studies shows that the role of elected women representatives in PRIs is slow and it will take more time to accomplish women's objective. Women are irregular in the Panchayat accomplishments due to worth missing their daily wage and concern about their crying babies and family relations. It is also fact that the women who have come in under caste reservation have come out 'with their social and economic hindrances – mostly have primary educated and some are illiterate, with little fruitful assets, largely dependent on wage labour and into a rural society that has fixed places for various castes and gender. In the course of conducting the study it is realized that some measures are required to be taken to promote

women's participation in general development process of legislation. So it may be suggested that elected women in each district may develop a linkage among them and hold meetings and discussions on routine basis about necessary measures to promote their participation and development of PRIs and neutralize male domination in local-self bodies. The present study presents low level of education in this case study which is not a worthy sign for a healthy democracy. Thus, it is significant to make extra educational training programmes related to legislation for enhancing knowledge of elected women members on government policies and programmes, bureaucratic structures and the issues of local concern. For this, government may make provision for obligatory attendance of an awareness programme/ orientation programme by members of PRIs. Sensitization of male members in PRIs is equally imperative so that they listen to women patiently, converse politely, recognize their suggestions in the meetings and implement them wherever feasible. It would lead to psychological empowerment of women and development of PRIs.

### References

- Department of Panchayati Raj, UP.  
Government of India, Census Report- 2011.  
K.K., Sharma, *Panchayat Raj in India*, (College Book Depot, Jaipur, 2002).  
Mahi Pal, Women in Panchayats: Experiences of a Training Camp, *Economic & Political Weekly*, Vol. 33, No. 4, 1998, January 24: 150-52.  
Narain Iqbal, Sushil Kumar and P.C. Mathur, *Panchayat Raj Administration*, Indian Institute of Public Administration, New Delhi, 1970, p.51.  
Pamela Singla, *Women's Participation in Panchayati Raj: Nature and Effectiveness*, (Rawat Publications, New Delhi, 2007)  
Report of the Committee on Revitalization of Panchayati Raj Institutions, L.M. Sanghvi, chairman, Government of India, , Delhi, 1986.  
Report on the Status of Women in India, Towards Equality, Government of India, 1974, pp. 355 -357.  
S. N. Sing, *Local Government: A Co-operative Perspective*, (Uppal Publishing House, New Delhi, 1991) 180-181.  
S.P. Jain, &N.Y.Naidu, *Panchayati Raj & Social Change: A Study of Assam*, National Institute of Rural Development, New Delhi, 1978, pp.97-99  
Srilatha Batliwala, Transforming Political Culture: "Mahila Samakhya Experience", *Economic and Political Weekly*, Vol. 31, No. 21, 1996, 1248-51.  
Status of Panchayati Raj in the States and Union Territories of India, 2000, Institution of Social Science, New Delhi.  
Sudha Pai, Pradhanis in New Panchayats: Field Notes from Meerut District, *Economic and Political Weekly*, Vol. 33, No. 18, 1998, 1009-10.  
The Constitution (Seventy Third Amendment Act), 1992, Government of India.

## STREET CHILDREN OF TARLAC CITY: TOWARDS A PROPOSED ACTION PLAN

**Murphy P. Mohammed**

College of Public Administration, Tarlac State University, Tarlac City, Philippines

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*This study aimed to evaluate the status of street children in Tarlac City. The result of the study would serve as basis for the proposal of an action plan. Descriptive method of research was utilized in the conduct of the study. Interview and questionnaire were the main sources of data. Purposive sampling was used to identify the respondents of the study. The subjects of the study were the street children working and living in the City of Tarlac. Forty (40) street children were interviewed in the study. The finding of the study revealed that most of the street children often engaged in begging for money or food in the market, the church, and fast food chains. Unlike the identified beggars, street children involved in selling goods were not engaged in any other activity on the streets. Scavenging, being a barker, a vulcanizer helper, and a jeepney terminal street sweeper were the other engagements of the street children. The most frequent reasons why children engaged themselves into street life were to earn money to buy food, to help their parents earn money, and to earn money to finance their education. Other reasons why children engaged themselves in the street were to buy things that they needed, to buy medicine and to buy things of their own choice.*

**Keywords:** *Street Children, Street Life, Poverty*

The United Nations defined the term ‘street children’ to include “any boy or girl... for whom the street in the widest sense of the word... has become his or her habitual abode and/or source of livelihood, and who is inadequately protected, supervised, or directed by responsible adults.”<sup>[1]</sup>

The abundance of street children in major cities in the country does not sit well with commitment to the millennium development goals. Street children are abundant, especially in urban areas. Sadly, they include children as young as four years old or even younger.<sup>[2]</sup>

In societies where poverty is a day to day struggle, children suffer the most as they comprise the most vulnerable group in any population. Poverty impacts directly on children’s physical and intellectual growth. In the Philippines, despite the country’s recent economic progress, poverty continues to affect millions of families of which most have young children. This is visible in the number of young ones who wander the streets in urban areas, who scavenge in Smokey Mountain, or who, at an early age, are forced to drop out of school to work to supplement their family income. The problem goes beyond mere lack of income or assets for these children’s families. Their situation speaks of a roster of factors that range from lack of appropriate skills to inability to control fertility intertwined with lack of job opportunities and other economic problems.<sup>[3]</sup>

In Tarlac City, the proliferation of street children is evident in areas such as in the market, church, fast food chains, and malls. The researcher conducted the study to evaluate the status of the street children within the city area and be able to gain insight on how to deal with such issue.

This study aimed to evaluate the status of street children in Tarlac City. The result of the study would serve as basis for the proposal of an action plan. Specifically, the study sought to address the following problems.

1. How are the street children in Tarlac City described in terms of: nature of street life?; place of origin?;
2. What are the reasons why street children engage themselves into street life?;
3. What problems are encountered by the street children on the streets?;
4. What action plan is proposed to address the situation?;

### Methods and Materials

Descriptive method of research was utilized in the conduct of the study. Interview and questionnaire were the main sources of data. Purposive sampling was used to identify the respondents of the study. The subjects of the study were the street children working and living in the City of Tarlac. Forty (40) street children were interviewed in the study.

### Results and Discussions

**Description of the Street Children:** The description of the street children as to their nature of street life and place of origin is presented in the following discussions.

**Nature of Street Life-**The nature of street life among the street children is presented in Table 1.

Some of the street children engaged in one or more nature of street life, based on the gathered data. Most of the street children often engaged in begging for money or food in the market, church, and fast food chains. Unlike the identified beggars, street children involved in selling goods were not engaged in any other activity on the streets.

**Table 1 - Nature of Street Life among the Street Children**

| Nature of Street Life             | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Beggar                            | 22        | 42.31      |
| Vendor                            | 17        | 32.69      |
| Scavenger                         | 9         | 17.31      |
| Barker                            | 2         | 3.85       |
| Vulcanizer(helper)                | 1         | 1.92       |
| Street sweeper (Jeepney terminal) | 1         | 1.92       |

Scavenging, being a barker, a vulcanizer helper, and a jeepney terminal street sweeper were the other engagements of the street children.

**Place of Origin-**Table 2 presents the place of origin or the residence of the interviewed street children.

**Table 2 - Place of Origin of the Street Children**

| Barangay    | Frequency | Percentage |
|-------------|-----------|------------|
| San Vicente | 17        | 42.50      |
| Carangian   | 8         | 20.00      |
| San Pablo   | 4         | 10.00      |
| Matatalaib  | 4         | 10.00      |
| San Nicolas | 4         | 10.00      |
| Maligaya    | 1         | 2.50       |
| San Isidro  | 1         | 2.50       |
| San Roque   | 1         | 2.50       |



Based on the gathered information, most of the street children reside in barangay San Vicente and Carangian. These barangays are adjacent to each other and they have a reclaimed area from the river wherein informal settlers reside. Unlike barangay San Nicolas, the reclaimed area is utilized by the city government as the location of the: market, jeepney and bus terminal, as well as retail stores.

The proximity of barangays San Vicente and Carangian to the market, church, mall, university, and fast food chains may have encouraged poor children to be engaged on the street.

The proliferation of illegal settlers may have contributed to the huge number of street children coming from the said barangays.

Reasons why street children engage themselves into street life-Table 3 presents the reasons why street children engaged themselves into street life.

The most frequent reason why children engage themselves into street life were: to earn money to buy food, to help their parents to earn money, and to earn money to finance their education. Other reasons why children engaged themselves in the street were to buy things that they needed, to buy medicine and to buy things of their own choice.

**Table 3 - Reasons Why Street Children Engaged Themselves into Street Life**

| Reasons                                  | Frequency | Percentage |
|--|-----------|------------|
| To earn money to buy food                | 36        | 36.73      |
| To help my parents earn money            | 29        | 29.59      |
| To earn money so that I can go to school | 22        | 22.45      |
| To buy things that I need                | 9         | 9.18       |
| To buy medicine                          | 1         | 1.02       |
| To buy things of their own choice        | 1         | 1.02       |

The living condition of the children was the main contributor forcing them to engage themselves in the street. Pointed out by the street children was the fact that their families did not have the capacity to provide enough nutritious food for their every meal.

Based on the conducted interview with the street children, all of respondents had five (5) or more siblings in the family. The most number of siblings the street children had was 11. Most of their fathers were tricycle drivers and while the mothers accepted laundry to earn money. Furthermore, majority of their parents of the street children had an elementary level of education and some were elementary graduates.

Problems encountered by the street children on the street-The problems encountered by the street children on the street are presented in Table 4.

Majority of the street children encountered street fighting. The common causes of the street fights were bullying, conflict with the authorities, and money issues.

**Table 4 - Problems Encountered by the Street Children on the Street**

| Encountered Problem   | Frequency | Percentage |
|---|-----------|------------|
| Street fighting   | 21        | 28.38      |
| Bullying  | 16        | 21.62      |
| Unsafe environment/accident prone                                     | 14        | 18.92      |
| Prone to vices  | 11        | 14.86      |
| They are usually chased by authorities (Police or Barangay Officials) | 8         | 10.81      |
| Other street children get my money                                    | 4         | 5.41       |

Bullying, unsafe environment/accident prone, prone to vices, conflict with the authorities, and other street children got their money were the other problems encountered by the street children. Based on the conducted interview, most of the boys already had smoked a cigarette while some had already learned how to drink liquor.

Proposed Action Plan-The proposed action plan to address the issues of street children is presented in Table 5.

**Table 5 - Proposed Action Plan**

| Proposed Plan   | Brief Description  |
|---|--|
| 1. Study the urban migration                                      | The Center for Local Governance of the College of Public Administration of Tarlac State University may establish a partnership with the LGUs to study the patterns of urban migration to Tarlac City.  |
| 2. Conduct reproductive health/family planning seminar            | The Center for Local Governance of the College of Public Administration as well as the Gender and Development Office of Tarlac State University in cooperation with the Department of Health may conduct seminars to high school and college students regarding the importance of reproductive health and family planning.   |
| 3. Conduct livelihood training for the parents of street children | The Tarlac State University, through the University Extension Office, may conduct livelihood training to the parents of the street children in partnership with public and private entities.   |
| 4. Conduct information dissemination                              | Through the Center for Local Governance of the College of Public Administration together with the Gender and Development Office, the Tarlac State University may help in information dissemination on the causes and effects of becoming street children to elementary and high school students. Information dissemination can also be done during barangay assembly meetings. |

## Conclusion

Based on the findings of this study the following conclusions are made. The street children are often engaged in begging for money or food in the market, the church, and fast food chains.; Most of the street children reside in barangay San Vicente and Carangian.; Most frequent reasons why children engage themselves into street life are to earn money to buy food, to help their parents to earn money, and earn money to finance their education.; Majority of the street children encounter street fighting. The common causes of the street fights are bullying, conflict with the authorities, and money issues.

## References

- Owoaje, Eme T., Adebisi, \*A.O., and Asuzu, M.C. (2009, June). Socio-demographic characteristics of street children in rural communities undergoing urbanization. *Annals of Ibadan Postgraduate Medicine*, Vol. 7 No. 1. Retrieved from <http://www.ajol.info/index.php/aipm/article/view/64055>
- Cullen, Shay. (September 17, 2005). *The Life of Street Children in the Philippines and Initiatives to Help Them*. Retrieved from <http://cpcabrisbane.org/Kasama/2005/V19n3/LifeOfStreetChildren.htm>
- Proliferation of street children: a threat to the MDGs*. (2010). Retrieved from [http://www.unicef.org/philippines/brief05\\_fnl.pdf](http://www.unicef.org/philippines/brief05_fnl.pdf)
- Reyes, Tabuga, Asis and Mondez. (2014, July). *Child Poverty in the Philippines*.
- Philippine Institute for Development Studies. Discussion Paper Series No. 2014-33. Retrieved from <http://dirp3.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1433.pdf>



## CASES OF VIOLENCE AGAINST WOMEN: TOWARDS A PROPOSED PLAN OF ACTION

**Murphy P. Mohammed**

College of Public Administration, Tarlac State University, Tarlac City, Philippines

**Rita E. Pulmano**

Gender and Development Office, Tarlac State University, Tarlac City, Philippines

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*This study determined the cases of violence against women in selected barangays of Tarlac City. In this research, the following questions were answered. What is the description of the cases on violence against women? What are the causes of violence against women? What support/assistance to women is provided by the LGUs? What plan of action is proposed to improve the VAW services of the barangays? The methodologies used in the present study were qualitative and descriptive researches. The researchers used documentary analysis and interview to gather data. The subjects of the study were violence against women survivors from the selected ten (10) populous barangays of Tarlac City. Physical abuse, mental abuse, threat, abandonment of children, child support issues, child custody, psychological abuse, economic abuse, and rape were the recorded cases among the evaluated barangays. The researchers found out that a VAW desk was established in every respondent barangay. This is in compliance with Section 12 D, Rule IV of the Rules and Regulations Implementing the Magna Carta of Women, which provides for the establishment of a VAW desk in every barangay to ensure that violence against women cases are fully addressed in a gender-responsive manner.*

**Keywords:** *Violence against Women, Cases of Violence against Women, Barangay VAW Desk*

The home is often the most dangerous place for women and many live in daily fear of violence. One in three women will experience physical or sexual violence from men, usually someone known to them, in their lifetime.<sup>[1]</sup>

Research over more than thirty years from around the world clearly indicates that domestic abuse as understood and defined is primarily perpetrated by men against a female partner or ex-partner. It is therefore a gender issue. This imbalance requires explanation rooted in analysis which posits, not that men are biologically and irredeemably 'hard-wired' for coercive controlling behaviour but the links between the individual behaviour of some men, and prevailing social/structural conditions must be examined.<sup>[2]</sup>

Domestic violence against women by men is 'caused' by the misuse of power and control within a context of male privilege. Male privilege operates on an individual and societal level to maintain a situation of male dominance, where men have power over women and children. In this way, domestic violence by men against women can be seen as a consequence of the inequalities between men and women, rooted in patriarchal traditions that encourage men to believe they are entitled to power and control over their partners.<sup>[3]</sup>

The United Nations and governments around the world recognize that National Action Plans (NAP) on Violence against Women (VAW) can play a valuable coordinating role in concerted, sustained efforts to address VAW. The implementation of multi-sectoral NAPs and the adoption/enforcement of national laws are two of five key goals that the UN Secretary-General's *UNiTE to End Violence against Women* campaign hopes to achieve worldwide by 2015.<sup>[4]</sup>

This study determined the cases of violence against women in selected barangays of Tarlac City. Specifically, the study answered the following: What is the description of the cases on violence against women? What are the causes of violence against women? What support/assistance is provided to women by the LGUs? What plan of action is proposed to improve the VAW services of the barangays?

### Methods and Materials

The methodologies used in the present study were qualitative and descriptive researches. The researchers used documentary analysis and interview to gather data.

The subjects of the study were violence against women survivors and victims from the ten (10) populous barangays of Tarlac City. These barangays were as follows: Carangian, Maliwalo, Matatalaib, San Isidro, San Miguel, San Rafael, San Roque, San Vicente, SapangMaragul, and Tibag.

### Results and Discussions

Description of the cases: In Table 1, the type of reported cases of violence against women among the barangays is presented. Based on the gathered data, physical abuse of women is the most common recorded case.

**Table 1 - Types of Reported Cases of Violence Against Women Among the Barangays**

| Barangays     | Types of Cases   |
|---------------|--|
| Carangian     | Physical Abuse   |
| Maliwalo      | Physical abuse   |
| Matatalaib    | Physical Abuse, Mental Abuse, Threatening, Abandonment of children, and Child Support Issues |
| San Isidro    | Physical Abuse, and Abandonment of children  |
| San Miguel    | No Recorded Case   |
| San Rafael    | Physical abuse (with a recorded case of Parricide)   |
| San Roque     | Physical abuse and Psychological abuse   |
| San Vicente   | Physical abuse, Child Support (Economic Abuse), Rape, and Child Custody                      |
| SapangMaragul | Physical abuse, Psychological abuse, and Rape  |
| Tibag         | Physical abuse and Economic abuse  |

Mental abuse, threat, abandonment of children, child support issues, child custody, psychological abuse, economic abuse, and rape were the recorded cases among the evaluated barangays.

Cases of Violence against Women: Presented here are two cases of violence against women recorded in two different barangays in Tarlac City. All indicated names here are fictitious or are not the real names of the persons involved in the actual incidents of violence against women.

Case 1: The story of Clark and Beth

Clark and Beth have been together for more than 15 years. In the early years of their marriage, Clark and Beth were as sweet as any lover can be. But as the years passed by, the sweetness of the couple was not sustained because Clark became dependent on illegal drugs. Arguments of the couple became frequent especially when Clark was under the influence of drugs. Beth tried to cope up with this situation because of their baby and she tried to encourage Clark to stop using



illegal drugs. Rather than reversing the situation, Clark became more aggressive and he started hitting Beth. Their situation became worse when Clark, besides being a drug dependent, also had extra marital affair. From then on, he did not provide for his family needs and he stopped working due to the use of illegal drugs. He continued with his vices and he kept on asking money from Beth from time to time. Beth was employed with good pay. In order to save their marriage, she tried to provide for the family needs. She even bought Clark a car and a personal gym at home to show how much she loves him. But Clark did not refrain from his vices like the use of illegal drugs and seeing his other woman. Whenever the couple argued Clark often beat Beth. After the beating, Beth usually acquired bruises, cuts, and black eye. When Beth could no longer endure her sacrifices, she reported the case to the barangay officials for them to take action. Due to the severity of the case it was endorsed to the Philippine National Police (PNP) and they took action. For the first time, Clark was sent to jail and Beth underwent counseling at the City Social Welfare and Development (CSWD). Due to the kind heartedness of Beth and for the sake of their child, she dropped the case against her husband and he was set free.

Clark tried to change his ways but he returned to his usual vices after several days. He started beating his wife again whenever they argued. Beth reported the case for the second time, so Clark was sent back to jail while she again attended counseling services from CSWD. Before the counseling ended, Beth withdrew the case and again Clark was set free with the promise that he would be a changed person. Just like other promises, Clark's promise was again broken.

Every time Beth was abused, the case was reported to the barangay so that from time to time, Clark got incarcerated. But due to Beth's soft heartedness, she would allow her husband to be released from jail.

After 14 years, the second child was born, a manifestation of Beth's love despite the abuses she received from Clark. After giving birth, Beth bought a motorcycle for Clark. To reciprocate Beth's love and efforts, Clark agreed to enter the drug rehabilitation center to be healed and with the hope that their relationship will improve. Before completing his medication, Clark pleaded to be released from the center. Beth agreed hoping that her husband would become a renewed person.

After the acquired freedom, Clark failed again to be true to his promise and he again used illegal drugs. Beth was always forced to give him money for his everyday expenses and for his vices. But with two kids to take care and to provide for their needs, Beth often refused to give him money which resulted to his beating her.

One night at about 10:00 o'clock in the evening, an intense argument of the couple occurred. Clark went home under the influence of illegal drugs. He forced Beth to give her money. Having no money to give, Beth received beating from Clark. The fight between the couple lasted for several hours. About 2:00 o'clock in the morning, their daughter woke-up due to the intense fight of the couple. She heard her mother shouting "sigepatayinmonaako!" After few minutes, the child heard her mother saying "tama na, tama na!" At this point, the child checked on the situation and she saw his father stabbing Beth. Due to fear, the child ran back to her room to hide with her baby brother. After the stabbing, Clark threatened her daughter. He took a shower and then left the house. After Clark left the house, the daughter had an

opportunity to ask help from neighbors. The barangay officials responded with the Philippine National Police.

Investigation showed that Beth received 33 stab wounds which resulted to her death. The 14-year-old daughter received counseling from CSWD due to trauma. The daughter and son of Cindy now live with her parents in another province.

As per interview with the officials of the barangay, Clark is still at large.

Case 2: The story of George and Cindy

George and Cindy were live-in partners for 12 years. Both were professionals and had an above average income level. The couple owned a building and two houses. They had three children. Despite having three children and material possessions, George did not want to settle solely with Cindy.

In 2012, the problem between the couple began. Cindy found out that George had an affair with another woman. Sometimes, the other woman was brought by George to the house adjacent to the house where the legal wife lived with their three (3) kids. Most of the time, after having pleasure with his mistress, George upon going home would still force Cindy to have sex with him. Whenever she refused George would beat her, usually at her thighs and abdomen, so that bruises could not be seen by others. Time and again, George would hit her even though Cindy would ask permission to see a friend or to go to the mall. Whenever Cindy nagged, she was beaten by George.

Experiencing worse situation, Cindy reached a point when she wanted to end her relationship with George. She was not able to do it because all her savings from being an OFW were exhausted in the construction of a building. To settle her problem, Cindy requested George to divide their property between them. Unfortunately, George did not agree to the idea. This is the reason why Cindy still stayed with George.

Twice this year, Cindy went to the barangay hall to unburden and to have consultations with the VAW officer regarding her case. The officer advised her to have the matter officially recorded at the barangay and at the PNP. Due to the social status of the couple in society, Cindy requested that the matters should not be put on record either at the barangay or PNP. She did not want their names to be the talk of the town. Cindy's request was granted by the barangay VAW officer. With Cindy's helpless situation, their relationship continued. On the second visit of Cindy at the barangay, she left a letter stating that in case something bad happened to her, George would be the primary suspect. The case of George and Cindy is still unsettled.

Causes of Violence Against Women: Based on the interview conducted, the cases of violence against women in the barangay occurred because of: dependence on illegal drugs; jealousy and the presence of a third party in the marital relationship; the influence of alcohol; anger; and provocation of the marital partner (nagging of the female).

Research points to many causes of domestic violence, but all have one underlying commonality: the abuser feels the need to exert complete control over his or her partner. A strong predictor of domestic violence in adulthood is domestic violence in the household where the person was reared. A child's exposure to his father's abuse of his mother is the strongest risk factor for transmitting domestic violence from one generation to the next. This cycle of domestic violence is difficult to break because parents have presented violence as the norm.<sup>[5]</sup>



Support/Assistance Provided by the LGUs to Women: Based on the gathered information from the different barangays, the researchers found out that all have VAW desks. Section 12 D, Rule IV of the Rules and Regulations Implementing the Magna Carta of Women, provides for the establishment of a VAW desk in every barangay to ensure that violence against women cases are fully addressed in a gender-responsive manner. The researchers observed that some barangays had separate room for investigation while some made use of the Punong Barangay's room as a venue to conduct investigations. Victim-survivors were even provided safe shelter when requested.

In one of the evaluated barangays, the officer of the day also acted as the VAW desk officer. According to the Joint Memorandum Circular No. 2010-1 entitled "Guidelines in the Establishment of a Violence Against Women (Vaw) Desk in every Barangay," the punong barangay shall designate a VAW Desk person who is trained in gender-sensitive handling of cases, preferably a woman barangay kagawad or woman barangay tanod. In cases where there are no trained personnel, he ensures that the person assigned shall undergo basic gender sensitivity training and orientation on anti-VAW laws.

Based on the records of the evaluated barangays, protocols were observed in handling VAW cases. The VAW officer of the barangay endorsed some VAW cases to the PNP and CSWD whenever necessary. Barangay protection orders were issued if found necessary and upon the request of the victims. For grave offenses by the perpetrators, the cases were endorsed to the PNP women's desk for immediate action.

There were cases wherein the survivor-victims went directly to the PNP VAW desk to report their cases. Light offenses were often endorsed back by the PNP officer to the barangay VAW desk officer for immediate action.

The Anti-Violence Against Women and Their Children (VAWC) Act (RA 9262) mandates the punong barangay or in his/her absence the barangay kagawad concerned or on duty to take immediate action upon being informed of a violent incident and is mandated to issue a Barangay Protection Order (BPO) on the date of filing after ex parte determination of the basis of the complaint. Take note that all forms of amicable settlement under the Barangay Justice System such as mediation, settlement, conciliation, arbitration shall not apply to cases of VAWC.

Proposed Plan of Action: Presented in Table 1 are the proposed plans of action to improve the VAW services of the barangays. The following are the proposed strategies: conducting training and development for the barangay officials and barangay police; giving assistance to barangay GAD planning and budgeting; showing adherence to protocol in handling VAW cases; and having information dissemination.

**Table 1 - Proposed Plan of Action to Improve VAW Services**

| Strategy   | Brief Description  |
|--|--|
| 1. Conducting trainings and seminars for the barangay officials and barangay police. | Through the Center for Local Governance of the College of Public Administration and the Gender and Development Office, Tarlac State University may establish a partnership with the Department of Interior and Local Government, Department of Social Welfare and Development, Department of Health, and Philippine Commission on Women on the conduct of training and development for the barangay officials and barangay police. |

|   |  |
|---|--|
| 2. Giving assistance to barangay GAD planning and budgeting | The Gender and Development Office of the Tarlac State University may assist the barangay officials in their GAD planning and budgeting to ensure the inclusion of activities/projects for the protection and promotion of respect for human rights.  |
| 3. Showing adherence to protocol in handling VAW cases      | Through the Center for Local Governance of the College of Public Administration and the Office for Gender and Development, the Tarlac State University may help the barangay to adhere to protocols in handling VAW cases by training the VAW desk officers and by providing a flow-chart based on the guidelines set by law.  |
| 4. Having information dissemination                         | With the help of barangay officials, the Center for Local Governance of the College of Public Administration and the Office for Gender and Development of the Tarlac State University may provide a seminar or orientation to the barangay residents during the conduct of the barangay assembly. Topics related to gender and development as well as to violence against women and children may be presented in the assembly.<br><br>The Gender and Development Office of the Tarlac State University may conduct a regular gender sensitivity orientation to all the employees of the university and its students. |

**Conclusions**

Based on the findings of this study, the following conclusions are reached. Physical abuse of women is the most common recorded case of VAW in selected barangays of Tarlac City; Cases of violence against women in the barangay occurred because of: dependence on illegal drugs; jealousy and the presence of a third party in the marital relationship; the influence of alcohol; anger; and the provocation of marital partner (nagging of the female); All barangays established VAW desks which is in compliance with Section 12 D, Rule IV of the Rules and Regulations Implementing the Magna Carta of Women.; The evaluated barangays observed protocols in handling VAW cases.

**References**

Rosche, Daniela and Dawe, Alexandra. (2013). Ending Violence Against Women: The Case for a Comprehensive International Action Plan. <http://oxfam.org> Briefing Note, 2013

Orr, Lesly (2007) "The Case for a Gendered Analysis of Violence Against Women" <http://www.scotland.gov.uk/resource/doc/925/0063070.pdf>

What is the cause of domestic violence <http://www.womensaid.org.uk/domestic-violence-articles.asp?section=00010001002200410001&itemid=1275>

Canadian Network of Women's Shelters and Transition Houses (2013) "The Case for a National Action Plan on Violence Against Women" [http://ywcacanada.ca/data/research\\_docs/00000307.pdf](http://ywcacanada.ca/data/research_docs/00000307.pdf)

Gluck, Samantha "Causes of Domestic Violence, Domestic Abuse" <http://www.healthyplace.com/abuse/domestic-violence/causes-of-domestic-violence-domestic-abuse/>

Republic Act 9710: Magna Carta of Women Guidelines in the establishment of a Violence Against Women (VAW) Desk in Every Barangay <http://www.humanitarianresponse.info/system/files/documents/files/Joint%20Memo%20Circular%20on%20VAW%20desks.pdf>

Republic Act 9262: Anti-Violence Against Women and Their Children (VAWC) Act



## HOW GAINFULLY CAN A PHARMACEUTICAL COMPANY BORROW IN THE 21ST CENTURY?

Jigar Aggarwal

Assistant Professor, JG College of Commerce, Ahmedabad

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*When a company involves debt in its capital structure, it has to bear fixed charges and this has deep impact on the company's profitability and liquidity. This paper focuses on the relationship between leverage and profit ability in West Coast Pharma Limited. The financial statements of West Coast Pharma Limited have been collected over a period of 7 years (from 2009-10 through 2015-16). Various tools and techniques employed reveal that the degree of operating leverage is found to have statistically significant positive correlation with the ROI as also that the degree of financial leverage is positively correlated with the ROI. It is suggested that West Coast Pharma Limited should revamp its capital structure such that it should include the optimum blend of equity and borrowed funds so that it has positive impact on Return on Investment. Further more, degree of combined leverage is positively correlated with ROI of West Coast Pharma. It follows that West Coast Pharma has not significantly resorted to the use of debt funds which also deprives it of the benefits of financial leverage.*

**Keywords:** Combined Leverage, Financial Leverage, Operating Leverage, Profitability and ROI

Leverage is employment of debt fund or borrowed capital. Although leverage is purely a financial tool, it is used immensely by managers involved in the decision-making processes related to capital structuring decisions, mergers and acquisitions, ascertainment of cost of capital etc. The management of a company goes through many brainstorming sessions before deciding on a particular capital structure- Equity dominated or Debt-dominated or trade-off between the two etc.

### Literature Review

Financial Leverage has always been a favourite topic with the business community as well as the academia. It evokes a full gamut of responses from both the teaching community and the business community. To fully gauge this diversity of opinion and body of work, several books, journals and articles were reviewed. In this study utmost care has been taken to include as diverse literature as possible on the theoretical aspect of the topic and findings and exploratory studies. Dilip D. Kare (2003) published a survey of Corporate practices with regard to employment of Financial Leverage, in which he said that while different industries may exhibit widely differing capital structure, firms in the same industry choose the same level of leverage composition...this means that intra industry leverage differences were fairly negligible". Brent A. Gloy and Timothy G. Baker (2002) have discussed the risk-taking and risk-aversion behaviour of various companies and the reasons thereof. They opined "the problem of choice among risk-management strategies is addressed with the dominance of a risk-free asset criterion. This allows for strategies with less business risk, less expected return and greater leverage to dominate strategies...". Carole E. Scott (1998) in a working paper described Financial leverage as "name given to the impact on returns of a change in the extent to which the firm's assets are financed with borrowed money". Louis Chaillet (2010) in his book has stated that the prospective investors should first look at the quality of assets acquired by the leveraged firm. This, they say, is a decisive factor in projecting the future prospects of getting

a reasonable rate of return. CA Sachchidanand Pachori and Dr. Navindra Totala (2012) made an attempt to study the influence of financial leverage on the shareholders' return and market capitalisation of automotive cluster companies of Pithampur, Madhya Pradesh, India. They have observed that shareholders of the firms with risk-laden debt will invest only when or up to the point at which, the expected return on investment is at least as great as the promised payment to bondholders. They imply that if the expected return is less than the promised payment, the shareholders invest less than the optimal amount or do not invest at all. Then, the firm value declines resulting in restricted use of debt. Their findings indicate that even if the rate of return on equity is high but if the amount of financial leverage is very high the shareholder will ask for premium to cover the added risk. They conclude that financial leverage is a speculative technique and that there are special risks and costs involved with financial leverage and there is no guarantee that financial leverage strategy will be successful during any period in which it is employed.

### Rational of the Study

In India, there have been significant changes in the capital market over the last few decades. The government rules and regulations have also been changing from time to time. Hence, the expectations of the investing community have also changed in keeping with the aforementioned changes. How the corporates raise funds and utilise the same has become a make or break point so far as the financial performance of the corporate world is concerned. Leverage has always been and continues to be the buzz-word for the corporates and the investors as well as other stakeholders. Employing leverage has its pros under a particular set of financial circumstances and also its cons in a different set of financial circumstances. West Coast Pharma Limited, an Ahmedabad-based company, has continued its steady march to growth and prosperity even in the face of changing vicissitudes at the stock market. West Coast Pharma Limited has been growing by leaps and bounds in recent



years and being a home-grown company it naturally arouses curiosity in the academia.

**Objectives of the Study**

To analyse the Financial Performance of West Coast Pharma Ltd.

To carry out Leverage Analysis of West Coast Pharma Ltd.

To examine the relationship between Leverage and Profitability in West Coast Pharma Ltd.

**Research Methodology**

Considering the nature of study only secondary financial data have been used. These secondary data have been collected from the online data sources.

Hypotheses-H1: There is significant positive correlation between Operating Leverage and Profitability of West Coast Pharma Ltd.; H2: There is significant positive correlation between Financial Leverage and Profitability of West Coast Pharma Ltd.; H3: There is significant positive correlation between combined Leverage and Profitability of West Coast Pharma Ltd.

**Methodology**

Various profitability ratios, liquidity ratios, and leverage ratios have been used to analyse the financial performance of West Coast Pharma Ltd. for the period from 2009-10 to 2015-16.

Operating Leverage, Financial Leverage and Combined Leverage have been computed to gauge leverage.; Degree of Operating Leverage (DOL) has been computed as under: Percentage change in EBIT/Percentage change in sales; Degree of Financial Leverage (DFL) been computed as under: % change in EPS/% change in EBIT; Degree of Combined Leverage (DCL)- The Degree of Combined Leverage (DCL) is the leverage ratio that sums up the combined effect of the Degree of Operating Leverage (DOL) and the Degree of Financial Leverage (DFL) has on the Earning per share or EPS given a particular change in sales. This ratio helps in ascertaining the best possible financial and operation all average that is to be used in any firm or business.

The Leverage and Profitability relationship has been analysed through statistical tools such as Pearson coefficient of correlation. Tools of data analysis: The collected data have also been analysed using Ratio Analysis Technique & statistical software such as SPSS.

**Data Analysis**

Table 1 - Degree of Operating Leverage

| Year    | Sales   | Operation profit | %EBIT  | %Sales | DOL   |
|---------|---------|------------------|--------|--------|-------|
| 2009-10 | 879.06  | 57.37            | ---    | ---    | ---   |
| 2010-11 | 955.89  | 72.25            | 25.93  | 12.56  | 2.06  |
| 2011-12 | 1080.98 | 102.48           | 78.62  | 28.41  | 2.76  |
| 2012-13 | 1104.97 | 147.3            | 156.75 | 42.19  | 3.43  |
| 2013-14 | 1558.76 | 181.8            | 216.89 | 63.18  | 3.43  |
| 2014-15 | 1840.64 | 247.95           | 332.19 | 99.83  | 3.326 |
| 2015-16 | 2037.88 | 274.43           | 378.35 | 138.40 | 2.73  |

Table 2 - Degree of Financial Leverage

| Year    | EPS (Rs) | Operation Profit (Rs.Cr) | %EPS   | %EBIT  | Financial Leverage |
|---------|----------|--------------------------|--------|--------|--------------------|
| 2009-10 | 6.25     | 57.37                    | ---    | ---    | ---                |
| 2010-11 | 7.38     | 72.25                    | 18.08  | 25.93  | 0.69               |
| 2011-12 | 9.45     | 102.48                   | 51.2   | 78.62  | 0.65               |
| 2012-13 | 10.46    | 147.3                    | 67.36  | 156.75 | 0.42               |
| 2013-14 | 14.84    | 181.8                    | 137.44 | 216.89 | 0.63               |
| 2014-15 | 35.14    | 247.95                   | 462.24 | 332.19 | 1.39               |
| 2015-16 | 26.7     | 274.43                   | 327.2  | 378.35 | 0.86               |

Table 3 - Degree of Combined Leverage

| Year    | % change in EPS | % Change in Sales | DOL   | DFL  | DCL = DOL*DFL |
|---------|-----------------|-------------------|-------|------|---------------|
| 2009-10 | ---             | ---               | ---   | ---  | ---           |
| 2010-11 | 18.08           | 12.56             | 2.06  | 0.69 | 1.42          |
| 2011-12 | 51.2            | 28.41             | 2.76  | 0.65 | 1.79          |
| 2012-13 | 67.36           | 42.19             | 3.43  | 0.42 | 1.44          |
| 2013-14 | 137.44          | 63.18             | 3.43  | 0.63 | 2.16          |
| 2014-15 | 462.24          | 99.83             | 3.326 | 1.39 | 4.62          |
| 2015-16 | 327.2           | 138.40            | 2.73  | 0.86 | 2.35          |

Table 4 - Current Ratio

| Year    | Current Ratio |
|---------|---------------|
| 2009-10 | 1.70          |
| 2010-11 | 1.71          |
| 2011-12 | 1.68          |
| 2012-13 | 1.10          |
| 2013-14 | 1.10          |
| 2014-15 | 1.72          |
| 2015-16 | 1.97          |

Table 5 - Quick Ratio

| Year    | Quick Ratio |
|---------|-------------|
| 2009-10 | 0.14        |
| 2010-11 | 0.18        |
| 2011-12 | 0.18        |
| 2012-13 | 0.22        |
| 2013-14 | 0.14        |
| 2014-15 | 0.20        |
| 2015-16 | 0.66        |

Table 6 - Debt - Equity Ratio

| Year    | Total debt (Rs.Cr) | Net worth (Rs.Cr) | Debt-equity ratio |
|---------|--------------------|-------------------|-------------------|
| 2009-10 | 480.33             | 2120              | 0.22              |
| 2010-11 | 510.8              | 2510.38           | 0.20              |
| 2011-12 | 440.63             | 2910.15           | 0.15              |
| 2012-13 | 250.05             | 3347.28           | 0.07              |
| 2013-14 | 138.77             | 3988.24           | 0.04              |
| 2014-15 | 1905.4             | 5749.3            | 0.30              |
| 2015-16 | 0.00               | 7000.33           | 0.00              |

Table 7 - Total Assets Turnover Ratio (TATR)

| Year    | Sales (Rs.Cr) | Total Assets (Rs.Cr) | TATR |
|---------|---------------|----------------------|------|
| 2009-10 | 770.93        | 266.31               | 2.89 |
| 2010-11 | 867.76        | 303.19               | 2.86 |
| 2011-12 | 989.96        | 335.8                | 2.94 |
| 2012-13 | 1096.21       | 359.33               | 3.05 |
| 2013-14 | 1258.08       | 412.01               | 3.05 |
| 2014-15 | 1540          | 593.72               | 2.62 |
| 2015-16 | 1837.97       | 700.33               | 2.62 |

Table 8 - Working Capital Turnover Ratio

| Year    | Sales (Rs.Cr) | Working capital (Rs. Cr) | WCTR  |
|---------|---------------|--------------------------|-------|
| 2009-10 | 770.93        | 124.42                   | 6.19  |
| 2010-11 | 867.76        | 142.01                   | 6.11  |
| 2011-12 | 989.96        | 132.56                   | 7.46  |
| 2012-13 | 1096.21       | 126.8                    | 8.64  |
| 2013-14 | 1258.08       | 32.07                    | 39.22 |
| 2014-15 | 1540.59       | 186.4                    | 8.20  |
| 2015-16 | 1837.97       | 343.54                   | 5.35  |

Table 9 - Rate of Return

| Year    | ROI (%) |
|---------|---------|
| 2009-10 | 19.31   |
| 2010-11 | 20.30   |
| 2011-12 | 18.34   |
| 2012-13 | 25.16   |
| 2013-14 | 26.11   |
| 2014-15 | 29.41   |
| 2015-16 | 29.07   |

**Relationship Bwtween Leverage And Profitability**

It is imperative to understand the relationship between leverage on the one hand and profitability on the other. In that, correlation is a statistical technique measuring an association or relationship between two or more variables. There can be a simple correlation or multiple correlation. An association between two variables is called simple correlation whereas an association among several variables (more than two variables) is called multiple correlation. If two variables are negatively correlated, such a correlation is called negative correlation and the Karl Pearson coefficient of correlation is negative. It may be pertinent to note here that the Karl Pearson coefficient of correlation varies from -1 to + 1. When two variables are positively correlated then the correlation is called positive correlation and the Karl Pearson coefficient of correlation is positive. If there is no correlation between two variables, it is called zero correlation and the Karl Pearson coefficient of correlation is zero. However, when the correlation coefficient -1 then there exists perfect negative correlation and it turns out to be +1, it indicates perfect positive correlation..

**Table 10-CorrelationCoefficientb/wDOL andROI (SPSS)**

|     | Variables          | DOL    | ROI    |
|-----|--------------------|--------|--------|
| DOL | PearsonCorrelation | 1      | .946** |
|     | Sig.(2-tailed)     |        | .004   |
|     | N                  | 6      | 6      |
| ROI | PearsonCorrelation | .946** | 1      |
|     | Sig.(2-tailed)     | .004   |        |
|     | N                  | 6      | 6      |

Source: spss& \*\*. Correlation is significant at the0.01level (2-tailed).

The table-10 shows that the correlation coefficient between DOL (Degreeof Leverage) and ROI(Return on Investment) is 0.946 which is statistically significant at 0.01 level of significant as significant level (pvalue=0.004) less than 0.01. Therefore, it is observed that degree of operating leverage is significant positively correlated with the ROI. It means that degree of operating leverage of West Coast Pharma was at a desirable level or in a good position. It is suggested to West Coast Pharma to continue its present operating leverage practice in future also.

**Table 11 - Correlationb/w DFL andROI (SPSS)**

|     | Variables          | DFL  | ROI  |
|-----|--------------------|------|------|
| DFL | PearsonCorrelation | 1    | .195 |
|     | Sig.(2-tailed)     |      | .712 |
|     | N                  | 6    | 6    |
| ROI | PearsonCorrelation | .195 | 1    |
|     | Sig.(2-tailed)     | .712 |      |
|     | N                  | 6    | 6    |

As can be observed from the table-11, the correlation coefficient between DFL(Degreeof

FinancialLeverage)andROI(Return on Investment) is 0.195whichisstatisticallynotsignificantat0.01level of significant as significant level (pvalue=0.712) more than 0.05. Therefore, it is implied that the (DFL) degree of financial leverage is positively correlated with the return on investment. West Coast Pharma Ltd. can be said to not have been optimally levered as suggested by DFL. West Coast Pharma Ltd. is advised to review and recast its present capital structureso that there is judicious mix of equity and borrowed funds to experience the positive impact of leverage on ROI.

**Table 12–Correlation b/wROI andDCL (SPSS)**

|     | Variables          | ROI  | DCL  |
|-----|--------------------|------|------|
| ROI | PearsonCorrelation | 1    | .469 |
|     | Sig.(2-tailed)     |      | .349 |
|     | N                  | 6    | 6    |
| DCL | PearsonCorrelation | .469 | 1    |
|     | Sig.(2-tailed)     | .349 |      |
|     | N                  | 6    | 6    |

A glance at table-12 divulges that the correlation coefficient between DCL (DegreeoffinancialLeverage)andROI(Return on Investment)is0.469whichisstatisticallynotsignificantatlevel of significant as significant level (pvalue=0.349) more than 0.01. Therefore, it is observed that degree of combined leverage is positively correlated with the ROI but not significant statistically. It means that degree of combined effect of leverage of West Coast Pharma Ltd. was not profound or at an optimum level. The key to augment ROI is effective management of debt. Again the company is advised to tweak its capital structure to have the desired effects of leverage.

**Conclusions**

West Coast Pharma Ltd is not maintaining optimum financial leverage. As a natural corollary, the averagedegreeof combined leverage is also not optimum. Everything in moderation is desirable. The company is tilting on the “inadequate leverage” side. This lopsided disarray of capital structure should be corrected by administering greater dose of leverage to augment profitability as well liquidity. In the context of liquidity, the company is not sufficiently liquid as reflected in the averageofcurrentratioof just 1.5 which is less than the standard norm of 2.1, reflecting the “not-so-satisfactory” liquidity position of the company. It may not be able to meet or even worse, default on its short-term obligations. The exact same truth is brought out by the quick ratio with the average quick ratio being 0.25 against the standard norm of 1. West Coast Pharma Ltd has an average total debt capital employed which is merely 8.43 percent of total capital employed. That leads to the



conclusion that the company is heavily banking on shareholders' funds, 91 % of its capital requirements and borrowed funds to the extent of just 8.43%. This inadequate use of debt has failed to unlock the company's potential to create wealth for its shareholders. The same fact is corroborated by the averaged out debt-equity ratio (at 0.12) of West Coast Pharma Ltd. and that is why the advantages of leverage are negated to the company. Total Assets turnover Ratio maintained of West Coast Pharma Ltd. is 2.86 which again shows that total assets have not been used productively to achieve greater amount of sales. It indicates that firm's management efficiency was not superior. However, the company is efficient when it comes to using its fixed assets as reflected in average of fixed Asset Turnover Ratio which come to 8.11 times. It can be said the fixed assets with the company have been effectively engaged in generating higher sales. The average of Working Capital turnover ratio maintained by West Coast Pharma Ltd. is 11.6 times indicating firm's superior management efficiency.

As far as profitability goes, the average ROI maintained by West Coast Pharma was 34.35% during the study period which can be taken as satisfactory. Moreover, when profitability and leverage are considered together, it can be stated that the degree of operating leverage is significant positively correlated with the ROI. The degree of financial leverage is positively correlated with the ROI. The degree of combined leverage is positively correlated with the ROI although not significant statistically, implying that the degree of combined effect of leverage was not a tan optimum level. This again brings home the point that the company must introduce a greater dose of leverage to achieve greater profitability and liquidity and even the cherished objective of shareholders' wealth creation can also be accomplished.

#### References

Allen, Paul (1995). Corporate Capital Structures in the United States: Investment Patterns and Financial

Leverage. University of Chicago Press. Volume ISBN: 0-226-26411-4. (p. 325-352).

Thomas, Martin (2010), 'Financial Leverage: Its Determinants and its Impact on Cost of Capital and Shareholders' Return', *Journal of Accounting and Finance*, XI(2), pp. 82-93.

Kobzeff, James (2009). *Financial Management of Enterprise. The Foundation: Romania Bucharest.*

Kare, Dilip D. (2003). "Market Structure and Financial Leverage : Does Market Power Affect Debt and Equity Decisions ?" published in *Akron Business and Economic Review*, Akron University, Vol. 21 ISSN: 0044-7048 (p 69-77)

Gloy, Brent & Baker, Timothy G. (2002), *American Journal of Agricultural Economics*, Vol. 84, No. 4 (November), (p 1130-1143)

Scott, Carole E. (1998), in *Your Financial Plan*, published by Harper & Row

Chaillet, Louise (2011) in IMF working paper series, "Financial Leverage: A Guide to Portfolio & Risk Management", Vol. 19 November (p 39)

Bernstein & Wild (2004) in "Analysis of Financial Statements" Book published by McGraw-Hill Education, Oct 2004, 5<sup>th</sup> Edition.

Butt, Dr. Umar (2011) "Profits, Financial Leverage and Corporate Governance" The DeGroote School of Business Research Day, Business Day (2011, Vol. 56), Ontario in Canada

Pachori Sachchidanand CA, Totala K Navindra Dr. (2012), "Influence of Financial Leverage on Shareholders Return and Market Capitalization: A Study of Automotive Cluster Companies of Pithampur, (M.P., India)." *National University of Singapore's Business Journal*

Pandey, Prof. I.M. (1979 & 1997) "Financial Management" Vikas Publishing House Pvt. Ltd. (seventh edition)



## AWARENESS AND USE OF INTERNET TOOLS AND ELECTRONIC INFORMATION RESOURCES BY MANAGEMENT STUDENTS IN B – SCHOOL LIBRARIES OF GUJARAT

**Pramod D Patel**

Librarian, Indukaka Ipcowala Institute of Management,  
Constituent of Charotar University of Science and Technology (Charusat), Gujarat

**Rajendra M Patel**

Librarian, Sardar Vallabhbhai Patel Institute of Architecture, Vasad

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*The purpose of the present study was to examine the use of Internet tools and electronic information resources by Management Students in B – School Libraries of Gujarat. In all, 630 students of MBA and PGDM Programs studying in B-Schools in Gujarat were selected and questionnaires were administered to them. Finally, total 567 filled-in questionnaires – questionnaire with responses - were received back. The questionnaire was analyzed statistically. The open-ended questions and options were analyzed using content analysis. A specifically designed questionnaire was administered to gather information about the awareness of resources, the frequency of use, the kind of information sources preferred by students, the main reasons for using the resources, the perceived effectiveness of the searches, the factors encouraging their use and the major obstacles in terms of using them effectively. Results showed that the vast majority of the participants used Internet search engines rather than In order to exploit the full potential of electronic information, library should undertake a more active role in informing, promoting, and educating the members of the academic community.*

**Keywords:** Internet, Electronic Information, B-School

Electronic information resources are most valuable tools for study, learning and research. Electronic resources can provide many advantages over outdated print-based resources: they contain current information because they updated regularly, they offer advanced search Patterns, they offer flexibility in the storage and for the retrievals of information, and they allow access to information without the boundaries of time and location. The access to e- resources in Management Students in B – School Libraries is rapidly increasing. The growth of information in electronic format forces students to learn how to find, select and use a wide variety of resources. Higher education must develop these skills, in order to produce qualified individuals, engaged in the lifelong pursuit of knowledge for personal and professional growth. For Management Students in B – School Libraries in particular, the ability to effectively utilize electronic information resources is a key issue, since it may help them to enrich the quality of their teaching when they become manager. In addition, it is expected that amentor comfortable in using e- resources may encourage his/her students to do the same, and thus contribute to their computer and information literacy.

### Objectives

To Examine the purpose of using e-resources by Management Students; To studied the respondents' duration and important of time utilization in search of information

### Literature review

To review the literature, search was conducted with combination of various key terms such as 'e-resources', 'e-journals' and 'e-journals consortia' in Library and Information Science Abstracts (LISA), Emerald database, EBSCO database, J-gate social and management, Science Direct and other databases, including search on the e-journals websites and search engines. In addition searches,

bibliographies journals were also reviewed for more sources.

Curtis. Et al. (1997)<sup>1</sup> studied the use of e-resources by health sciences (medicine, nursing, and pharmacy) at the University of Illinois, Chicago, USA. They found that use of the print Index Medicus among faculty was in transition: 86 While 30.50% continued to use the print resources, 68% of faculty accessed Medical Literature Analysis and Retrieval System Online (MEDLINE) through electronic means. Faculty preferred accessing electronic databases from their offices for doing so from the library. Health sciences faculty used a wide variety of e-journals and databases. Most faculty did not take advantage of either in-house or electronic training sessions offered by librarians.

Tenopir (2003)<sup>2</sup> identified eight other major research studies carried out between 1995 and 2003 at the UK and the United States on the use of electronic resources. Among other things, these projects indicated that subject area and status of the individuals are significant factors affecting the use of digital resources. Aside from the large projects engaged to the investigation of large populations in different disciplines and institutions, a number of small-scale studies have been conducted to assess the level of use in specific settings. Back in the 1990's, Adams and Bonk (1995) conducted a survey of faculty use of electronic information technologies and resources at the four University Centers of the State University of New York. The campus library online catalog and the abstract/index databases loaded on it found to be the most widely used resources. All other resources, including electronic journals were used rather infrequently. Respondents perceived lack of information about available resources and lack of training as the main barriers to the use of electronic technologies

Tahir, Khalid and Shafique (2010)<sup>3</sup> assessed the use of electronic information resources and facilities by humanities



scholars at the University of the Punjab, Lahore, Pakistan. The results correspond with previous studies conducted in other countries. The humanists still stick to the printed information sources but they pay good attention to electronic resources. Most of them have access to computer and internet at office and home. They are regular users of a variety of electronic technologies. Although faced with many problems, the humanists perceive that modern technology made their work easier. Keeping in view the positive trend of humanists towards modern technology, universities and libraries should give more funding to provide electronic resources and facilities in the arts and humanities discipline. Special training programmes for humanists should be organized

Dadzie(2005)<sup>4</sup> investigated the use of e-resources by students and faculty of Asheshi University, Ghana, to determine the level of use, the type of information accessed and the effectiveness of the library's communication tools for information research and problems faced in using e-resources. Results indicate that 85 per cent of respondents used the internet to access information, and that respondents mainly accessed information in the library by browsing books on the shelves.

### Research Methodology

The study is mainly based on the primary data collected from the management students in Gujarat state besides the secondary data have been collected from the sources available from the collage and the library. The primary data required for this study will be collected through a well-tested questionnaire. The questionnaire will be distributed to management students in the Gujarat state. Sufficient time will be given to the respondents to furnish the information. Suggestions to improve the library service e-resources will also be collected from the respondents. Tentatively the following variables / methods will be considered to accomplish different objectives: Demographic variable like gender age graduation degree etc.; Frequency of use of library especially e-resources to be studied broadly on the following parameters like daily usage, weekly, fortnightly, monthly, once in a semester / quarter, etc.

*Type of Research:* Descriptive research design will be used to study the information search pattern of management students.

*Sources of Data:* Primary and Secondary data sources will be used. The secondary data will be collected for generating list of management institutions and reviewing the literature. Magazines, journals, books, internet and newspapers among many will form part of the same. The primary data will be used for analyzing the information search behavior of management students for e-resources.

*Data Collection Method:* Survey using Questionnaire

*Sampling Plan:* - Sampling Size: 630

- Sampling Unit: Management student

*Data Analysis:* For data analyses Ms-Excel and SPSS Software (16.0 Version +) will be used.

## Results and Findings

**Table 1 - Frequency of Demographic Information**

| Demographic Variables | Categories | Frequency | Percentage |
|-----------------------|------------|-----------|------------|
| Gender                | Male       | 308       | 54.30      |
|                       | Female     | 259       | 45.70      |
|                       | Total      | 567       | 100.00     |
| Age                   | 20-25      | 526       | 92.80      |
|                       | 26-35      | 41        | 07.20      |
|                       | Total      | 567       | 100.0      |
| Qualification         | BBA        | 236       | 41.60      |
|                       | B Com      | 136       | 24.00      |
|                       | BCA        | 20        | 03.50      |
|                       | B Sc       | 66        | 11.60      |
|                       | B Tech     | 95        | 16.80      |
|                       | B Pharm    | 14        | 02.50      |
| Total                 | 567        | 100.0     |            |
| Present Programme     | MBA        | 498       | 87.80      |
|                       | PGDM       | 69        | 12.20      |
|                       | Total      | 567       | 100.0      |
| Present Semester      | 2          | 406       | 71.60      |
|                       | 4          | 161       | 28.40      |
|                       | Total      | 567       | 100.0      |

The above table reads that there were 308 (54.3%) male respondents and 259 (45.7%) female respondents. It is also evident from the above table that 526 (92.8%) of management students are from age group of 20-25 and 41 (7.2%) are from age group 26-35. Means, majority of management students belong to the age group of 20-25. Further, it is also found that 236 (41.6%) of management students had BBA as their graduation, 136 (24%) had B.Com, 20 (3.5%) had BCA, 66 (11.6%) had B. Sc, 95 (16.8%) had B. Tech, and 14 (2.5%) had B. Pharm as their graduate studies. In addition, majority of the Management students i.e. 498 (87.8%) were studying in MBA program with only 69 (12.2%) studying in PGDM program. Out of all those who responded, 406 (71.6%) of the students were from second semester and 161 (28.4%) were from fourth semester.

**Table 2 - Mean and SD of Frequency of Use of Internet Tools**

| Internet Tools/ Resources | Classification                   | Mean | Std. Deviation |
|---------------------------|----------------------------------|------|----------------|
| Gateways                  | Fedgate                          | 1.92 | 1.459          |
|                           | Knimbus                          | 1.00 | 0.000          |
|                           | J-gate                           | 2.08 | 1.538          |
|                           | Ebsco Discovery                  | 1.56 | 1.198          |
|                           | Focuz Info-Tech                  | 1.00 | 0.000          |
| Search Engines            | Google                           | 4.96 | 0.202          |
|                           | Yahoo                            | 4.46 | 1.217          |
|                           | Alta Vista                       | 3.35 | 1.886          |
|                           | Ebay                             | 1.63 | 1.293          |
|                           | AOI Search                       | 1.11 | 0.406          |
|                           | Lycos                            | 1.06 | 0.241          |
|                           | Webcrawler                       | 1.43 | 1.133          |
|                           | HotBot                           | 2.64 | 1.842          |
|                           | Infoseek                         | 2.78 | 1.909          |
|                           | MetaEureka                       | 3.17 | 1.878          |
| E-Resources               | Ebsco                            | 4.46 | 1.340          |
|                           | Emerald Management               | 4.19 | 1.610          |
|                           | J-GATE for Social and Management | 4.18 | 1.506          |
|                           | Elsevier                         | 2.07 | 1.573          |
|                           | Indian Journals.com              | 2.82 | 1.712          |
|                           | Springer                         | 1.90 | 1.445          |
|                           | Taylor and Francis               | 2.24 | 1.636          |
|                           | ACE Equity                       | 2.89 | 1.795          |
|                           | Capitaline                       | 3.67 | 1.811          |
|                           | Proquest Database                | 3.62 | 1.796          |
|                           | CMIE                             | 1.95 | 1.657          |

Table 2, represents that Fedgate (1.92) and J-gate (2.08) are mostly used Gateways by the management students. Google (4.96), Yahoo (4.46), and Alta Vista (3.35) are three mostly used search engines by them. In E-resources category, they widely use Ebsco (4.46), Emerald Management (4.19) and J-GATE for Social and Management (4.18).

Table 3 - Mean and SD of Average Time Spent per Week on Use of Internet (In Minutes)

| Internet Tools/ Resources        | Classification  | Mean               | Std. Deviation |       |
|----------------------------------|-----------------|--------------------|----------------|-------|
| Gateways                         | Fedgate         | 1.58               | .940           |       |
|                                  | Knimbus         | 1.00               | .000           |       |
|                                  | J-gate          | 1.68               | 1.116          |       |
|                                  | Ebsco Discovery | 1.40               | .962           |       |
|                                  | Focuz Info-Tech | 1.00               | .000           |       |
| Search Engines                   | Google          | 2.76               | .473           |       |
|                                  | Yahoo           | 2.43               | .674           |       |
|                                  | Alta Vista      | 1.68               | .789           |       |
|                                  | Ebay            | 1.20               | .587           |       |
|                                  | AOI Search      | 1.00               | .000           |       |
|                                  | Lycos           | 1.05               | .217           |       |
|                                  | Webcrawler      | 1.09               | .291           |       |
|                                  | HotBot          | 1.43               | .844           |       |
|                                  | Infoseek        | 1.49               | .941           |       |
|                                  | MetaEureka      | 1.61               | .875           |       |
|                                  | E-Resources     | Ebsco              | 2.07           | 1.014 |
|                                  |                 | Emerald Management | 2.21           | .989  |
| J-GATE for Social and Management |                 | 2.04               | .866           |       |
| Elsevier                         |                 | 1.52               | .772           |       |
| Indian Journals.com              |                 | 1.49               | .645           |       |
| Springer                         |                 | 1.42               | .583           |       |
| Taylor and Francis               |                 | 1.35               | .593           |       |
| ACE Equity                       |                 | 1.50               | .815           |       |
| Capitaline                       |                 | 1.45               | .610           |       |
| Proquest Database                |                 | 1.47               | .540           |       |
| CMIE                             |                 | 1.33               | .470           |       |

Table 3, depicts that management students, on an average, spend about 31-60 minutes on Gateways such as Fedgate (1.58) and J-gate (1.68) on weekly basis. They also spend about 61-120 minutes on Google (2.76) and Yahoo (2.43) on weekly basis. All other search engines are not frequently used by the students more than 30 minutes per week. In E-resources category, the students, on an average, spend between 60 minutes and 120 minutes on Ebsco (2.07), Emerald Management (2.21) and J-GATE for Social and Management (2.04) per week.

Table-4 Relationships between Frequency of Use of Internet Tools and Resources and Demographic Variables

| Internet Tools / Resources | Classifications | Demographic Variables |           |               |                 |                  |                        |
|----------------------------|-----------------|-----------------------|-----------|---------------|-----------------|------------------|------------------------|
|                            |                 | Gender                | Age       | Qualification | Present Program | Present Semester | University / Institute |
| Gateway s                  | Fedgate         | 0.006 (4)             | 0.000 (4) | 0.000 (20)    | 0.000 (4)       | 0.000 (4)        | 0.000 (32)             |
|                            | J-gate          | 0.001 (4)             | 0.000 (4) | 0.000 (20)    | 0.000 (4)       | 0.000 (4)        | 0.000 (32)             |
|                            | Ebsco Discovery | 0.343 (4)             | 0.000 (4) | 0.000 (20)    | 0.000 (4)       | 0.804 (4)        | 0.000 (32)             |
| Search Engines             | Google          | 0.000 (1)             | 0.162 (1) | 0.000 (5)     | 0.062 (1)       | 0.002 (1)        | 0.000 (8)              |
|                            | Yahoo           | 0.000 (4)             | 0.253 (4) | 0.000 (20)    | 0.002 (4)       | 0.000 (4)        | 0.000 (32)             |
|                            | Alta Vista      | 0.000 (3)             | 0.029 (3) | 0.000 (15)    | 0.028 (3)       | 0.000 (3)        | 0.000 (24)             |

|             |                     |           |           |            |           |           |            |
|-------------|---------------------|-----------|-----------|------------|-----------|-----------|------------|
|             | Ebay                | 0.000 (3) | 0.000 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |
|             | AOI Search          | 0.000 (2) | 0.163 (2) | 0.000 (10) | 0.040 (2) | 0.000 (2) | 0.000 (16) |
|             | Lycos               | 0.005 (1) | 0.752 (1) | 0.055 (5)  | 0.000 (1) | 0.000 (1) | 0.000 (8)  |
|             | Webcrawler          | 0.000 (3) | 0.000 (3) | 0.000 (15) | 0.008 (3) | 0.004 (3) | 0.000 (24) |
|             | HotBot              | 0.000 (3) | 0.339 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |
|             | Infoseek            | 0.000 (3) | 0.084 (3) | 0.000 (15) | 0.134 (3) | 0.000 (3) | 0.000 (24) |
|             | MetaEureka          | 0.000 (3) | 0.000 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |
| E-Resources | Ebsco               | 0.154 (3) | 0.000 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |
|             | Emerald Management  | 0.000 (2) | 0.020 (2) | 0.000 (10) | 0.001 (2) | 0.007 (2) | 0.000 (16) |
|             | J-GATE              | 0.758 (1) | 0.000 (1) | 0.000 (5)  | 0.000 (1) | 0.000 (1) | 0.000 (8)  |
|             | Elsevier            | 0.000 (3) | 0.000 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |
|             | Indian Journals.com | 0.000 (3) | 0.001 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |
|             | Springer            | 0.000 (4) | 0.000 (4) | 0.000 (20) | 0.000 (4) | 0.000 (4) | 0.000 (32) |
|             | Taylor and Francis  | 0.000 (4) | 0.000 (4) | 0.000 (20) | 0.000 (4) | 0.000 (4) | 0.000 (32) |
|             | ACE Equity          | 0.000 (4) | 0.000 (4) | 0.000 (20) | 0.000 (4) | 0.000 (4) | 0.000 (32) |
|             | Capitaline          | 0.000 (4) | 0.000 (4) | 0.000 (20) | 0.000 (4) | 0.000 (4) | 0.000 (32) |
|             | Proquest Database   | 0.000 (4) | 0.126 (4) | 0.000 (20) | 0.000 (4) | 0.000 (4) | 0.000 (32) |
|             | CMIE                | 0.000 (3) | 0.000 (3) | 0.000 (15) | 0.000 (3) | 0.000 (3) | 0.000 (24) |

Note: Figures indicate Pearson Chi-Square Value & those in the brackets denote degrees of freedom

From table 4, with respect to Frequency of Use of Internet Tools (Gateways, Search Engines and E-Resources), it can be inferred that - Tools like Ebsco Discovery (Gateway), Ebsco (E-Resources), J-Gate for Social and Management (E-Resources) and do not show any significant relationship with Gender as the P-Values are above the significance level (0.05). All other tools are having significant relationship with Gender.; Search engine tools like Google, Yahoo, AOI Search, Lycos, HotBot, Infoseek and E-Resource tool such as Proquest Database show no significant relationship with Age as the P-Values are above the significance level (0.05). All other tools are having significant relationship with Age.; For qualification, there is no significant relationship found for Search Engine tool like Lycos.; There is no significant relationship between Search Engine tools such as Google and Infoseek with Present Program (MBA/PGDM) as P-Values are above the significance level (0.05).; There is no significant relationship between Gateway tool such as Ebsco Discovery with Present Semester (Semester-II/IV) as P-Values are above the significance level (0.05).; There is significant relationship for frequency of use of internet tools by management student with different institutions.



**Table 5 - Relationships between Average Times Spent on per Week on Use of Internet Tools and Resources (In Minutes) and Demographic Variables**

| Demographic Variables      |                 |              |              |               |                 |                  |                        |
|----------------------------|-----------------|--------------|--------------|---------------|-----------------|------------------|------------------------|
| Internet Tools / Resources | Classifications | Gender       | Age          | Qualification | Present Program | Present Semester | University / Institute |
| Gateways                   | Fedgate         | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.170<br>(3)     | 0.000<br>(24)          |
|                            | J-gate          | 0.001<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
|                            | Ebsco Discovery | 0.000<br>(4) | 0.000<br>(4) | 0.000<br>(20) | 0.000<br>(4)    | 0.000<br>(4)     | 0.000<br>(32)          |
| Search Engines             | Google          | 0.005<br>(2) | 0.000<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.000<br>(2)     | 0.000<br>(16)          |
|                            | Yahoo           | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
|                            | Alta Vista      | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
|                            | Ebay            | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
|                            | Lycos           | 0.101<br>(1) | 0.456<br>(1) | 0.001<br>(5)  | 0.000<br>(1)    | 0.000<br>(1)     | 0.000<br>(8)           |
|                            | Webcrawler      | 0.165<br>(1) | 0.643<br>(1) | 0.000<br>(5)  | 0.045<br>(1)    | 0.000<br>(1)     | 0.000<br>(8)           |
|                            | HotBot          | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
|                            | Infoseek        | 0.009<br>(2) | 0.000<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.000<br>(2)     | 0.000<br>(16)          |
|                            | MetaEureka      | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
|                            | E-Resources     | Ebsco        | 0.000<br>(3) | 0.000<br>(3)  | 0.000<br>(15)   | 0.000<br>(3)     | 0.000<br>(3)           |
| Emerald Management         |                 | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
| J-GATE                     |                 | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
| Elsevier                   |                 | 0.223<br>(2) | 0.234<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.080<br>(2)     | 0.000<br>(16)          |
| Indian Journals.com        |                 | 0.186<br>(2) | 0.000<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.000<br>(2)     | 0.000<br>(16)          |
| Springer                   |                 | 0.022<br>(2) | 0.002<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.004<br>(2)     | 0.000<br>(16)          |
| Taylor and Francis         |                 | 0.000<br>(2) | 0.000<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.000<br>(2)     | 0.000<br>(16)          |
| ACE Equity                 |                 | 0.000<br>(3) | 0.000<br>(3) | 0.000<br>(15) | 0.000<br>(3)    | 0.000<br>(3)     | 0.000<br>(24)          |
| Capitaline                 |                 | 0.000<br>(2) | 0.000<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.000<br>(2)     | 0.000<br>(16)          |
| Proquest Database          |                 | 0.000<br>(2) | 0.000<br>(2) | 0.000<br>(10) | 0.000<br>(2)    | 0.000<br>(2)     | 0.000<br>(16)          |
| CMIE                       | 0.863<br>(1)    | 0.001<br>(1) | 0.000<br>(5) | 0.004<br>(1)  | 0.001<br>(1)    | 0.000<br>(8)     |                        |

Note: Figures indicate Pearson Chi-Square Value & those in the brackets denote degrees of freedom

From table 5, with respect to Average Time Spent on Use of Internet Resources per Week (In Minutes), it can be inferred that - Average time spent on Search Engine Tools like Lycos, WebCrawler and E-Resources tools like Elsevier, Indian Journals.com and CMIE do not show any significant relationship with Gender as the P-Values are above the significance level (0.05). All other tools are having significant relationship with Gender.; Average time spent on Search engine tools like Lycos and WebCrawler and E-Resources tool such as Elsevier show no significant relationship with Age as the P-Values are above the significance level (0.05). All other tools are having significant relationship with Age.;

For qualification and Present Program, there is significant relationship found for average time spent on any of the tools.; There is no significant relationship between average time spent on Gateways tool such as Fedgate and E-Resources tool such as Fedgate with Present Semester (Semester-II/IV) as P-Values are above the significance level (0.05).; There is significant relationship for average time spent on internet tools/resources by management student with different institutions.

### Conclusion

The e-resources are the best means of getting current and up-to-date information. The library environment has currently undergone drastic changes in terms of collections and services. The proliferation of e-resources has had a significant impact on the way the academic community uses, stores, and preserves information. The advantages of e-resources have drawn attention of the library users to a great extent. Accordingly, these resources have occupied a significant place in the collection and budget of almost all libraries. Research scholars' attitudes seem to be very positive towards e-resources for their study and research and the role of libraries as gateways to provide assistance in accessing these resources. The study shows that e-resources have radical impact on the changing higher education environment. It is interesting that e-resources usage among Management student of B-schools libraries is much more than expected. It is broadly used for research purposes.

The use of electronic information sources for study and research purposes must be encouraged and proper training should be organized from time to time. This is the comprehensive study of the use of e-resources by the management students. It is hoped that its findings would help the University and its libraries in framing its policies and programmes related to e-resources to facilitate teaching and research.

### References

- Curtis, Karen L., et. al. (1997) Information seeking behavior of Health Sciences faculty: the impact of new information technologies. *Bulletin of Medical Library Association*, 85 (4), 402-410.
- Tenopir, C. (2003). Use and users of electronic library resources: an overview and analysis of recent studies. Council on Library and Information Resources, Washington, DC. Available at: <http://www.clir.org/pubs/reports/pub120/contents.html>
- Tahir, Muhammad, Mahmood, Khalid, & Shafique, Farzana (2010). Use of electronic information resources and facilities by humanities scholars. *The Electronic Library*, 28 (1), 122-136.
- Dadzie, P.S. Electronic resources: Access and usage at Asheshi University College. *Comp. Wide Inf. Sys.*, 2005, 22(5), 290-97



## STUDY OF ADOPTION BARRIERS FOR FLEXIBLE MANUFACTURING SYSTEM IN INDUSTRY

**S.H.Sundarani**

Lecturer in Mechanical Engineering, Government Polytechnic, Ahmedabad

**M. N. Qureshi**

Associate Professor, Industrial Engineering Dept. King Khalid University, Abha, KSA

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

**Abstract**

*Manufacturing companies face a challenge of technological innovation in competitive markets. Rapid changes in technology produce product and process with short product life cycles, short lead times with continuously changing consumer preferences with high the uncertainty that demands enhanced manufacturing flexibility not only for productivity enhancement but for survival too. The higher manufacturing flexibility offers more spare time to feed the customers with a higher product range and variety of options. To dynamic changes and competitive market may be captured through flexibility in manufacturing. This research is focused on the study of the adoption of flexible manufacturing system in industries by studying various barriers for adoption. These study industries which are found for willing to accept modification in present manufacturing system. Mathematical modeling can be developed with the help of Multiple Criteria Decision Making (MCDM) like AHP or TOPSIS can be used by any industry by just finding the value of barriers. Once this is done, Industry can be assessed how they can adopt flexible manufacturing system, which are the most significant barriers for the adoption of FMS. The major outcome of this research is adoption assessment and intensity of barriers for successful implementation of Flexible Manufacturing System. This procedure can be used for both old as well as new industry.*

**Keywords:** Flexible manufacturing systems, Adoption Barriers.

In today's market scenario, product life, demand and specification changes very rapidly, also technological advancement, customer's expectation and fierce competition force manufacturer to accommodate these changes in their manufacturing system quickly to remain in market competition Flexible manufacturing system (FMS) has a capability to react to market changes within a shorter time and at less cost.

A flexible manufacturing system (FMS) usually operated by centrally control system generally comprising of a set of processing workstations (usually CNC machine tools) interconnected by an automated material handling system having capability of Automated Storage/Retrieval Systems (ASRS). An AS/RS comprises of Crane, Handling picking and loading, Rack either stationary or movable racks. AS/RS is capable of handling pallets. Flexible Manufacturing Cell (FMC) comprises two or more CNC machines while Flexible Manufacturing System (FMS) have two or more FMC

To combat the above situations, Indian manufacturers are all set to use FMS in a big way to join with the global users. However, they realize that the FMS selection and implementation is costly and time consuming. There are factors that influence the FMS adoption in place of prevailing traditional manufacturing system. Organization must be aware of these factors so that they don't face hardship in FMS selection and implementation. This paper aims to address these issues and provides good time to organization in FMS selection.

**Literature review**

Nowadays customer demand lower price more customized product more innovative product, make manufacturing system more agile and productive and able to produced customized product and for this FMS is more suitable manufacturing philosophy compare to Job, batch and mass production system. But although above situation still today adoption of FMS is very low, of course first step of FMS

i.e. programmable machine tools (CNC machine) is now widely adopted but other components like AGV, Robot, ASRS and CIM is still not adopted in manufacturing system. Present paper is attempted to study various adoption barriers still today for adoption of FMS in industries.

Manufacturing organizations are much influenced by management functioning at strategic, tactical operation level. Manufacturers must pay due attention at its strategic level in selecting a FMS system. Scope for FMS has been established and a four-stage strategic framework for the effective the implementation process has been suggested<sup>1</sup>. A unified framework using Analytic Hierarchy Process (AHP) and Data Envelopment Analysis (DEA) is proposed to facilitate decision making during designing and planning stage<sup>3</sup>.

The development of intelligent decision support tools to aid the design of flexible manufacturing systems has been proposed<sup>4</sup>. Integration plays an important role in FMS setup. Many researchers have recommended various tools for FMS design, simulation and decision-making support in a defined environment. Simulation and modeling plays a vital role in establishing process without actually running the setup thus provides lot of advantage<sup>5</sup>. Simulation models give maximum information pertaining to facilities, the layout, and their interconnections.

Fuzzy based modeling has been suggested by many researchers in selection of FMS system. Linguistic criteria in FMS selection using fuzzy-set-AHP approach has been proposed<sup>6</sup>. Application of fuzzy sets for the selection criteria framework provides user-friendly features. Many selection criteria have been suggested and grouped viz. like flexibility, cost, productivity, and risk. High capital outlay and moderate risk of a FMS investment must be balanced with benefits such as flexibility and enhanced quality. Selection of FMS based on economic and strategic investment using MCDM framework is also proposed<sup>8</sup>. FMS selection using compromise ranking method in conjunction with Analytic



Hierarchy Process (AHP) has been proposed<sup>9</sup>. Evaluation of alternative FMS for a given industrial application has been carried out using TOPSIS and AHP<sup>10</sup>. Due to globalization and competitive market condition the past two decades, use of FMS as a competitive weapon has increased significantly.<sup>11</sup> ( Rakesh Narain R.C. Yadav Jiju Antony, (2004)).

Researchers studied various approach for the implementation for FMS but the real-life scenario, which is very dynamic in nature and requires accurate methodologies and decision support system for FMS adoption. Several researchers suggested different approach for FMS adoption. (e.g., Rezaie and Ostadi 2007, Groover 2003 ) Groover<sup>16</sup> discussed FMS planning and implementation issue while Rezaie and Ostadi<sup>17</sup> suggested dynamic programming model for FMS implementation and also phased implementation of FMS. Not only FMS but various flexibility also needs great attention for successful FMS adoption. Flexibility is one of the critical dimensions in enhancing the competitiveness of organizations. Sethi and Sethi<sup>18</sup> (1990) defined eleven types of flexibility: product, process, program, production, volume, routing, expansion, operation, machine, material handling and market flexibility. FMS is called flexible because this manufacturing system is capable to manufacture variety and number of products as per market demand.

FMS must be able to cater the need of accomplishing various performance measures such as the average waiting time, the average and maximum lead time, the total production time along with machine utilization. Many researchers have contributed towards selection and implementation of FMS setup. Babbar and Rai<sup>19</sup> insisted that barriers is not technology but its successful implementation is biggest task hence the focus should be on overall effectiveness .Ching and Loh (2003) have raised the issue of good management in successful implementation of FMS.

**Methodology**

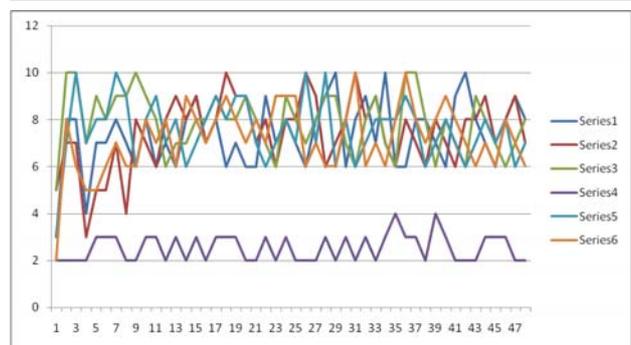
FMS is very versatile but complex system and hence for adoption of FMS is challenging task literature reviews suggest various barriers for successful adoption of FMS. From literature reviews, manufacturing company’s survey, academicians and advance manufacturing consultants identified barriers. Raj, Tilak, et al<sup>15</sup> (2010) has identified various barriers for FMS adoption. In these barriers further work is carried out for successful adoption of FMS. These barriers are grouped into seven major categories. To identify intensity of barriers and sub-barriers in the path of adoption of FMSs, total 50 industries are surveyed as pilot survey personally through survey questionnaire and data collected. All sub-barriers are quantified on linear scale as per intensity in path for adoption of FMS and plotted in Tabel-2 to table-7. Also to check reliability, reliability test carried out for data collected through survey questionnaire and found satisfactory as shown in Table 1 value of cronbach’s alpha is showing reliability of data. These barriers may be different for different organizations because of their work culture, management’s attitude and the type of their product:

**Table 1**

| Construct              | No of items | Cronbach Alpha |
|------------------------|-------------|----------------|
| Behavior barriers      | 06          | 0.782          |
| Technical barriers     | 06          | 0.859          |
| Operational barriers   | 06          | 0.765          |
| Financial barriers     | 05          | 0.712          |
| Strategic barriers     | 06          | 0.878          |
| Supply chain barrier   | 04          | 0.715          |
| Miscellaneous barriers | 03          | 0.706          |

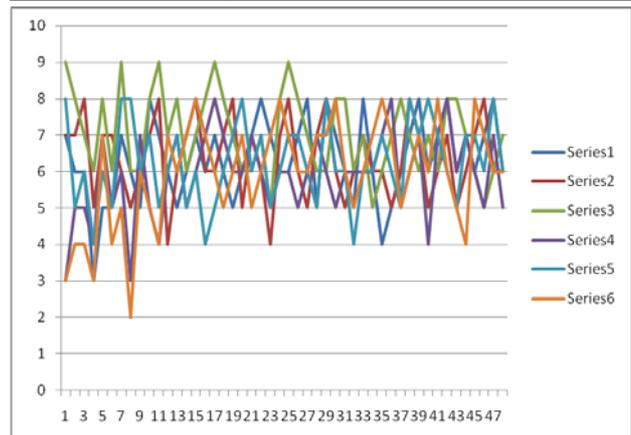
**Table 2**

| Name of Barriers  | Sub-barriers   |
|-------------------|--|
| Behavior barriers | <ol style="list-style-type: none"> <li>1. fear of failure</li> <li>2. lack of clear vision</li> <li>3. employee’s resistance</li> <li>4. non-commitment of top management</li> <li>5. social implications due to the retrenchment of employees</li> <li>6. cheap labour</li> </ol> |



**Table 3**

| Name of Barriers   | Sub-barriers   |
|--------------------|--|
| Technical barriers | <ol style="list-style-type: none"> <li>1. difficulty in the use of high tech-equipments like AGVs, robots, AS/RSs etc.</li> <li>2. lack of technical knowledge</li> <li>3. non-availability of trained personnel</li> <li>4. complex operational techniques of FMSs.</li> <li>5. technical uncertainty</li> <li>6. difficulty in the integration of different components of FMSs.</li> </ol> |



**Table 4**

| Name of Barriers     | Sub-barriers  |
|----------------------|---|
| Operational barriers | <ol style="list-style-type: none"> <li>1. resource failures</li> <li>2. maintenance failures</li> <li>3. difficulty in handling the loading problems of FMSs.</li> <li>4. difficulty in handling the scheduling problems of FMSs.</li> <li>5. tool management problems</li> <li>6. layout problems</li> </ol> |

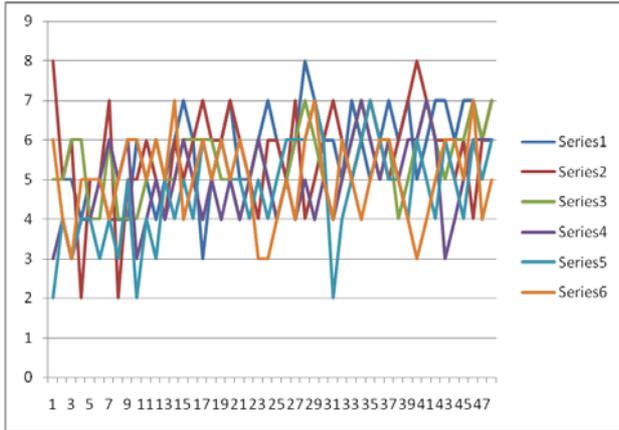


Table 5

| Name of Barriers   | Sub-barriers   |
|--------------------|--|
| Financial barriers | <ol style="list-style-type: none"> <li>1. high cost of FMSs</li> <li>2. non-availability of funds</li> <li>3. high taxes like sales tax, excise duty etc.</li> <li>4. poor rate of return over investment</li> <li>5. long payback period</li> </ol> |

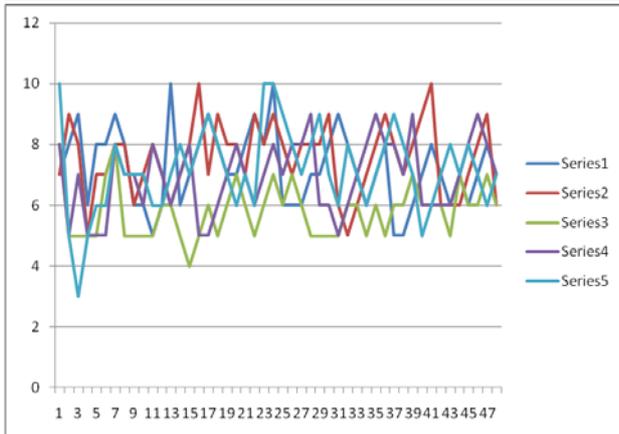


Table 6

| Name of Barriers   | Sub-barriers   |
|--------------------|--|
| Strategic barriers | <ol style="list-style-type: none"> <li>1. FMS planning problems</li> <li>2. low throughput time</li> <li>3. unfavorable government policies</li> <li>4. flexibility measurement problems</li> <li>5. non-availability of good vendors</li> <li>6. failures to carry out feasibility studies</li> </ol> |

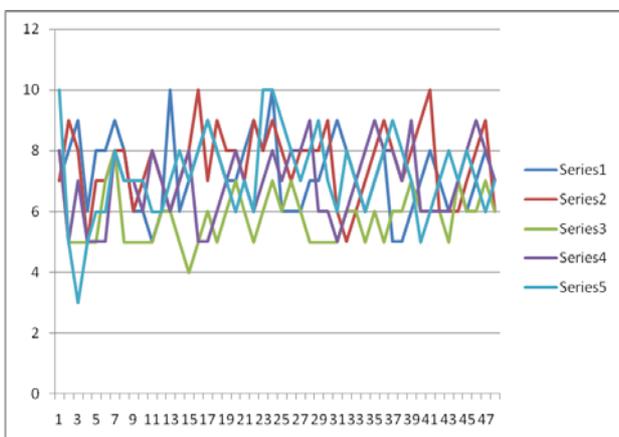


Table 7

| Name of Barriers      | Sub-barriers   |
|-----------------------|--|
| Supply chain barriers | <ol style="list-style-type: none"> <li>1. vendor selection problems in the supply of high-tech equipment</li> <li>2. big losses of market share during transition periods</li> <li>3. lack of supply chain planning and coordination</li> <li>4. demand uncertainties</li> </ol> |

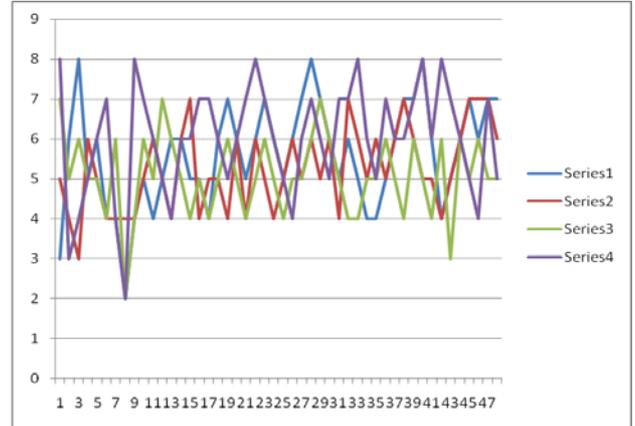
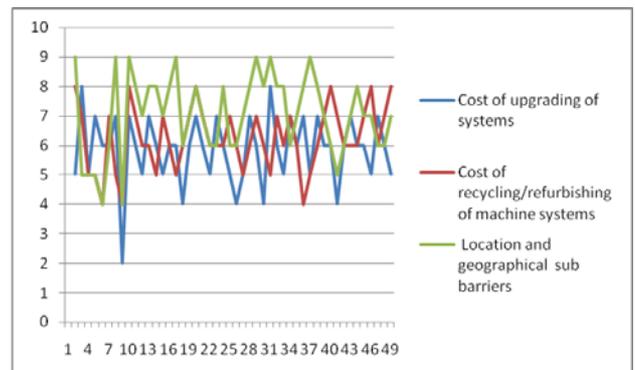


Table 8

| Name of Barriers       | Sub-barriers   |
|------------------------|--|
| Miscellaneous barriers | <ol style="list-style-type: none"> <li>1. Cost of upgrading of systems</li> <li>2. Cost of recycling/refurbishing of machine systems</li> <li>3. Location and geographical sub barriers</li> </ol> |



**Analysis and Interpretation**

From the analysis, it has been observed that financial barriers have the maximum intensity. Next, the major categories of barriers are behavioral, technical and operational. At the technical level, difficulty in the integration of various components of FMSs is an important issue. After identifying various barriers for adoption of FMS. The cost of using flexible manufacturing systems is high and it is one of the factors which needs to be considered when undertaking flexible manufacturing systems adoption project. The cost of obtaining flexible manufacturing systems is a major barrier to the increased uptake of flexible manufacturing systems amongst the industry. In figure 1. Prioritization of barriers is for FMS adoption is shown.

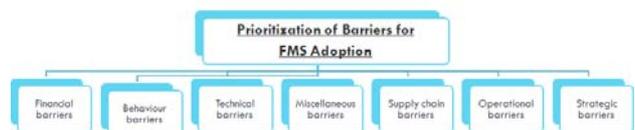


Figure 1



## Conclusions

FMS essentially enhances firm's competitiveness thus boost its position in the competitive market. However, the organization may land into trouble by committing common mistakes in adoption of FMS system. The present framework for identification of barriers and sub barriers work will help the organization to make correct decision in adopting FMS system studying intensity of various barriers in a holistic way. It has been observed that financial barriers, behavioral and technical are major barriers to adoption of FMS.

Many a time cost constraint compels the organization to opt for partial flexibility instead of totally flexibility in its shop floor to get benefits of total flexible systems.. However, organization should not consider cost aspect only while deciding for FMS, it should encompass other criteria like behavioral barriers, technical barriers as well for the successful adoption of FMS. The major outcome of this research is adoption assessment and intensity of barriers for successful implementation of Flexible Manufacturing System.

## References

- K.V. Sambasiva Rao, S.G. Deshmukh, Strategic Framework for Implementing Flexible Manufacturing Systems in India, I.J. of Operatn. & Prod.Mangt.14 (1994) 50 - 63.
- Henry Y.K. Lau, K.L. Mak, The design of flexible manufacturing systems using an extended unified framework, J. of Manuftg.Tech. Managt.15 (2004) 222-238.
- J.Shang, T. Sueyoshi, A unified framework for the selection of a Flexible Manufacturing System, European J.of Operatn. Resea. 85, (1995) 297-315
- F.T.S. Chan, B. Jiang, N.K.H. Tang, The development of intelligent decision support tools to aid the design of flexible manufacturing systems, Int. J. Production Economics 65 (2000) 73-84.
- D. Borenstein, Intelligent decision support system for flexible manufacturing system design, Annals of Operations Research 77 (1998) 129-156.
- M. Shamsuzzaman, A.M.M. Sharif Ullah, Erik L.J. Bohez, Applying linguistic criteria in FMS selection: fuzzy-set-AHP approach, Integrated Manufactg. Syst. 14 (2003) 247 – 254.
- A.Bhattacharya, A.Abraham, V. Pandian, FMS Selection Under Disparate Level-of-Satisfaction of Decision Making Using an Intelligent Fuzzy-MCDM Model, Fuzzy Multi-Criteria Decision Making, Springer Optimization and Its Applications 16 (2008) 263-280.
- E.E. Karsak, Fuzzy MCDM procedure for evaluating flexible manufacturing system alternatives, Engineering Management Society, 2000. Proceedings of the 2000 IEEE (2000) 93 - 98.
- R. Venkata Rao, Flexible Manufacturing System selection using an improved compromise ranking method, I. J. of Ind. and Systems Engg. 4 (2009),198 - 215.
- R. Venkata Rao, Evaluating flexible manufacturing systems using a combined multiple attribute decision making method I.J. of Prodn. Reser. 46 (2008)1975–1989.
- Rakesh Narain R.C. Yadav Jiju Antony, (2004),”Productivity gains from flexible Manufacturing Experiences from India”, International Journal of Productivity and Performance Management, Vol. 53 Iss 2 pp. 109 – 128
- Injazz Chen Atul Gupta Chen-Hua Chung, (1996),”Employee commitment to the implementation of flexible manufacturing systems”, International Journal of Operations & Production Management, Vol. 16 Iss 7 pp. 4 – 13
- Raj, Tilak, et al. “A graph-theoretic approach to evaluate the intensity of barriers in the implementation of FMSs.” International Journal of Services and Operations Management 7.1 (2010): 24-52.
- Robert Treumann(2014) Top 15 Barriers to Adopting New Technology
- David Atkin and Azam Chaudhry et (2016) Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan
- M. Ali, S. Wadhwa, Performance Analysis of Partial Flexible Manufacturing Systems, Global J.of Flexible Syst.Managt. 6 92005) 9-19.
- Groover, Mikell P. *Automation, production systems, and computer-integrated manufacturing*. Prentice Hall Press, 2007.
- Rezaie, Kamran, and B. Ostadi. “A mathematical model for optimal and phased implementation of flexible manufacturing systems.” *Applied mathematics and computation* 184.2 (2007): 729-736.
- Sethi AK, Sethi SP (1990) Flexibility in manufacturing: a survey. Intl J Flex Manuf Syst 2(4): 289–328
- Babbar, S. and Rai, A., “Computer-integrated Flexible Manufacturing: An Implementation Framework”, *International Journal of Operations & Production Management*,Vol.10 No.1 , 1990, pp. 42-50
- Cordero, Rene, Steven T. Walsh, and Bruce A. Kirchoff. “Motivating performance in innovative manufacturing plants.” *The Journal of High Technology Management Research* 16.1 (2005): 89-99.
- Kost, Gabriel G., and Ryszard Zdanowicz. “Modeling of manufacturing systems and robot motions.” *Journal of Materials Processing Technology* 164 (2005): 1369-1378.

CANDIDATE ENGINEERS: AN EVALUATION OF THEIR  
LICENSURE EXAMINATION PERFORMANCE**Mervin P. Mohammed**

College of Engineering, Tarlac State University, Tarlac City, Philippines

**Murphy P. Mohammed**

College of Engineering, Tarlac State University, Tarlac City, Philippines

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

**Abstract**

*This study evaluated the performances of the candidate engineers of the College of Engineering (COE) of the Tarlac State University (TSU) in the licensure examinations. The results of the four-year licensure examinations of the graduates of the COE with specialization in the fields of civil, electrical, electronics, and mechanical engineering were covered in this study. The research methods used in the study were descriptive and analytical approaches. The subjects of the study were the TSU College of Engineering graduates with specialization in civil, electrical, electronics and mechanical engineering. They took the board examination during the same year or not more than one year from the time of their graduation. Candidates who took the board examination more than once and/or beyond one year from the date of their graduation were not included in this study. For ethical consideration, all necessary procedures in acquiring the board examination results were strictly adhered to by the researchers. Likewise, the names and board examination results of the subjects of this study were treated with utmost confidentiality to protect their interest. The total numbers of first time takers for the licensure examinations in engineering specializing in civil, electrical, electronics and mechanical engineering were 100, 106, 108, and 44 respectively. The statistical methods used in this study were the descriptive and inferential statistics. The analysis of variance was used to determine the variation among the four-year licensure examination performances of the candidate engineers in the fields of civil, electrical, electronics, and mechanical engineering. The study revealed that there was no significant difference among the four-year licensure examination performances of both the civil and mechanical engineer candidates. In contrast, the electrical and electronics engineer candidates' performances significantly differed within the evaluation period.*

**Keywords:** Candidate Engineer, Licensure Examination Performance, Evaluation of Licensure Performance

Engineering educators of the Philippines pose a substantial concern for globalization of service. In this case there will be free flow of service among countries and therefore professional services have to be liberalized. Due to the increasing importance of human services, an appropriate move has to be done in order to stress the greater impact and promotion of engineering education for globalization. In this age of globalization, modern professionals are challenged to learn, analyze and innovate. A key to globalization is sustaining knowledge-based education through interdisciplinary ways.<sup>[1]</sup>

The Licensure Examination for Engineers is a tool that measures and ensures the quality of engineers who would join the workforce of various manufacturing industries in the Philippines and abroad. The Professional Regulations Commission (PRC) as the duly constituted body created for this function has been consistent in its task of screening who among the graduates from all board courses will be granted the professional licenses based on the board exam results.<sup>[2]</sup>

Professional regulation impacts the lives of the 2.4 million registered Filipino professionals from 42 various fields and the hundreds of thousands of aspiring professionals who take the licensure examinations every year. More so, PRC affects the lives of every Filipino relying on the services of the professionals.<sup>[3]</sup>

Passing the licensure examination given by the PRC is one of the greatest achievements in one's life. This examination is intended to prove the graduates' knowledge, progress, skills and qualification in a particular profession. It needs a lot of time to study, to have self-discipline, patience and determination and these will not be possible without prayers, support and encouragement.<sup>[4]</sup>

In an academic setting, it is the responsibility and accountability of the members in the academic system to ensure the success of their graduates.<sup>[5]</sup> This would be accomplished through the adoption of appropriate engineering education and experience requirements as prerequisites for licensure.<sup>[6]</sup>

The performance of the student in every institution plays a very important role in determining the quality of education, which eventually guarantees the efficiency and effectiveness in application in a chosen profession or career. It suggests a higher standard of performance of the instructional system. The performance of the student in the licensure examination reflects the institution's efficiency as well as the intellectual capacity of the student.<sup>[7]</sup>

The present study evaluates the performance of the engineering graduates of the College of Engineering (COE) of the Tarlac State University in the licensure examination. The results of the four year licensure examinations of the graduates of the COE with specializations in the fields of civil, electrical, electronics, and mechanical engineering are covered in this study.

The present study is focused on evaluating the licensure examinations performance of the candidate engineers of the TSU College of Engineering with specializations in civil, electrical, electronics, and mechanical engineering. Specifically, the study answered the following questions.

1. What are the performances of the candidate engineers in the licensure examination in terms of: rating distribution per course? average performance per subject area? passing performance?;
2. Is there a significant variation among the performances of the candidates in the engineering licensure



examination?; 3. What plan of action is proposed to improve the performances of the candidate engineers in the licensure examinations?

**Methods and Materials**

The research methods used in the study were the descriptive and analytical approaches. The subjects of the study were the College of Engineering graduates with specialization in civil, electrical, electronics and mechanical engineering. The Tarlac State University graduates took the board examinations during the same year or not more than one year from the time of their graduation. Candidates who took the board examinations more than once and/or beyond one year from the date of their graduation were not included in this study. The board examination performances of the engineer candidates were acquired from the Professional Regulatory Commission (PRC) through the Dean of the College of Engineering. For ethical consideration, all necessary procedures in acquiring the board examination results were strictly adhered to by the researchers. Likewise, the names and board examination results of the subjects of this study were treated with utmost confidentiality to protect their interest.

The total numbers of first time takers of the licensure examinations in engineering specializing in civil, electrical, electronics and mechanical engineering were 100, 106, 108, and 44 respectively.

The statistical methods used in this study were the descriptive and inferential statistics. The analysis of variance was used to determine the variation among the four-year licensure examination performances of the candidate engineers in the fields of civil, electrical, electronics, and mechanical engineering. The scheffe test was used to determine which among the licensure examination performances of the candidate engineers in the fields of civil, electrical, electronics, and mechanical engineering significantly differed.

**Results and Discussions**

Performance of the Candidate Engineers in the Licensure Examination: The rating distribution per course, average performance per subject area, and passing performance of the TSU first time takers of the licensure examinations in engineering specializing in civil, electrical, electronics and mechanical engineering are presented in the succeeding discussions.

*Rating Distribution per Course:* In Table 1, the overall rating distribution per course of the candidate engineers is presented.

Section 16 of Republic Act 9292 with the short title Electronics Engineering Law of 2004 states that “to pass the licensure examination, a candidate for Electronics Engineer must obtain a passing rating of seventy percent (70%) in each subject given during the examination: Provided, however, that a candidate who obtains a passing rating in the majority of the subjects but obtains a rating in the other subject/s below seventy percent (70%) but not lower than

sixty percent (60%), shall be allowed to take one removal examination on the subject/s where he/she failed to obtain the passing rating.”

For the civil, electrical and mechanical engineering licensure examinations all candidates must obtain an average rating of seventy percent (70%) in all subject areas provided that no subject/s will fall below fifty percent (50%).

The table reveals that majority of the performances of the civil engineer candidates were below the passing mark of 70 percent. There were 45 candidates who surpassed the passing mark but only 44 candidates passed the examination. The reason for this is that one candidate had a rating below 50 percent in one of his subjects. Among the examination passers, one candidate got a passing mark of 94.55 percent.

**Table 1 - Overall Rating Distribution per Course**

| Score Range                                       | Civil | Electrical | Electronics | Mechanical |
|---|-------|------------|-------------|------------|
| 35 – 39   | 1     | 1          | 2           | 0          |
| 40 – 44   | 8     | 8          | 1           | 0          |
| 45 – 49   | 8     | 8          | 3           | 0          |
| 50 – 54   | 9     | 13         | 12          | 0          |
| 55 – 59   | 9     | 9          | 15          | 3          |
| 60 – 64   | 12    | 16         | 17          | 2          |
| 65 – 69   | 8     | 14         | 14          | 5          |
| 70 – 74   | 5     | 19         | 20          | 6          |
| 75 – 79   | 17    | 10         | 14          | 15         |
| 80 – 84   | 14    | 5          | 9           | 9          |
| 85 – 89   | 8     | 3          | 1           | 2          |
| 90 – 94   | 1     | 0          | 0           | 2          |
| Total number of passers                           | 45    | 37         | 44          | 34         |
| Total number of candidates below the passing mark | 55    | 69         | 64          | 10         |

There were 37 electrical engineer candidates who earned ratings above the 70 percent passing mark. Unfortunately, the candidates, passing rate stood only at 34.91 percent.

Forty-four of the electronic engineer candidates earned an overall rating of 70 percent and above. Out of the 44 candidates only 29 passed the examinations. The candidates who earned ratings below 70 percent in one or more subjects automatically earned a conditional or removal examination remark. Candidates who obtained passing ratings in the majority of the subjects but obtained ratings in the other subject/s below seventy percent (70%) but not lower than sixty percent (60%), were allowed to take one removal examination on the subject/s where the candidates failed to obtain the passing rating.

The mechanical engineer candidates got the highest number of passers among the courses in terms of percentage. Out of the 44 examination takers, 34 of the candidates earned a rating of above 70 percent. Out of the 34 candidates, two candidates earned ratings of 90.80 and 90.85 in the licensure examinations.

Overall, the mechanical engineer candidates out-performed the civil, electrical, as well as the electronics engineer candidates in terms of average passing performance.



*Average Performance per Subject Area:* The average performance of the candidate engineers per subject area is presented in table 2. The licensure examination for civil engineers covers the subjects mathematics, surveying and transportation engineering (subject 1); hydraulics & geotechnical engineering (subject 2); and structural engineering and construction (subject 3). For the electrical engineer licensure examination, the coverage are mathematics (subject 1), engineering sciences and allied subjects (subject 2) as well as electrical engineering professional subjects (subject 3).

Electronics engineer licensure examination covers the following subjects: mathematics (subject 1), general engineering and applied sciences (subject 2), electronics engineering (subject 3), as well as electronic system and technologies (subject 4) The coverage of the mechanical engineer licensure examination are mathematics (subject 1), machine design (subject 2), and industrial/power plant engineering (subject 3).

Table 2 - Average Performance per Subject Area

| Subject | Civil | Electrical | Electronics | Mechanical |
|---------|-------|------------|-------------|------------|
| 1       | 69.78 | 63.62      | 68.42       | 75.30      |
| 2       | 69.14 | 62.21      | 69.81       | 80.30      |
| 3       | 60.75 | 63.24      | 62.23       | 70.84      |
| 4       | -     | -          | 63.56       | -          |
| Overall | 66.43 | 63.06      | 66.01       | 75.71      |

As presented in Table 3, the civil, electrical, as well as the electronics engineer candidates in the licensure examinations attained an average rating below the passing mark in all subject areas. Only the candidates in the mechanical engineering licensure examinations attained an average rating of 70 percent and above in all subject areas.

Overall, the candidates in mechanical engineering had the highest average performance in the licensure examinations at 75.71 percent. This was followed by the civil, electronics and electrical engineer candidates with averages of 66.43, 66.01, and 63.06 percent respectively.

*Passing Performance:* In Table 3, the passing performance of the candidates in the engineering licensure examinations is presented. There were 100, 106, 108 and 44 candidates who took the civil, electrical, electronics and mechanical engineering licensure examinations, respectively, in the last four years.

Table 3 - Passing Performance of the Candidates

|                               | Civil | Electrical | Electronics | Mechanical |
|-------------------------------|-------|------------|-------------|------------|
| Number of Candidates          | 100   | 106        | 108         | 44         |
| Passed                        | 44    | 37         | 29          | 34         |
| Passing Rate                  | 44.00 | 34.91      | 26.85       | 77.27      |
| Average National Passing Rate | 38.95 | 43.12      | 27.05       | 62.68      |

The average passing rate of the civil and mechanical engineer candidates was above the average national passing rate. Both the electrical and electronics engineer candidates had average passing rates below the average national passing percentage.

Difference among the Performances of the Candidates in the Licensure Examination: In Table 4, the results of the analysis of variance on the four-year licensure examination performances of the candidate engineers is presented.

Table 4 - Analysis of Variance on the Performances of the Candidate Engineers

| Course      | Computed F - value | Critical F-Value | Decision  |
|-------------|--------------------|------------------|-----------|
| Civil       | 0.77200            | 2.69939          | Accept Ho |
| Electrical  | 11.56988           | 2.693721         | Reject Ho |
| Electronics | 6.122244           | 2.691979         | Reject Ho |
| Mechanical  | 2.117476           | 2.838745         | Accept Ho |

The results revealed that the performances of the civil engineer candidates did not significantly differ in terms of their examination results in the last four years of the licensure examinations. This means that there was cohesiveness of the knowledge by the candidates who took the licensure examinations. Unfortunately, the average rating of 66.43 of the civil engineer candidates is below the passing mark which indicates that they performed poorly in all the four years of licensure examinations.

For both the electrical and electronics engineering licensure examinations, the results revealed that the performances of the candidates significantly differed during the four years of licensure examinations. The difference can be attributed to the decline in performance of the candidates in some licensure examinations.

The performance comparison among the licensure examination results of the mechanical engineer candidates revealed that there is no significant difference among their performances in the four year period. This means that the performances of the mechanical engineer candidates were comparable per examination year.

Proposed Plan of Action: In Table 5, the proposed plan of actions to improve the performance of the candidate engineers in the licensure examination is presented.

Table 5 - Proposed Plan of Action

| Strategy  | Brief Description  |
|---|--|
| 1. Curriculum review on the engineering courses               | The dean, chairpersons, and faculty members of the different departments of the college may review to improve the curriculum on a regular basis and they ensure that the quality of instruction is on the rise.  |
| 2. Review of the college retention policy                     | The dean, chairpersons, and faculty members may establish a retention policy that includes the recruitment of quality students into the engineering department and the continuous attempt to improve the quality of those already enrolled in the department through quality instruction by the faculty. |
| 3. Practice or mock board examination for graduating students | The department chairs, with the approval of the college dean, may encourage the faculty members to administer a practice or mock board examination to graduating students. This can be used by the students as basis on their possible performance in the actual board examination.                      |
| 4. Coaching on how to pass the licensure examination          | The department chairs, with the approval of the college dean, may encourage the faculty members to administer relevant coaching sessions after the administration of the practice or mock board examination to graduating students.  |
| 5. Conduct of bench marking in high performing schools        | The dean, chairpersons, and faculty members may conduct bench marking activities in high performing schools in the licensure examination for them to replicate the identified best practices.  |



The proposed strategies to improve the performance of the candidate engineers in the licensure examination are as follows: review of the curriculum; review of the college retention policy; practice or mock board examination for graduating students; coaching on how to pass the licensure examination; and conduct of bench marking in high performing schools.

The evaluation of student performance has two primary purposes: 1) summative, to measure student progress or achievement, and 2) formative, to provide feedback to students to help them learn. For instructor, it is easy to place emphasis on the first goal, since one of his most visible jobs is to assign grades that become part of the permanent record. The second goal, however – providing feedback for the purpose of helping students improve – is often the more important one for the success of students, as well as for the success of the teacher.<sup>[8]</sup>

According to Singh (2010), evaluating factors such as academic competence, test competence, strategic studying, time management, and test anxieties are very important in evaluating academic success. Specifically, test competence and academic competence are important factors associated with academic performance. Focusing efforts to understand these factors further would be helpful for students in enhancing their academic performances. Efficient counseling services regarding study techniques along with stress management programs could assist students in achieving better academic performance.<sup>[9]</sup>

The effectiveness of a curriculum is measured using the results of the licensure examination. Schools usually develop remedial measures to increase the number of passers.<sup>[10]</sup>

Learning outcomes must be observable, achievable, and measurable. Determining how successful learning outcomes are achieved is a challenging task. It requires continuous assessment and professional judgment from all program constituents.<sup>[11]</sup>

### Conclusions

Based on the findings of this study, the following conclusions are reached.

The mechanical engineer candidates out-performed the civil, electrical, as well as the electronics engineer candidates in terms of their average passing performance; The candidates in the mechanical engineering licensure examination had the highest average performance with a 75.71 rating; Overall, the civil and mechanical engineer candidates performed above the average national passing rate. On the other hand, both the electrical and electronics engineer candidates had average passing rates but below the average national passing percentage; There is no significant difference among the four-year licensure examination performances of both the civil and mechanical engineer candidates. In contrast, the electrical and electronics engineer candidates' performances significantly differed within the evaluation period.

### References

Banluta, Jenith. 2013. Relationship of the Academic Rating and Board Examination Performance of the Electronic Engineering Graduates. [Cited 2015 March 20]. Available from <http://www.ietec-conference.com/ietec13/>

conferenceproceedings2013/papers/ Monday/MP1/MP1.4\_submission\_118.pdf

Laguador, Jake M., Dizon, Noimie C. 2013. Academic Achievement in the Learning Domains and Performance in Licensure Examination for Engineers Among LPU's Mechanical and Electronics Engineering Graduates. [Cited 2015 April 01]. Available from <http://research.lpubatangas.edu.ph/wp-content/uploads/2014/04/IJMIE-Academic-Achievement-in-the-Learning.pdf>

PRC [Internet]. c2011~2015. Mandate; [cited 2015 March 29]. Available from <http://www.prc.gov.ph/about/default.aspx?id=4>

Manalo, Myla C. 2013. Correlation of the LPU-Batangas Mock Board Examination and Custom Broker Licensure Examination for Academic Year 2008~2009. [Cited 2015 April 09]. Available from [http://worldconferences.net/proceedings/gse2013/papers\\_gse2013/157%20Marie%20Kristine%20Joy%20M.%20Obligar.pdf](http://worldconferences.net/proceedings/gse2013/papers_gse2013/157%20Marie%20Kristine%20Joy%20M.%20Obligar.pdf)

Neri, Donna Lou E. 2008. Intellectual Variables as Predictors to Nursing Licensure Examination Performance. [Cited 2015 March 25]. Available from [http://www.eisrjc.com/documents/Intellective\\_Variables\\_as\\_Predictors\\_to\\_Nursing\\_-\\_Licensure\\_Examination\\_Performance\\_1325761219.pdf](http://www.eisrjc.com/documents/Intellective_Variables_as_Predictors_to_Nursing_-_Licensure_Examination_Performance_1325761219.pdf)

Bardet, Jean-Pierre, et al., 2008. Performance Assessment for Civil Engineering Curriculum. [Cited 2015 March 30]. Available from [http://search.asee.org/search/fetch?url=file%3A%2F%2Flocalhost%2FE%3A%2Fsearch%2Fconference%2F17%2FAC%25202008Full1285.pdf&index=conference\\_papers&space=129746797203605791716676178&type=application%2Fpdf&charset=](http://search.asee.org/search/fetch?url=file%3A%2F%2Flocalhost%2FE%3A%2Fsearch%2Fconference%2F17%2FAC%25202008Full1285.pdf&index=conference_papers&space=129746797203605791716676178&type=application%2Fpdf&charset=)

Manalo, Myla C., 2013. Correlation of the LPU-Batangas Mock Board Examination and Customs Broker Licensure Examination for the Academic Year 2008~2010. [Cited 2015 March 20]. Retrieved from [http://worldconferences.net/proceedings/gse2013/papers\\_gse2013/157%20 Marie%20Kristine%20Joy%20M.%20Obligar.pdf](http://worldconferences.net/proceedings/gse2013/papers_gse2013/157%20 Marie%20Kristine%20Joy%20M.%20Obligar.pdf)

Indiana University Teaching Handbook. Assessing Student Performance. [Cited 2015 March 25]. Retrieved from [http://teachingiub.edu/wrapper\\_big.php?section\\_id=assess](http://teachingiub.edu/wrapper_big.php?section_id=assess)

Singh, Bharat Raj, Singh GD. 2010. Innovative Teaching Techniques for Improving Academic Performance – Key to Transform Excellent. [Cited 2015 April 03]. Retrieved from [http://www.researchgate.net/profile/Prof\\_Bharat\\_Raj\\_Singh2/publication/265007544\\_Innovative\\_Teaching\\_Techniques\\_for\\_Improving\\_Academic\\_Performance\\_-\\_Key\\_to\\_Transform\\_Excellent\\_Engineers/links/544127b50cf2a6a049a5628f.pdf](http://www.researchgate.net/profile/Prof_Bharat_Raj_Singh2/publication/265007544_Innovative_Teaching_Techniques_for_Improving_Academic_Performance_-_Key_to_Transform_Excellent_Engineers/links/544127b50cf2a6a049a5628f.pdf)

Tamayo, Adrian M., Bernardo, Geffren, Eguia, Rec, 2014. Readiness for the Licensure Exam of the Engineering Students. [Cited 2015 April 01]. Available from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2395037](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2395037)

Asiz, A., Ouda, O., Ayadat, T., Nayfeh, J., Performance Measures of Student Learning Outcomes for Civil Engineering at PMU. [Cited 2015 April 09]. Available from [http://www.pmu.edu.sa/kcfinder/upload/files/Paper\\_DubaiEdConf\\_Asiz\\_et\\_al.pdf](http://www.pmu.edu.sa/kcfinder/upload/files/Paper_DubaiEdConf_Asiz_et_al.pdf)



## BARANGAY JUSTICE SYSTEM IN BARANGAY MATATALAIB, TARLAC CITY: AN EVALUATION

**Murphy P. Mohammed**

College of Public Administration, Tarlac State University, Tarlac City, Philippines

**Nicanor C. Caingat**

College of Public Administration, Tarlac State University, Tarlac City, Philippines

**Voice of Research**

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*The Barangay Justice System or KatarungangPambarangay is a system for the amicable settlement of disputes at the barangay level. It aims to promote speedy administration of justice and to relieve the courts of conciliable criminal and civil cases. The Barangay Justice System is neither a court of justice nor a judicial tribunal where cases are heard and decided before a judge or a jury. It is an administrative body at the barangay level where community members may reconcile their differences without resorting to judicial process, thus avoiding protracted and expensive settlement of disputes before the court. This study focused on the Barangay Justice System of Matatalaib which included 989 filed cases. The respondents of the study included the punong barangay (village captain), barangay secretary and twenty (20) members of the lupongtagapamayapa (community conciliators). Documentary analysis and interview were the primary sources of the data. Based on the gathered data, majority of the filed cases were resolved with the help of the barangay justice system. Robbery/ theft and trespassing were the cases which were commonly not resolved due to the lack of: evidence and the identities of who committed the offenses.*

**Keywords:** *Barangay Justice System, Good Governance*

Presidential Decree No. 1508 is a decree issued by former President Ferdinand E. Marcos which is geared towards the establishment of a system of amicably settling disputes at the barangay level. PD 1508 has four objectives which are the promotion of speedy administration of justice, minimization of indiscriminate filing of cases in courts, minimization of congestion of court dockets to enhance the quality of justice dispensed by the courts and perpetuation and recognition of time-honoured tradition of amicably settling disputes at the community level. This legislation paved the way for the creation of the Barangay Justice System or KatarungangPambarangay in the Philippines.<sup>[1]</sup>

According to Republic Act No. 7160 otherwise known as the Local Government Code of 1991 Section 384, "Barangay is the basic political unit in the Philippine government which serves as a primary planning and implementing unit of government policies, plans, programs, projects and activities in the community. It also serves as a forum for the expression, crystallization and consideration of the views of the people and the amicable settlement of disputes among its residents." Being the smallest political unit in the country, it is then in the most strategic position to facilitate the resolution or mediation of community disputes.

The Barangay Justice System or KatarungangPambarangay is a system for the amicable settlement of disputes at the barangay level. It aims to promote speedy administration of justice and to relieve the courts of conciliable criminal offenses and civil cases. The Barangay Justice System is neither a court of justice nor a judicial tribunal where cases are heard and decided before a judge or a jury. It is an administrative body at the barangay level where community members may reconcile their differences without resorting to judicial process, thus avoiding protracted and expensive settlement of disputes before the court. Almost all civil disputes and every criminal offense punishable by imprisonment not exceeding one year or a fine not exceeding five thousand pesos (PhP 5,000) are subject to amicable settlement under the Barangay

Justice System when the parties involved are individuals who are residing in the same city or municipality.<sup>[2]</sup>

The existing law governing the Barangay Justice System is Republic Act No. 7160. Pertinent provisions on BJS are Sections 399 – 422 under Chapter 7, Title one, Book III; Section 17 (b) (iv); Section 389 (b) (10); 391 (a) (15); and Section 515. Section 1117 (b) (iv) of the Code mandates the barangay to maintain the BJS as one of the basic services. Also, Section 389 (b) (10) directs the punong barangay to administer the operation of the BJS. Section 391 (a) (15) grants benefits to lupon members and Section 515 prescribes sanctions to parties who will fully refuse to appear during the scheduled hearing.<sup>[3]</sup>

The lupongtagapamayapa or lupon is a body organized in every barangay composed of the punong barangay as the chairperson and not less than ten and more than twenty members. They are in-charge of conflict resolution in the community.

This study was undertaken to evaluate the barangay justice system of barangay Matatalaib, Tarlac City. Specifically, it attempted to answer the following questions: How are the cases described in terms of types? What is the status of the filed cases? What are the problems encountered in the administration of justice in the barangay? What strategies are proposed to improve the Barangay Justice System of Matatalaib, Tarlac City?

### Methods and Materials

The study focused on the Barangay Justice System of Matatalaib which included 989 cases filed for the year. The respondents of the study included the punong barangay, barangay secretary and twenty (20) members of the lupongtagapamayapa.

The study was conducted in barangay Matatalaib which is located on the eastern portion of the city proper. Barangay Matatalaib is considered to be one of the biggest and oldest in the city of Tarlac with a land area of 7.4 square kilometres. It comprises eighteen sitios namely: Suba, Tanpoco, H-Cruz,



Buno, Mangga IA, Mangga IB, Mangga Dos, Sto. Niño, Santos, Silangan, Tarikan, Urquico, Robertsville, St. Mary, Villa Perpetua, Villa Leticia and Micalugud.

As of 2010 NSO Survey, barangay Matatalaib is considered as one of the most populous in the city with a total population of 21,117 inhabitants.

Documentary analysis and interview were the primary sources of the research data.

**Results and Discussions**

Descriptions of the Case Types: The types of cases were classified into criminal, civil and miscellaneous ones. Table 1 presents the number of criminal cases filed at the barangay. Based on the gathered data, there were 568 recorded criminal cases in Brgy. Matatalaib.

The recorded physical injuries were often the result of group or gang war among young boys of the different sitios in the barangay. Confrontation often happened at night when rival groups crossed path. Other cases of physical injuries were due to the beating of a person without any reason by a drunken individual. Bruises, impairment of body parts and other physical injuries usually resulted from these cases.

**Table 1 - Criminal Cases Filed in Barangay Matatalaib**

| Types                    | Frequency | Percentage |
|--------------------------|-----------|------------|
| Physical injuries        | 243       | 42.78      |
| Robbery/Theft            | 104       | 18.31      |
| Threats                  | 62        | 10.92      |
| Slander/Oral defamation  | 61        | 10.74      |
| Damage to property       | 54        | 9.51       |
| Coercion/Unjust vexation | 24        | 4.23       |
| Trespassing              | 14        | 2.46       |
| Estafa                   | 6         | 1.06       |
| TOTAL                    | 568       | 100.00     |

Other criminal cases filed at the barangay were robbery/theft, threats, slander/oral defamation, damage to property, coercion/unjust vexation, trespassing, and estafa.

The number of civil cases filed in barangay Matatalaib is presented in Table 2.

There were 355 reported civil cases in Matatalaib. The following were the civil cases filed based on record: collection of debts or rental, family/marital relations, demand for specific performance of obligation arising from breach of contracts, damages, and ejection.

**Table 2 - Civil Cases Filed in Barangay Matatalaib**

| Types  | Frequency | Percentage |
|--|-----------|------------|
| Collection of debts or rental  | 245       | 69.01      |
| Family/Marital relations   | 78        | 21.97      |
| Demand for specific performance of obligation arising from breach of contracts | 26        | 7.32       |
| Damages  | 3         | 0.85       |
| Ejection   | 3         | 0.85       |
| TOTAL  | 355       | 100.00     |

The collection of debt or rental is the primary civil case filed in the barangay. This case often occurred when a person who borrowed money from a neighbor or from a friend would not be able to pay the amount within the agreed time. The record in the barangay showed that the amount being collected by the complainants ranged from hundreds to thousands of pesos. There were some instances when tenants

or boarders failed to pay their rents or balances which resulted in the filing of cases.

The number of miscellaneous cases filed at barangay Matatalaib is presented in Table 3. The miscellaneous cases filed in the barangay involved violation of local ordinances, labor cases, boundary disputes, and agrarian cases. There was a total of 66 miscellaneous cases filed at the barangay.

**Table 3 - Miscellaneous Cases Filed at Barangay Matatalaib**

| Types                         | Frequency | Percentage |
|-------------------------------|-----------|------------|
| Violation of local ordinances | 51        | 77.27      |
| Labor cases                   | 7         | 10.61      |
| Boundary disputes             | 6         | 9.09       |
| Agrarian cases                | 2         | 3.03       |
| TOTAL                         | 66        | 100.00     |

Violation of local ordinances filed at barangay Matatalaib usually involved the use of illegal drugs or violation of the curfew set by barangay officials which started at 10:00 PM and ended at 4:00 AM. These ordinances are widely known in the barangay, still some of the residents violated them. Teenage boys usually violated the curfew ordinance because of late-night sessions on alcohol drinking.

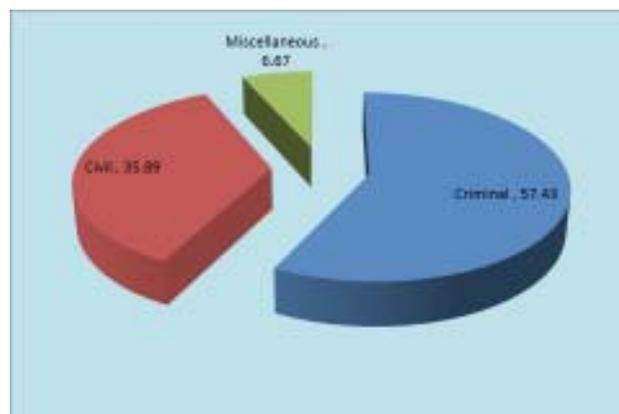


Fig. 1: Summary of Filed Cases

In Figure 1, a summary of the cases filed in barangay Matatalaib is presented. Based on the gathered data, the criminal cases filed at the barangay had the highest percentage at 57.43 percent or equivalent to 568 cases. This is followed by civil cases and then by miscellaneous cases with 35.89 percent and 6.67 percent respectively.

Status of Filed Cases: The status of the filed cases is categorized as resolved, unresolved, and elevated. Unresolved cases are defined as cases which are still in-progress during the conduct of the study or cases which cannot progress due to the unknown identity of the respondent. Elevated cases are those which are filed in court.

In Figure 2, a summary of the status of filed cases is presented. Based on gathered data, majority of the filed cases were resolved with the help of the barangay justice system. Robbery/theft and trespassing were the cases commonly not resolved due to lack of evidence and unknown identities of those who committed the cases.

Regarding the elevated cases, there were 12 cases which were filed in court. The elevated cases were as follows: seven (7)

criminal cases, three (3) civil cases, and two (2) miscellaneous cases. The elevated criminal cases were physical injuries, threats, and robbery/theft. Regarding the civil cases, all three (3) involved family/marital relations. The violation of local ordinance concerning the use of illegal drugs was the elevated case under miscellaneous cases.

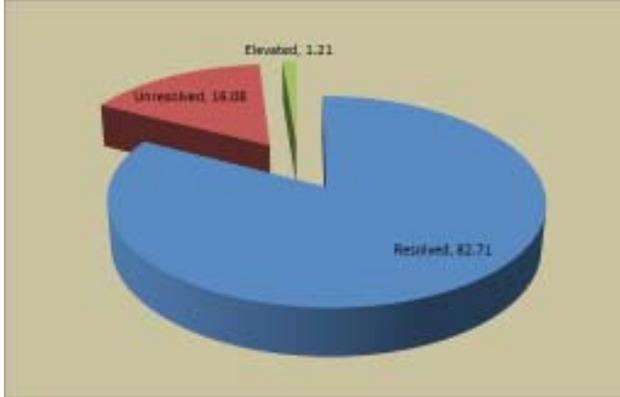


Figure 2. Summary of the Status of Filed Cases

Problems Encountered: The problems encountered by the “lupongtagapamayapa” in the administration of the barangay justice system are presented in Table 4.

Table 4 - Problems Encountered at Matatalaib on the Administration of the Barangay Justice System

| Problems Encountered   | Frequency | Rank |
|--|-----------|------|
| Insufficient trainings or seminars   | 17        | 1    |
| Non-compliance of the respondent regarding the summon  | 12        | 2    |
| Failure to track or contact the respondent   | 11        | 3    |
| Non-compliance with the agreement made   | 7         | 4.5  |
| Giving false statements by the complainant or respondent   | 7         | 4.5  |
| Disorganized records system  | 6         | 6    |
| Inadequate fund support and other forms of assistance for the lupongtagapamayapa from the barangay and other forms of assistance | 5         | 7.5  |
| Failure to reach an agreement between the complainant and the respondent   | 5         | 7.5  |
| Unidentified respondent  | 2         | 9    |
| Inadequate manpower in Barangay Justice System   | 1         | 10   |

Based on gathered data, insufficient trainings or seminars related to the administration of the barangay justice system was the primary concern of the respondents. This was followed by non-compliance of the respondents regarding the given summons. Next problem was the failure to track or contact the respondent.

Non-compliance with the agreement, giving false statement by the complainant or respondent, disorganizes records, inadequate fund support and other forms of assistance for the lupongtagapamayapa from the barangay, failure to reach an agreement between the complainant and the respondent, unidentified respondent and inadequate manpower in barangay justice system were the other identified problems at the barangay Matatalaib.

Proposed Strategies to Improve the Barangay Justice System: The proposed strategies which can be adopted by the barangay justice system of Matatalaib related to their encountered problems are presented in Table 5.

Table 5 - Strategies on how to Improve the Barangay Justice System of Matatalaib

| Strategy  | Brief Description  |
|---|--|
| 1. Conduct training and development work on the Lupon                                     | The punong barangay may coordinate with the Department of Interior and Local Government or with the Tarlac State University for the possible trainings for the lupon.    |
| 2. Work in close coordination with the barangay council for funding and other services.   | The lupon, through the kagawad in-charge of peace and order, may request for additional support from the barangay for the implementation of the barangay justice system. |
| 3. Conduct Barangay Justice System information dissemination during the barangay assembly | The punong barangay or a lupon member may disseminate important information regarding the barangay justice system during the barangay assembly.                          |
| 4. Use preemptive measures to limit unwanted acts   | Monitor the peace and order situation in the barangay with the help of the barangay police.  |

The barangay justice system may adopt the following strategies: conducting training and development of the lupon; working in close coordination with the barangay council for funding and other services; and having barangay justice system information dissemination during the barangay assembly.

In the study of Blue, Devanadero and Leylo (2002) entitled “Assessment of the Centers of Local Governance: Implementation of the Barangay Justice Service System (BJSS) Project in Mindanao, Philippines,” they concluded that training is considered effective if this training is focused on listening, consulting, mediating and conciliation skills rather than on formal knowledge of law. The lupongtagapamayapa members need considerable support to keep them motivated including continuous training, motivational meetings and some form of money honorarium.

**Conclusions**

Based on the findings of this study, the following conclusions are reached. The most common case is physical injury; civil case is collection of debts or rental; miscellaneous case is violation of local ordinance.; Criminal cases have the most number covering of 57.43 percent of the total number of filed cases.; More than 80 percent of the filed cases in the barangay are resolved through the barangay justice system.; Robbery/theft and trespassing cases are commonly not resolved due to lack of evidence and unknown identities of the offenders.; Less than two (2) percent of the filed cases are elevated in courts.; Insufficient training or seminar related to the administration of the barangay justice system is the primary problem of the respondents.

**References**

Manuel, Marlon and Maricel Vigo. 2004. Katarungang Pambarangay. Philippines – Canada Local Government Support. Quezon City, Philippines.

Ortiz, Juanito S. 2004. Handbook on Katarungang Pambarangay. First Research and Consultancy Services. Quezon City, Philippines.

Mosquito, John Reyl L. 2010. Barangay Justice System with Diversion Proceedings under RA 9344. Central Books. Quezon City, Philippines.

Blue, Richard N., et.al. (2002). Assessment of the Centers of Local Governance: Implementation of the Barangay Justice Service System (BJSS) Project in Mindanao, Philippines. United States Agency for International Development.

Nolledo, Jose N. 2002. The Local Government Code of 1991: Annotated Edition. Philippine Graphic Arts. Calocan City, Philippines.



## PERCEIVED SOCIAL BARRIERS IN ACCESSING MENTAL HEALTH CARE FROM MENTAL HOSPITAL: A STUDY AMONG PEOPLE WITH MENTAL HEALTH PROBLEM IN ONE OF THE MENTAL HOSPITAL, UTTAR PRADESH

Priyanka Singh

Ph.D. Scholar, Center of social medicine and community health,  
School of Social Sciences, Jawaharlal Nehru University, New Delhi

### Abstract

*Mental health is an essential part of public health because good health includes physical, mental and social well-being. Mental illnesses are among the most important contribution to the global burden of disease and disability. Despite the huge burden of mental illness, huge numbers of patients do not take treatment because of some social factors. The objectives comprised to understand the social barriers in accessing mental health care from one of the mental hospital of Uttar Pradesh from the perspective of the health personnel and the patients and patient's family members. This research is very sensitive in nature, because this research conducted on people with mental health problems, therefore respondents and mental hospital name is not revealed in this paper. Thirty respondents (10 patients and 20 providers) were selected purposively from one of the mental hospital of Uttar Pradesh. Primary data were collected after providers and patients and their family members consent. Qualitative method used for data analysis. Result shows many social barriers in accessing to mental health care such as: stigma, gender discrimination, beliefs about causality of mental illness, negative behavior with people with mental health problem, negative attitude about mental hospital and negative attitude about providers. Government should be implementing educational program for mental health and mental health services as well so that awareness is generated and more people opt for treatment.*

**Keywords:** Social barriers, mental health care

Health is an essential quality in human being. It is defined as a state of complete physical, mental and social well-being and not merely the absence of disease (WHO, 2001). This definition intends to embrace the other components that contribute to positive health like spiritual, emotional, behavioral and cultural. According to the 10th five year plan ten million people are affected by serious mental disorders (Planning commission, 2002:126) and Uttar Pradesh has much absolute number of mental case compare to other states. (Kale, 2010) Despite the huge burden of mental illness, huge numbers of patients do not take treatment because of some social factors. Generally, people show little concern towards the mentally ill patients and treat them with unsympathetic behavior. They have double jeopardy in life that first they struggle with the symptoms and disabilities along with the discrimination by society and family. Researchers on mental health issue have highlighted that such low priority and discrimination of mentally ill individuals is due to myths and misconception associated with mental health (Murthy et al, 2005). In this paper review of literature is divided into three sections to discuss the utilization of mental health services, discuss the stigma as barrier in availing mental health services and to understand the role of hospital care and specialized care for mentally ill people.

### Poor Utilization of Mental Health Services

Earlier report of mental health care shows that community does not utilize the available mental health services. Out of all the mentally ill patients, twenty percent patients need specialist treatment. Proportion of mentally ill patients without treatment is much higher in India compare to Western countries. High numbers of patients do not take

treatment because of ignorance, fear stigma, misconceptions and faulty attitudes regarding mental illness (Murthy et al, 2005). Recent study shows that patients suffering from severe mental illness choose psychiatric services as first contact of treatment and patient suffering from neurotic and stress related and organic mental disorders choose non-psychiatric treatment as their first source and choose faith healer as first source of treatment, female patients choose non-psychiatric treatment as first contact. These choices are based on good reputation, easy accessibility and those who prefer non-psychiatric services were due to accessibility, good reputation and time given for consultation. Reasons for going to faith healer included belief in supernatural power, recommendation by someone, easy accessible and availability on low cost (Nagpal et al, 2011).

### Stigma and Belief about Mental Illness as Barriers in Availing Mental Health Services

Majority of patient do not take any treatment because of ignorance, fear, stigma, misconceptions and faulty attitudes regarding mental illness. General people have belief that mental illness is caused by evil spirits, black magic, bad stars and bad deeds in the present and past life. Therefore mentally ill patient seek the treatment by the faith healers and magicians. People have own fear about mental hospitals. They felt that mental hospital is a place where dangerous mental patients are locked up. Patient treated in mental hospital stigmatized, they become isolated and discriminated in the community. Due to this patient family do not go for treatment in mental hospital, therefore they do delayed in treatment thereby increasing disability (Murthy et al, 2005). A study was conducted on outpatient setting at the department



of psychiatric, All India Institute of Medical Sciences, New Delhi in 2011. This study covered 200 patients (125 male and 75 female). These patients come from Delhi, Uttar-Pradesh, Bihar, Haryana and rest of the patients comes from other states. This study finding shows that 91 patients (45.5%) had consulted with psychiatrist as their first contact, 88 patients (44%) were consulting with non- psychiatrist, 16 patients (8%) had firstly gone to traditional faith healer and 5 patients (2%) had chosen alternative medicine. The study reported reason for choosing traditional healer as a first contact were 75% reported that belief in supernatural cause for mental disorders, 75% stated for recommended by someone, and 68.8% reported for easy accessibility and 43.8% informed that low cost of treatment. Another finding of this study was that more male patient contacted a psychiatrist as a first contact compare to female patients (Nagpal et al, 2011).

### **The Role of Hospital and Specialized Care for in Mental Health Services**

Hospital and specialist care play important role in improving mental health apart from community care. It is necessary to manage acute as well as severe cases and sometimes for rehabilitation under hospital observation by trained psychiatric professionals. Sometimes, some patients require full attention because of their harmful and risky behavior for themselves as well as for others. "Hospitalization for psychiatric patients is often necessary when it is determined that their behaviors are acutely dangerous to themselves" (Latha and Shankar 2011). Psychiatric rehabilitation is to help persons to compensate for or reduce the functional deficits, interpersonal and environment barriers created by the disability and to restore ability for independent living, socialization and effective life management. Interventions help the individual learn to compensate for the effects of the symptoms of the illness through the development of new skills and coping techniques and a supportive environment (Pillai 2010). After reviewing the above literature, researcher found huge burden of mental illness in India and particularly in Uttar Pradesh. Despite of huge load of mental illness patients do not use proper mental health services because of the stigma, discrimination and beliefs they have about the mental hospitals. This has been highlighted by literature reviewed above. And we further need to explore social realities.

### **Objective of the study**

To understand the social barriers in accessing mental health care from one of the mental hospital of Uttar Pradesh from the perspective of the health personnel and the patients and patient's family members.

### **Research Methodology**

In this research involved primary and secondary data both. In this research paper respondents name are changed and name of mental hospital do not use due to privacy reason. Primary data collected from one of the Mental Hospital of Uttar Pradesh. For primary data 30 respondents (10 patients (OPD and IPD) and 20 providers) were selected purposively and data were collected through semi-structure interview schedule and observation technique. Primary data were collected after providers and patients and their family members consent. Qualitative method used for data analysis.

### **Ethical Consideration**

This research involves respondents with mental illness. Hence it carries several significant ethical considerations, for which the researcher was sensitive while conducting the research. The most important ethical consideration was respecting dignity of individuals. The researcher fully respected the dignity of individual patients. This was important because these patients were suffering from mental illnesses and in some cases were not be able to take informed decision about them. In such cases where the respondents are not in a condition to give informed consent, their caregivers were interviewed for full details. Only when their caregivers wanted to participate in the research, with full informed consent, they were interviewed.

### **Results**

Results of this paper describes four themes that emerged in the course of the study: stigma, gender discrimination, beliefs about causality of mental illness and perception about government mental hospital and these themes have been analysed on the basis of patients/ patients' family members and provider's perspective.

### **Stigma**

Stigma related to mental illness has always been a matter of concern to researchers and mental health practitioners, as it is not only related to illness prognosis but also affect the help seeking behaviour of the patient and their relatives. Researcher was found in all the interviews with respondents that stigma prevails not only in the society itself but also in the families of psychiatric patients. To explore more dimensions of stigma related to mental illness some interrelated points are being discussed in this section. These points are: feeling of embarrassment, family discouragement and gender and health-seeking behavior. Most of the patients and their family members are found to have a feeling of embarrassment and discomfiture about having psychiatric illness themselves and in their family. Society has a stigma about mental illness and mentally ill person. Therefore people



with mental illness feel embarrassed to share his or her problem with anyone. They fear of being referred negatively and in a prejudiced way by the people of society and also worried of facing a changed behaviour towards them when people around them come to know about their illness. The family of psychiatric patients also feel awkwardness due to having a patient with mental illness. This is the reason why some patients' families don't accept that they are having a patient with mental illness and show no interest in finding out the proper treatment for their problems. Here some of the statements of respondents are given which shows these tendencies: Parents of 27 years old Sheela (name changed) suffering with hysteria said, *"If anyone gets to know about my daughter's illness, then no one would like to invite us to any of their social function and will avoid visiting our home."* Even the providers corroborated this finding. For instance; Dr. Sanjay (name changed) 50 years old working in Mental Hospital as a psychiatrist stated, *"Some patients do not come for treatment in the mental hospital because it might ruin their status in the society."*

#### **Gender Discrimination**

Gender discrimination is quite evident when the stigma was being explored. Female psychiatric patients are more stigmatized than male psychiatric patients. Data of this study shows that most of the families of the female psychiatric patients show gender discrimination in health-seeking behavior. When a female member of the family gets affected by mental illness, her family members usually don't accept her illness due to fear of society. They avoid disclosing the fact about her mental illness with their relatives, neighbors and other people related to them. They do not seek proper psychiatric treatment in the initial phase of the illness because they are worried that others will get to know about her mental illness. They think that if anyone gets to know about her illness then they and their patients will have to face many problems lifelong like in marriage, social gathering etc. Therefore most of the female patients used to visit faith healing as a first source of treatment. The major concern of the family members of the female psychiatric patients is that if anyone in the society would come to know about the patients' mental illness, it will be difficult for them to arrange their marriages, as no one would be ready to marry a girl with mental illness. Parents of 26 years old Charankaur (name changed) suffering with mood disorder said, *"If she was a boy then it would be better to seek treatment, as boys will always remain with the family but in case of girls it is quite difficult because they get married and have to shift to another family where they will not be accepted unconditionally as they are in their own families"* Even the providers confirmed this finding. For instance, one female attendant said *"if any female in the family develops mental illness, her family members do not want to take her*

*for the treatment as they feared that it might ruin her opportunity to get married, and also might destroy the family reputation in the society. On the other hand if any married female get affected by mental illness, her in-laws refuse to accept her and try to leave her on the basis of her mental condition"* Thus we find that stigma is equally attached to the married and unmarried females. Here a case study is being shared to show the stigma related to mental illness. Lela (name changed), 29 years old married woman was getting treatment in a family ward with her mother since three days. She was illiterate and came from a rural area. She had been suffering from paranoid schizophrenia since one year. Her in-laws had refused to keep her with them and therefore had left her at her mother's home after she started showing symptoms. Her brother and sister-in-law also did not want to look after her as they were afraid that their children might get affected, and also that it would harm their reputation in the society leading to no social interaction. However, Lela's mother fought with her son and daughter-in-law for her ailing daughter and is presently bearing all the cost of her treatment with her pension. Her mother had stated that she would file a case against her son and daughter in law once her daughter is fully treated, to restore her rights.

#### **Beliefs about Causality of Mental Illness**

Researcher found in the interviews with respondents that some of the people have own belief about cause of mental illness. They believe that mental illness is an effect of ghosts and evil spirits which is known in local language as "prêt atma" "burasaya" "uparihawa" "deviana" etc. People also believe that mental illness is the result of black magic which is referred as "jadutona" and "kalajadu". They think that someone, who is jealous of them, performs some black magic and because of that black magic their family member lost his or her mental control. Most of the female patients and rural patients have these beliefs and therefore they opted for faith healing as a first source of treatment. Apart from this people have own believe that cause of hysteria is late marriage and they have also believe that marriage work as a treatment for hysteria and for drug abuse. Some of the examples that portray this kind of belief are -Sheela's (changed name) 27 years old was suffering with hysteria. Her father said, *"We had no knowledge about mental illness and about its symptoms; someone told that cause of these symptoms might be supernatural power"* Mohit (name changed) 29 years old was suffering from depression come from rural area said, *"Initially my parents felt that somebody persuaded witchcraft."* (kisi ne kuchhkarwadiyahai). Some providers also agree for instance; most of the doctors, nurses and attendants said that majority of the patient and their family members are superstitious and hence they opt for faith healing as a first option for



treatment. Due to this kind of thinking effect on people help seeking behaviour. Sudha (name changed), 50 years old was working in this hospital since twenty years as an attendant. She said, *“People believe in supernatural power as a cause for his or her problems therefore they go for faith healing, I was working in this hospital since 20 years, my sister-in-law had some mental illness but we did not accept her problem as a mental illness and we went for faith healing.”* Bena (name changed) 45 years old was working as attendant since fifteen years, she too said, *“mostly people believe that late marriage is a cause for hysteria in females and mostly doctors are also believed like that.”*

#### **Perception about Governmental Mental Health Services**

As researcher has been discussed above mental illness are extremely stigmatized in society as well as in family of the patients with mental illness. Because of that mental health services are also stigmatized in society. Therefore most of the patients and their family members have negative perception about mental health services. Due to this most of the people do not want to take treatment in government mental hospital.

#### **Negative Attitude About Mental Hospital**

Researcher find that generally people do not see mental hospital as a treatment and curable place they felt that mental hospital is a place where dangerous and violent patients are locked up with mental illness. This perception about mental hospital is extremely stigmatizing. Therefore patients and their family have negative attitude and behaviour about mental hospital because of which they thought of mental hospital like “pagalkhana” ( madhouse) where “pagal” or “mad” people are getting treated in inhuman manner. More patients and their family member have negative attitude about mental hospital, female patients and their family have more negative attitude about mental hospital compared to male patients and their family. Example showed negative attitude about mental hospital. Dewakar (name changed) 50 years old patient having mood disorder getting treatment in family ward since five days, hailing from urban area. His wife said, *“When we came in this hospital first time, my husband said that I will not go to a mental hospital (pagalkhane). If anyone hears that I went to a mental hospital, then they will tease me.”*

#### **Perception About the Providers**

Researcher found that the patients and their family have a negative attitude and behaviour about psychiatric providers. Most of the family members of female patients think that the providers in the mental hospital misbehave with female patients in IPD and OPD. Sheela’s mother said, *“I did not send my daughter alone with her father to mental hospital, but accompanied them because all sorts of persons come for treatment, and had also heard about the doctors’ misconduct.* Even some

female providers stated that some female patients and their families did not want to go to a mental hospital because of misbehaviour of some doctors and other male staff.

#### **Discussion**

The findings also demonstrate that stigma is a very important cause in availing mental health services. Gender discrimination is evident when we explore stigma. Researcher also found that female psychiatric patients are more stigmatized compared to male psychiatric patients and their family do not want to accept her manifestation of symptoms of mental illness as “illness” due to fear of losing reputation in society. As the finding shows female patients often delay in accessing government mental health care services due to stigma (family discouragement, gender discrimination and negative attitude about mental illness), belief about causality of mental illness and negative attitude about the government mental hospital and the providers. The finding of this study is similar to Murthy et al (2005) research.

#### **Conclusion**

In our society, people have extremely negative attitudes about mental illness and mental health services, because very little attention is paid to mental health and mental health services as compared to other health problems and health services. Therefore government should be implementing educational program for mental health and mental health services as well so that awareness is generated and more people opt for treatment.

#### **References**

- Kale, S. 2010. ‘Emerging issues in health’. (ed) Mahal, A. and et.al, India Health Report, as available on [www.indicus.net/media/index.php/booksandreports/1584-India-health-report-2010](http://www.indicus.net/media/index.php/booksandreports/1584-India-health-report-2010) as accessed
- Latha, K.S and Shankar, R. 2011. ‘Hospital Related Stress Among Patients Admitted to a Psychiatric In-patient Unit in India’. *Online Journal Health Allied Sciences*, as available on <http://www.ojhas.org/issue37/201> as accessed on 16th May, 2012, Vol.10
- Nagpal, S. J. S. et al 2011. ‘Changing Trends of Services Used as First Contact by Patients with
- Pillai, R.R.2010. ‘Rehabilitation Needs with Major Mental Illness in India’. *International Journal of Psycho-social Rehabilitation*, Vol.14, Issue.2, 95-104.
- Tenth five year plan (2002-07), ‘Planning Commission Government of India, New Delhi, 126-30.
- World Health Organization (2001), *Atlas: Mental health resources in the world*. Geneva: WHO.

Reg. no: GUJENG/2012/48984



**website: [www.voiceofresearch.org](http://www.voiceofresearch.org)**

Printed, published and owned by Dr. Avdhesh S Jha, Printed at Rudrax Printers, 48, Laxmi Estate, Nr. Nagarvel Hanuman Temple, Amraiwadi Road, Ahmedabad-380026 and Published at E/1, Samay Appartments, Behind NID, Paldi, Ahmedabad-380007. Gujarat. India. Ph. No. 079-26623727 Chief Editor Dr. Avdhesh S Jha