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JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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EFFECTS OF SOCRATIC AND CONVENTIONAL LECTURE TEACHING METHODS ON ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN FINANCIAL ACCOUNTING IN ADAMAWA STATE, NIGERIA

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ABSTRACT
The study was conducted to determine the effects of Socratic and conventional lecture teaching methods on academic performance of secondary school students in Financial Accounting in Adamawa State. Two research questions were formulated to guide the study while one null hypothesis was tested. The study adopted a quasi-experimental research design, specifically, the pre-test, post-test non-equivalent control group. 725 students offering Financial Accounting in senior Secondary schools in Yola metropolis, Adamawa State constituted the population of the study. Purposive sampling technique was used to select 105 students for the study. Three senior secondary schools were purposively selected and randomly assigned to experimental groups and control group. Aliyu Musdafa College, yola (experimental group) was taught using Socratic method and Government Day Secondary School Doubeli (control group) was taught using conventional Lecture method. The data collection period lasted for four weeks using instructional package for Financial Accounting (IPFA) which comprised well-planned lessons on the selected topics based on the two methods of teaching. The instrument for data collection was a 50-item 'Financial Accounting Achievement Test' (FAAT) validated by three experts from Kwara State University, Malete, not below the rank of senior lecturer. A pilot test of the instrument was conducted at Government Day Secondary School Muhammad Nya, Jalingo, Taraba State on forty (40) senior secondary school (SS II) Students offering Financial Accounting in the school. Using Kuder Richardson 20 (K-R20) formula, a reliability coefficient of 0.83 was obtained. Research questions were answered using mean and standard deviation while the hypothesis was tested using Analysis of Covariance (ANCOVA) at 0.05 level of significance. The results of the study revealed that Socratic method had significant effect on students' performance than conventional lecture method. Among the recommendations made was that, efforts should be intensified by teachers to aggressively adopt Socratic method in teaching Financial Accounting.

KEYWORDS
academic performance, teaching methods.

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INTRODUCTION
The secondary school level of education is a fundamental stage in the life of the students because it gives them a firm foundation on which they can achieve their life goal and become self-reliant or proceed to higher institutions of learning for further studies. In Nigeria, Secondary school education has six years duration given in two stages - three years of junior secondary school and three years of senior secondary school. The curriculum designed for senior secondary school is comprehensive and broad based, aimed at broadening students' knowledge and outlook. Subjects offered in the senior secondary schools are in three groups: core subjects, non- vocational and vocational subjects. One of the vocational subjects is Financial Accounting.

Financial Accounting is the process of identifying, measuring, recording, and communicating organization's economic activities to users for decision making (Dauderis & Annand, 2014). According to John (2009) the objective of studying Financial Accounting at the senior secondary school includes the enablement of students to appreciate the basic rules, functions and principles of Accounting. Similarly, the American Institute of Certified Public Accountants (2016), "Financial Accounting is the art of recording, classifying and summarizing in a significant manner in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the results there of". Thus accounting is the art of recording, classifying, summarizing, analyzing and interpreting the financial transactions and communicating the results thereof to the interested person. The primary objective of learning accounting is its vocational use-preparation for a job employment within a wide range of business career. To achieve these objectives, Financial Accounting teachers employ various instructional methods in the classroom.

Teaching is the process through which knowledge, skills and values are consciously or unconsciously acquired as a result of interaction between the teacher and his pupils. Teaching therefore, according to Ayeni (2011), teaching is a process that involves bringing about desirable changes in learners so as to achieve specific outcomes. Therefore, the success in teaching is measured by the degree to which the teacher is able to achieve his or her desired learning in the student. To achieve this, the teacher must know the type of learning needed by his pupils, and how to bring about such learning utilizing the best method of teaching.

Teaching method comprises the principles and methods used for instruction to be implemented by teachers to achieve the desired learning by students. These strategies are determined partly on subject matter to be taught and partly on the nature of the learner. For a particular teaching method to be appropriate and efficient, it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. However, no single teaching method is appropriate in all situations, and for all students. Many teaching methods and approaches have been in use in the teaching of Financial Accounting such as lecture and discussion among others (Pilato & Ulrich, 2014). However, these methods do not seem to be yielding the expected results currently. There are opinions that activity stimulating and student-centred methods could improve students' academic performance in different subjects better than teacher-centred methods. Umar, Abdullahi and Hassan (2015) advocated for use of activity stimulating and student-centred teaching methods such as Socratic and demonstration methods in the teaching of accounting yet most teachers at the post basic education still use conventional (lecture) method which is teacher-centred in teaching accounting.

Socrates valued the knowledge and understanding already present within students and thought, that using this knowledge could potentially be beneficial in advancing their understanding, by helping students examine their premonitions and beliefs while at the same time accepting the limitations of human thought. Socrates believed students could improve their reasoning skills and ultimately move toward more rational thinking and ideas more easily supported with logic. The Socratic teaching method is a 'question and answer' method that involves open ended, higher level questions designed to elicit discussion, debate and analysis. The method encourages active participation of students; it requires the students to critically evaluate their own beliefs. It requires them to articulate reasoned concepts behind their beliefs. The Socratic Method has the advantages of allowing learners to use process skills to generate content information through critical thinking. Teachers are released from the role of authority and to become facilitators and fellow investigators. This replaces the notion that the teacher must know all the answers. Socratic teaching method as a "question and answer" method, works in the following way: the teacher asks a question, one student answers, the teacher reacts and asks another question which is responded to by a second student, and so forth (Saiki, 2009). The method was believed to be extremely valuable as a way to guide developmental thinking, to stimulate creativity, problem solving, to initiate discussion and to stimulate quick recall of requisites needed for the day's lesson (Adib-Hajbaghery & Aghajani, 2011).

Lecture method is a one way flow of communication from the teacher to the students, the method is a teacher-centered approach where most of the talking is carried out by the teacher while the students remain as passive listeners taking down notes (Alcorn, 2010). A lecture is an oral presentation of information by the instructor. It is the method of relaying factual information which includes principles, concepts, ideas and all theoretical and practical knowledge about a given topic in Financial Accounting syllabus. Alcorn (2010) described lecture method as one of the oldest methods of teaching. It is a teaching and learning procedure by which the teacher seeks to create interest, to influence and stimulate his students, and to get them involved in learning by the use of verbal message.

Academic performance of students could be defined as the learning outcomes of the students. This includes the knowledge, skills and ideas, acquired and obtained through their course of study within and outside the classroom situation. It is the outcome of determination, hard work, of student in academic pursuit. According to Morgan (2010), it is an assessment strategy by which the evidence about students learning is gathered through students work on a performed task. It is as an observable or measurable behavior of a person in a particular situation usually experimental situation. Therefore, Students' performance is very important because, it appears to be the major criterion by which the effectiveness and success of any educational institution could be judged. Perhaps, this is the reason Umar, Abdullahi and Hassan (2015) observed that the ineffective teaching methods used by Financial Accounting teachers in secondary schools have failed to produce students with needed skills for employment and admission into tertiary institutions.

It is based on this background that the researcher considers it necessary to determine the effect of Socratic and Lecture teaching methods on academic performance of secondary school students in Financial Accounting in Adamawa state.

STATEMENT OF THE PROBLEM

The rate of failure in Financial Accounting in secondary schools in Adamawa state was clearly shown in the West African Examinations Council (WAEC) results from 2011 to 2015, where the number of students that passed with distinction and credit grade levels were on the decline from 22.38% in 2011 to 21.57% in 2012; it was 20.48% in 2013; it fell to 19.67% to 19.58% in 2014 and 2015 respectively, while those that had ordinary passes and failure were on the increase (WAEC office Adamawa state, 2016). The students' performance was unsatisfactory and this has continued to be a major source of concern to schools, parents, teachers and public examination bodies.

However, the researchers' interaction with some Financial Accounting teachers and students in the selected senior secondary schools in Adamawa state tends to show that, the low level of performance has been attributed primarily to poor teaching methods teachers use in imparting knowledge to the students. Similarly, Igwe and Ikatule (2011) attributed poor academic performance of students to deficiency in teaching method(s) used by teachers. Probably, the non-use of innovative methods that are problem solving oriented such as Socratic method, is not yet widely recognized and utilized as method of teaching Financial Accounting in the state. Students on the other hand, are known to have complained of not understanding the subject, possibly because of the type of teaching methods used by the teachers. The use of the conventional lecture method may seem to be a contributing factor to the poor performance of students and also at the work place when eventually such students get employed after graduation (John, 2009).

It is as a result of these problems that the researchers were prompted to carry out an investigation on the effects of Socratic and Lecture teaching methods on the academic performance of students in Financial Accounting in Adamawa state, Nigeria.

OBJECTIVES OF THE STUDY

The main objective of the study was to determine the effects of Socratic and conventional lecture teaching methods on academic performance of secondary school students in Financial Accounting in Adamawa State. Specifically, the study sought to determine the:

1. Effect of Socratic method on academic performance of secondary school students in Financial Accounting in Adamawa State.
2. Effect of lecture method on academic performance of secondary school students in Financial Accounting in Adamawa State.

RESEARCH QUESTIONS

In order to achieve the purpose of the study, the following research questions were raised:

1. What is the effect of Socratic method on academic performance of secondary school students in Financial Accounting in Adamawa State?
2. What is the effect of demonstration method on academic performance of secondary school students in Financial Accounting in Adamawa State?

RESEARCH HYPOTHESES

The following null hypothesis was formulated and tested at 0.05 level of significance.

H_{01}: There is no significant effect of treatment of Socratic method on the academic performance of secondary school students taught Financial Accounting in Adamawa State.

METHODS

The design of the study is quasi experimental design. Specifically the non-equivalent, non-randomized control group, pretest, post-test design was adopted. The quasi experimental design was used since the class of students used were already been organized into intact classes to provide for stability and avoid disruption of class lessons and class arrangement. In support of this design, Enemali (2010) stated that it is a suitable alternative to experimental design when randomization is not used or applied. The population of the study comprised all 725 SSII students offering Financial Accounting in senior secondary schools in Yola metropolis, Adamawa state. The sample for the study consisted 105 SSII Financial Accounting students from two senior secondary schools in Yola metropolis, Adamawa State. The schools are Aliyu Musdafa College, Yola (AMC) experimental group I and Government Day Secondary School doubeli (GDSS) control group. Purposive sampling technique was used in this study. A survey of co-educational public secondary day schools was carried out to identify schools that have an intact Financial Accounting class in SSII and are equivalent in terms of provision of facilities and are all funded by Adamawa State Government. Only schools that have at least one graduate Financial Accounting teacher with relevant professional teaching qualifications were chosen. Chosen schools were randomly assigned to experimental and control groups while students in the sampled schools remained in their intact classes. In order to give the schools equal chance of being in any group, the researchers wrote the names of the three schools on each of the three pieces of paper which were folded and mixed thoroughly in a hat. These pieces of papers were shuffled after which the groups were picked.

Two types of instruments were developed for data collection in this study. These are:

(i) Instructional Package for Financial Accounting (IPFA)

The instructional package comprised prepared lesson plans on selected topics from senior secondary school curriculum based on the methods of teaching. No special teaching session was organized. Teaching was done in accordance with the selected schools' timetable period allocated for Financial Accounting. The lesson plans were prepared on topic by topic matched to period by period basis. Lesson plans outlined the period, the topic and the behavioural objectives of each lesson.

(ii) Financial Accounting Achievement Test (FAAT)

The Financial Accounting achievement test (FAAT) comprised fifty (50) multiple choice questions with four options lettered A to D with only one correct answer, each correct answer attracts 2 marks which add up to a total of 100 marks. Sixty (60) minutes were allocated for the FAAT. In order to ensure standard, all the test items were drawn from the past question papers of WAEC and NECO of 2006 to 2016. The pretest scores served as a basis for comparing student's academic performance in Financial Accounting test before treatment.

The FAAT was adapted from the WAEC and NECO Financial Accounting past questions from 2006-2016 hence, the instrument had been face validated. The drafted FAAT and IPFA having been reconstructed and restructured based on the inputs by the researchers. To ensure content validity the FAAT was also subjected to thorough scrutiny and proof reading by experts in Business Education and measurement and evaluation not below the rank of senior lecturer in Modibbo Adama University of Technology, Yola and Kwara State University, Malete for further necessary corrections and approval. Validators checked the appropriateness of the items and ensured that the achievement test items sample the content areas. Corrections and suggestions were incorporated in the final copy.

Furthermore, a pilot test of the instrument was conducted at Government Day Secondary School Muhammad Nya, Jalingo, Taraba State. The instrument was administered to forty (40) senior secondary school (SS II) Students offering Financial Accounting in the school. This was done in order to avoid ambiguity of the instrument items and to determine if students at SS11 level would be able to answer the questions. The sample had similar characteristics and background with the target sample for the study. The data collected were subjected to statistical test to determine the reliability coefficient.

The internal consistency reliability of FAAT was established using Kuder-Richardson formular (KR-20). The choice of K-R 20 was influenced by the fact that it is most suitable in multiple choice items with right or wrong answers (Enemali, 2010). This procedure is used for establishing the reliability of a test score obtained from a single administration of a single test form. In situations where test items are scored correctly or wrongly, the problem of how to split a test is resolved with the use of KR -20 and the reliability coefficient for this study was therefore calculated and it was found to be 0.83. This is in line with (Enemali, 2010).who stated that reliability co-efficient of 0.7 and above is adequate and the instrument for which it is calculated is reliable. Therefore this test instrument was termed as reliable.

Before the treatment, the research subjects were given a pretest in the first week. The test was administered by the researchers to the sampled schools which lasted for sixty (60) minutes each. The scripts were marked and the results of the pretest were used to determine the students' initial knowledge of the materials they have learned and determined the comparability of the two groups (experimental and control) with respect to their achievement in the pretest scores.

The main treatment for the study was the teaching of manufacturing, trading and profit and loss account to senior secondary (SS II) Financial Accounting students by the researcher and this helped in controlling teacher variable which the use of research assistant would not. A total of three groups were used in collecting data for the study namely experimental group and control group, representing Socratic and lecture teaching methods respectively. The two groups were given treatment by the researcher for the period of four weeks, once a week for a double period of eighty minutes making a total of twelve visits in which the experiment was carried out and this was possible with the aid of a detailed lesson plan on the selected topics.

After the treatment, post test was administered to the subjects (both the control and experimental groups) in the fourth week. Sixty (60) minutes was allocated for the post FAAT. The scripts were marked by the researchers and the students' scores were recorded.

The research questions were answered, using mean and standard deviation of the experimental and control groups scores. Analysis of covariance (ANCOVA) was used to test null hypotheses at 0.05 level of significance with the pre-test serving as covariates. ANCOVA was chosen because of its power to take care of the initial lack of equivalence in the groups since intact classes were used for the study.

DECISION RULE

Research question: Any mean score between 50 and above was indicated as high performance, while any mean score of below 50 was indicated as low performance.

Research hypotheses: If the computed p-value is greater than 0.05 level of significance the null hypothesis was accepted and concludes that, there is no significant effect between the variables compared. If the computed p-value is less than 0.05 level of significance, the null hypothesis was rejected, and concludes that, there is significant effect between the variables compared.

RESULTS

RESEARCH QUESTION 1

What is the effect of treatment of Socratic method on academic performance of secondary school students in Financial Accounting in Adamawa State? To answer this question**,** scores of students obtained from financial accounting achievement test including both the pre-test and post-test were analysed using mean and standard deviation as shown in table 1.

TABLE 1: MEAN OF PRE-TEST AND POST-TEST SCORES OF TREATMENT GROUP ONE TAUGHT FINANCIAL ACCOUNTING USING SOCRATIC METHOD

Group	N	Mean	SD
Pre-Test	65	42.02	9.48
Post-Test Mean & Sd Difference	65	56.03 14.01	10.11 0.63

Source: Field experiment, 2017

The data presented in table 1 revealed that the treatment group one taught Financial Accounting with Socratic method had a mean score of 42.02 in the pretest and a mean score of 56.03 in the post-test with standard deviation of 9.48 and 10.11 for the pre-test and post-test, respectively, pre-test (mean= 42.02; SD = 9.48), post-test (mean= 56.03; SD = 10.11). The result gave a pre-test, post-test mean gain of the treatment group one taught with Socratic method to be 14.01. The low standard deviation difference (0.63) showed that the scores of students in both the pre-test and post-test are clustered around their respective mean scores. With this result, it is clear that Socratic method is effective in improving students' performance in Financial Accounting.

RESEARCH QUESTION 2

What is the effect of treatment of lecture method on academic performance of secondary school students in Financial Accounting in Adamawa State? To answer this question**,** scores of students obtained from financial accounting achievement test including both the pre-test and post-test were analysed using mean and standard deviation as shown in table 2.

TABLE 2: MEAN OF PRE-TEST AND POST-TEST SCORES OF CONTROL GROUP TAUGHT FINANCIAL ACCOUNTING USING TRADITIONAL LECTURE METHOD

Group	N	Mean	SD
Pre-Test	40	42.80	9.49
Post-Test Mean Difference	40	50.30 7.50	8.36 1.13

Source: Field experiment, 2017

The data presented in table 2 revealed that the control group taught Financial Accounting with traditional lecture method had a mean score of 42.80and standard deviation of 9.49 (mean= 42.80; SD = 9.49)in the pre-test and a mean score of 50.30 and standard deviation of 8.36 (mean = 50.30; SD = 8.36) in the post-test, giving a pre-test post-test mean gain in the control group taught with traditional lecture method of 7.50. Also, the low standard deviation difference (1.13) showed that the scores of students in both the pre-test and post-test did not differ in the way in which they are clustered around their respective mean scores. This result indicated that traditional lecture method is fairly improved students' academic performance in Financial Accounting.

TEST OF HYPOTHESIS

The null hypotheses for the study were tested using Analysis of Covariance (ANCOVA) at 0.05 level of significance as shown in table 3.

H_{01}: There is no significant effect of treatment of Socratic method on the academic performance of secondary school students taught Financial Accounting in Adamawa State. The test of this Null Hypothesis can be seen as summarized in table 3.

TABLE 3: SUMMARY OF ANALYSIS OF COVARIANCE (ANCOVA) FOR TEST OF SIGNIFICANCE OF MAIN EFFECT OF TREATMENT OF SOCRATIC METHOD ON ACADEMIC PERFORMANCE OF STUDENTS IN FINANCIAL ACCOUNTING

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1424.055[a]	4	356.014	4.119	.004
Intercept	8888.775	1	8888.775	102.838	.000
Pretest	474.145	1	474.145	5.486	.021
Treatment	947.330	1	947.330	10.960	.001
Gender	163.322	1	163.322	1.890	.172
Treatment*gender	6.360	1	6.360	.074	.787
Error	8643.507	100	86.435		
Total	314522.000	105			
Corrected Total	10067.562	104			
a. R Squared =.141 (Adjusted R Squared =.107)					

SOURCE: FIELD EXPERIMENT, 2017

The data presented in table 3 showed F-calculated values for effects of treatment of Socratic method on students' academic performance in Financial Accounting. The table showed that there was a significant main effect of treatment of Socratic on academic performance of secondary school students in Financial Accounting ($F= 10.960$; $P = 0.001$). Hence, the null hypothesis that stated that there is no significant effect of treatment of Socratic method on the academic performance of secondary school students taught Financial Accounting was therefore rejected. This implied that teaching with Socratic method has positive effect on the academic performance of secondary school students in Financial Accounting. This means that the effect observed are due to the main treatment given to students.

TABLE 4: ESTIMATED MARGINAL MEANS OF BOTH THE TREATMENT AND CONTROL GROUPS

Groups	Mean	Std. Error
Treatment	56.27	1.161
Control	49.98	1.503

Source: Field experiment, 2017

The data in table 4 showed estimated marginal means for the two groups, i.e., the adjusted mean after the covariance. The Table revealed that the participants in experimental group performed better than their counterparts in control group because they had the highest adjusted post mean score (mean = 56.27) as against the adjusted posttest mean score of the control group (mean = 49.98). The implication here is that teaching with Socratic method is effective for improving the academic performance of secondary school students in Financial Accounting.

DISCUSSION OF FINDINGS

With reference to research question one "what is the effect of treatment of Socratic method on academic performance of secondary school students in Financial Accounting?" the findings revealed that Socratic method is effective in improving students' performance in Financial Accounting as the result gave a pre-test, post-test mean gain of the treatment group one taught with Socratic method to be 14.01. Furthermore, findings to the null hypothesis one (H_{01}) which stated that, there is no significant effect of treatment of Socratic method on the academic performance of secondary school students taught Financial Accounting, revealed that the participants in experimental group performed better than their counterparts in control group because they had the highest adjusted post mean score (mean = 56.27) as against the adjusted posttest mean score of the control group (mean = 49.98). The implication here is that teaching with Socratic method is more effective for improving the academic performance of secondary school students in Financial Accounting than the conventional Lecture method. This is in line with the findings of Onaolapo (2015) who reported that Students taught Financial Accounting using Socratic method performed better than those taught using lecture method. This finding also corroborate with the findings of (Singh, 2010) who indicated that students taught with Socratic method perform better. Questioning breaks the passivity and monotony that often pervade in a class as most teachers use lecture method. This is supported by Copeland (2010) who stated that the questions asked by the teacher help the students to think, reason and organize their thoughts to be able to give answers.

CONCLUSION

Based on the findings of the study it was shown that Socratic method is the most effective method of teaching Financial Accounting in secondary schools, followed by lecture method. The implication therefore is that, the lecture method that is predominantly used in teaching Financial Accounting is not as effective as the other methods. Therefore, if lecture method alone is relied upon instead of incorporating Socratic methods in teaching Financial Accounting, improvement in students' performance in external examination would be difficult. This will also negatively affect students at the work place when eventually such students get employed after graduation.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. Financial Accounting teachers should be encouraged to use Socratic Method in Teaching in Senior Secondary Schools since it improves students' academic performance than the conventional lecture method
2. Financial Accounting teachers should not rely on the use of traditional lecture method alone because it was found not as effective as Socratic and demonstration methods in improving students' academic performance.

REFERENCES

1. Adib-Hajbaghery, M. & Aghajani M. (2011).Traditional Lectures, Socratic Method and Student Lectures: Which One does the Students Prefer? *Webmed Central Medical Education Journal,* 2(3):wmc001746
2. Adunola, O. (2011). "The Impact of Teachers' Teaching Methods on the Academic Performance of Primary School Pupils in Ijebu-Ode Local Govt. Area of Ogun State," Ego Booster Books, Ogun State, Nigeria.
3. Alcorn, M.D. (2010). Better teaching in secondary schools. Holt Rinehart and Winston. New York: Holt Rinehart and Winston.
4. Ameh, I. E., Daniel B. P., & Akus, Y. (2007). Research and Methods in the Social Sciences. Ankpa: Rowis Press.

5. Amesi, J. & Akpomi, M. E. (2013). Application of New Technologies and Mentoring Strategies in Business Education in Rivers State. *International Journal of Accounting Research (Arabian Group of Journals)* 1(5), 11 –20.
6. Association of International Certified Public Accounting. (2016) Aat.org.uk. Retrieved from htt://en.wikipedia.or/wiki, accountancy. 26/04/2017
7. Ayeni, A.J. (2011), "Teachers professional development and quality assurance in Nigerian Secondary Schools," World Journal of Education, 1(2):143-149.
8. Bruner, J.S. (1967). The Process of Education. Cambridge, Mass: Harvard University Press.
9. Copeland, M. (2010). Socratic Circles: Fostering Critical and Creative Thinking in Middle and High School. Portland MN
10. Dauderis, H. & Annand, D. (2014). Introduction to Financial Accounting (2nd edition) Canada: Printed and bound in Canada by Athabasca University; Published by Valley Educational Services Ltd.1(21)
11. Enemali, J.D. (2010) Education and training for industrialization: Edo state: Stirling-Horden Publishers Ltd.
12. Eze, T. I., Ezenwafor, J. I. & Obidile, J. I. (2016). Effect of Gender on Students' Academic Performance and Retention in Financial Accounting in Technical Colleges. British Journal of Education, Society & Behavioural Science 18(4): 1-9
13. Igwe, A. U. & Ikatule, O. R. (2011). Effects of Computer Tutorial and Drill (CTD) on Senior Secondary School Students' Achievement in Basic Electronics in Lagos State. Proceedings of Nigerian Association of Teachers of Technology. Umunze, 108-119.
14. Ikechi, F.A (2004). Strategies for improving the teaching and learning of financialaccounting in secondary schools in Enugu east local government area. Unpublished M.Ed Project, Department of Vocational Teacher Education, University of Nigeria, Nsukka.
15. John, 1. (2009). History of Accounting. Retrieved from http://www.articlealley.com/article 781249 22.html on 17/6/2017.
16. Maxfield, M. B., (2011). The Effects of Small Group Cooperation Methods and Question Strategies on Problem Solving Skills, Achievement, and Attitude During Problem-Based Learning; unpublished Msc. Thesis university of Nigeria, Nsukka.
17. Morgan, O. H. (2010). Assessments of Students Performance in Mathematics. New York: Mcgraw hill.
18. Muhammad, A. U, Bala, d. & Ladu. K.M. (2016). Effectiveness of Demonstration and Lecture Methods in Learning Concept in Economics among Secondary School Students in Borno State, Nigeria Journal of Education and Practice retrieved from www.iiste.org 7.12,- 201.on 24/04/2017.
19. Nzewi, U. M. (2010). It's all in the Brain of gender And Achievement in Science and Technology Education 51st Inaugural lecture of the University of Nigeria Nsukka 18 (32).
20. Olarinoye, T. T. (2015); Comparative Effects of Cooperative and Guided Discovery Methods on Secondary School Students' Performance in Accounting in Plateau State Nigeria. Master's thesis submitted to the department of vocational and technical education, Ahmadu Bello University, Zaria.
21. Omotayo, B. K. (2014). Teachers' characteristics and students' performance level in senior secondary school Financial Accounting. Journal of Empirical Studies, 2014; 1(2): 48-53
22. Omwoyo, L. (2010) Primary social studies standard four secondary schools. Nyanza province. Nairobi. Kenya Literature Bureau.
23. Onaolapo, E. (2015). Influence of Socratic and Interactive Methods of Teaching Financial Accounting on Performance of Secondary School students in katsina Metropolis, Nigeria. Msc. project of department of vocational and technical education, ABU. Zaria.Retrieved from http://www.kubanni.Abu.edu.ng. May, 2017.
24. Pilato, B. & Ulrich M.M. (2014). Is the Case Study Method an Effective Pedagogical Method for Students to Learn the Fundamentals of Financial Accounting? proceedings of ASBBS; 21 (1): 541-555.
25. Saiki, M. (2009). Socratic Teaching Method (A Textbook for: Socratic Questions 101). By Ark. Retrieved from http:\teach\socs\socrates. 05/04/2017.
26. Singh, Y. K. (2010). Dictionary of Education. New Delhi: A. P. H Publishing Corporation
27. Umar, I. Abdullahi, Z. & Hassan H. (2015). Effects of Cooperative Learning on Secondary School Students' Achievement in Financial Accounting. Paper presented at the international conference on accounting studies, Johor, Malaysia, Retrieved from www.icas.my
28. West African Examination council, (2004). Percentage Performance of Candidates in Twenty Popular Subjects in West African Senior School Certificate Examination (WASSCE). The Punch Newspaper Retrieved from http://www.punchonline.com 26/05/2017

HUMAN RESOURCE MANAGEMENT PRACTICES & WORK LIFE BALANCE: WOMEN INFORMATION TECHNOLOGY PROFESSIONALS

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ABSTRACT
Work life balance is achieving a balance between work and family demands. Large number of women is entering in information technology industry and Women more likely suffer from role over load as she was found to undertake majority of house hold duties with work responsibility as a result confronted with work life imbalance. Human resource management professionals have to take some initiatives in the form of human resource management practices to deal with work life imbalance. This study is an attempt to find out relationship between human resource management practices & work life balance among women information technology professionals. A well-structured questionnaire was developed. A sample of 130 women information technology professionals were drawn from Pune, one of the information technology hub of Maharashtra. Result reveals that there exist a significant relationship between human resource management practices & work life balance among women information technology professional. Human resource management practices taken in the study to attain work life balance are self rostering, telecommuting, unpaid maternity leave, paid maternity leave, a carers room or bringing children to work in emergencies and carers leave. Study suggested that information technology organization should implement these above mentioned human resource management practices in their organization to better manage work life imbalance among women information technology professional.

KEYWORDS
human resource management practices, information technology industry, work life balance, women information technology professional, work life balance initiatives.

JEL CODES
M1, M12.

1. INTRODUCTION
In developing country like India, drastic changes have been observed from last few decades. Shift of family structure from joint to nuclear family, changes in work culture from fixed hour working to long working hours and Entry of women in workforce from the time when men as the bread earner of family and women as the homemaker or caretaker of family. To the time now when the men earns and women earns too. But Women are still taking care of family, so the question is how she manages the dual role of working outside as a professional & managing family responsibility as a homemaker. Hence the concept of work life balance arises. *Work life balance is defined as a satisfactory level of involvement or 'fit' between the multiple roles in a person's life* (Clarke, Koch and Hill, 2004). Women struggle to balance their multiple roles as compared to their male counterpart (Kamenou, 2008). Women more likely suffer from role over load as she was found to undertake majority of house hold duties and moreover women scarifies more at the time of childcare responsibility (Bridge, 2009). To deal with above mentioned situation human resource management professionals were taken some initiatives to balance the work & non work life of women professionals & these initiatives were known as human resource management practices. HRM practices are those favorable practices which are created by employers for their employees to manage their work and non-work demands. *HRM practices relate to specific practices, formal policies, and philosophies that are designed to attract, develop, motivate, and retain employees who ensure the effective functioning and survival of the organization* (Cheng Ling Tan & Aizzat Mohd Nasurdin, 2011).
Earlier women's were associated with the professions like teaching, nursing, and banking and now after globalization & urbanization with improved education the society has witnessed a surge in the participation of women in the Information Technology Industry. The Indian Information Technology Industry has marked their identity in the last few years and emerged as one of the fastest growing sector not in terms of economic growth but also in terms of employment generation. Work culture of IT industry is highly demanding as the IT projects were basically outsourced from US, Europe, Australia etc., and employees need to work according to their working hours. With the growing number of women in IT industry, highly demanding IT work culture and multitasking women who played dual role in work & family front has emphasized practitioners & researchers interest in the topic Human resource management practices & work life balance among women IT professionals of India.

2 REVIEW OF LITERATURE
2.1 WORK LIFE BALANCE & WOMEN
Work life balance is a state of equilibrium in which an individual can balance work & non work demands. The term work life balance was first coined in 1986 although its usage in everyday language was sporadic for a number of years.
Earlier the term was known as work family conflict. Greenhaus & Beutell (1985) defined work family conflict: "a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect". Then the term were called as work family balance Greenhaus, Collins & Shaw (2003) defined work- family balance as "the extent to which an individual is equally engaged in and equally satisfied with his or her work role and family

role". In recent scenario the term is known as Work-life balance, in its broadest sense, is defined as a 'fit' between the multiple roles in a person's life (Hudson, 2005).
Women experiencing more work family conflict then due to role-over load, interference from work to family and interference from family to work (Higgins et al. 1994). Women confronted with more work interference in family than men as women spent more time on fulfilling family responsibility as compared to men, in spite of spending around same number of hours in paid work as men. Both men & women reported the same level of family interference in work (Gutek et al. 1991) but contrary to Gutak study Rajadhyaksha and Velgach (2009) in their study found that women experienced more family interference with work as compared to men. However both men & women experience same level of work interference with family.
The concept of work life balance attention in management studies by the entry of women in work force and captured more attention due to growing number of women with dependent children entering in to the workforce (Hamilton et al., 2006). Study revealed that women having dependent children confronting more work life imbalance than those who do not have dependent children as women having children need to spent time with them for their upbringing (Sanjiv Gupta, 2009). Women being married and having children directly affect the balance of work and personal life (Nathalie & Philippe, 2006). As the age of women increases and they get married & have children, their responsibilities increases at home that affect their work life balance. Parallely as their length of service increase their responsibilities at work place will also increase. Hence it is quite natural that as the working women grow in their age, their responsibility will also increase that may affect their work-life balance (Kumari K. Thriveni& Devi V. Rama, 2012).

2.2 HRM PRACTICES & WORK LIFE BALANCE AMONG WORKING WOMEN

Indian women professionals striking with the work life imbalance, so many factors like role conflict, lack of recognition, organizational politics, gender discrimination, elderly and children care issues, quality of health, problems in time management and lack of proper social support influencing the issue (Vijaya Mani, 2013)."Work–life" is an umbrella term incorporating wide range of HRM practices envisioned to support employees to balance their work and non-work responsibilities (Callan, 2007; Glass & Finley, 2002). Supportive HRM practice is becoming a challenge for the employers to provide. They commonly refer to practices that enable employees to balance the demands of paid work and personal life which can be in the form of workplace flexibility or work time flexibility (Subramaniam, 2010). HRM practices were basically covering two factors i.e. work based factor & family based factor to manage work life balance. HRM practices under family based factor are provision of childcare/eldercare help women to get relieve from some family responsibilities; and HRM practices under work based factor are flexible work schedules, work from home to assist women to better manage their family commitments by giving them greater control over their work arrangements. (Niharika & Supriya, 2010; Heywood & Jirjahn, 2009).Working women confronted with less work life conflict if organization provides HRM practices having leave policies like maternity leave, carer's leave. These leave policies provide an opportunity to give full attention to family as per requirement while remain attached to the organization (Rogier & Padgett, 2004) and, as a result will be able to concentrate more on work, which in turn increase performance.
Organizations basically develop HRM practices for female employees' to their family responsibilities with work responsibilities. Although both men and women can suffer from work–family conflict (Grönlund, 2007; Kossek & Ozeki, 1998; van Veldhoven & Beijer, 2012), and organization often provide HRM practices for both men & women, but it is found that women employees are frequent user of HRM practices (Vandello, Hettinger, Bosson, & Siddiqi, 2013; Wise & Bond, 2003).Studies reported that organization having HRM practice to support work life balance will help to decrease absenteeism and turnover (Rogier & Padgett, 2004), and increase productivity and innovation (Taneja, Pryor, & Oyler, 2012) and as a result employee will have more loyalty & attainment towards organization (Butts, Casper, & Yang, 2013; Wang, Lawler, & Shi, 2011).

2.3 WORK LIFE BALANCE AMONG IT WOMEN PROFESSIONALS

Sushree Sangita Das et al (2016) in their study analyses the ground reality of women information technology professionals in Mumbai and they found that duration of working hours are not uniform and it may vary as per the task. They need to work for around 12 hours per day. Managing house hold activities & dependent care is a big challenge for them. This affects the normal family life, lead to both physical and mental exhaustion resulting in stress. Study also reported that in order to play dual role rationally, women information technology professionals in Mumbai are already seen, in compromising either at family or at the professional life.
Bharathi S. Vijayakumar (2015) in their study of work life balance of women employees in IT industry with special reference to Pune focuses on certain key professional challenges and personal challenges and enhancers to work life balance. Study recommends that travel time from home to workplace to be lessened, Supportive people at office &family, job rotation, crèche facility within the company premises, and work from home at least 2-3 days a week will help better manage work life balance.
Vanitha & Meenakumari (2011) in their study stated that women played multifaceted roles at family, society and at work places with extraordinary pressures. Due to absence of co-ordination and support from work & family part work family conflict arises and it also mutually influences each other. The impact of these influences impetus with work and family problems and sometimes leads to undesirable consequences.
Reimara and Vasanthi (2011) in their study have attempted to understand how work and family related factors influence the work-family balance of Indian women information technology professionals. The study revealed that of women information technology professionals can attain work life balance by setting priorities in their work and personal lives and by having support systems from supervisor, co-supervisor and from family members. The study also concluded that working women can achieve work life balance only when organization design & implement supportive HR policies and practices. As a result women professionals would be more committed towards organization & perform better at work place, and this in turn participate in the growth of economy and positively impact society as whole.
Valk and Srinivasan (2011) in their study of the work and family related factors in women information technology professionals in India shows six major dimensions namely family influence on life choices, attempts to negotiate multi-role responsibilities, self and professional identity, work life challenges and the combating strategies, organizational policies and practices and social reinforcement.
Kelkar (2003) in his study observed that human resource management practices to balance work life imbalance are available in information technology companies of jargaon but only on paper not on real sense. Employee has to work around 14-16 hours a day a work place & if required then need to work on home as well.

3. NEED OF THE STUDY

The topic of work life balance got more attention by the entry of women in work force & changes in work culture. Previously male was bread earner of family & female was caretaker of family so they both perform their roles & responsibility independently and no clash happened but after entry of women in work force role interference has been observed like interference of work in to family and needs to work 24*7 and specially in IT industry project were outsourced from USA, Europe etc and employees need to work according to their work time and both the factors enhance work life imbalance among women IT professionals. So HRM professionals have to take initiative to deal with the work life imbalance. This study is an attempt to identify factors affecting work life balance & to know the relationship between HRM practice & work life balance among women IT professional.

4. STATEMENT OF THE PROBLEM

Women's are playing multifaceted role of handling paid work responsibility with homemaker and caretaker of family. This results in role-over load or role conflicts among working women. IT industry demands 24*7, 365 days working, as the projects in IT industry were outsourced from western country and IT professionals required to give support as & when required. So this study is an attempt to identifying factors affecting work life balance of working women in IT industry and to find out human resource management practices that help women IT professionals in managing their multifaceted role henceforth in attaining work life balance.

5. OBJECTIVES OF THE STUDY

The Objectives of this Study are:
1. To identify factors of work life balance among women IT professionals of Pune.
2. To study relationship between human resource management practices and work life balance among women IT professionals of Pune.
3. To put forth suggestions for human resource management practices supportive to work life balance among women IT professionals of Pune.

6. HYPOTHESIS

H_0: There is no significant relationship between human resource management practices and work life balance among women IT professionals of Pune.

H_1: There is significant relationship between human resource management practices and work life balance among women IT professionals of Pune.

7. RESEARCH METHODOLOGY

7.1 DESCRIPTION OF SAMPLE

The study was conducted for women IT professionals of Pune. Sample of 130 women IT professionals was drawn through convenient sampling.

7.2 DESCRIPTION OF THE TOOL USED

A structured questionnaire developed for the purpose of study. Questionnaire is divided into three parts namely: demographic profile contains age, marital status, children status, educational qualification, monthly income, and experience, work life balance scale contains 22 items grouped into four factors, and six women centric human resource management practices.

In work life balance & human resource management scale 7 point liker scale was used and coded as 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neutral, 5 = Slightly Agree, 6 = Agree, & 7 = Strongly Agree.

Cronbach's alpha statistics was applied to check the reliability of the questionnaire, thenafter factor analysis for work life balance was done. To achieve the objective & test the hypotheses of study Pearson correlation was applied.

8. RESULT & DISCUSSION

Statistical testing & analysis was done by using SPSS (originally Statistical Package for the Social Sciences) version 22 for Windows.

8.1 PROFILE OF THE RESPONDENTS

150 questionnaire was distributed among women IT professional of Pune out of which 130 completely filled was receive & used for further analysis. Out of 130 68 was married & 62 unmarried and 40 is having children & remaining 90 is not having children.

8.2 RELIABILITY& VALIDITY

A questionnaire consist two different scales: human resource management practices and work life balance. Cronbach's alpha statistics is measured for both the scales individually. As shown in the table 1 given below the Chronbach's alpha value of work life balance is .889 & human resource management practices are .850. The Chronbach's alpha value more than 0.72 is considered as good and acceptable in literature. Inter-term correlation between the variables is good, hence questionnaire has sound validity.

TABLE 1: RELIABILITY STATISTICS OF WORK LIFE BALANCE AND HUMAN RESOURCE MANAGEMENT PRACTICES SCALE

	Reliability Statistics		
Scale	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Work-Life Balance	.889	.890	22
HRM Practices	.850	.855	6

8.3 FACTOR ANALYSIS

All the variables of work life balance scale have good inter-item correlation. To check data adequacy KMO Barlett's test of sampling adequacy was applied. The KMO value for work life balance scale shown in table 2 is .787, which is acceptable value and good, as value of KMO above 0.5 is acceptable and higher the value more adequacies associated with data. Hence data is adequate & factor analysis could be applied. To identify the factor principal component analysis was done and as a result four factors have been extracted with eigen value more than 1. All the factors accounts for cumulative variance of 69.111% shown in table 3. Four factor were named as work family interference, family work interference, work family enhancer, & family work enhancer

TABLE 2: KMO & BARTLETT's TEST OF WORK LIFE BALANCE

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.787
Bartlett's Test of Sphericity	Approx. Chi-Square	1998.385
	df	231
	Sig.	.000

TABLE 3: FACTOR ANALYSIS OF WORK LIFE BALANCE TOTAL VARIANCE EXPLAINED

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	6.817	30.987	30.987	6.817	30.987	30.987	3.966	18.029	18.029
2	5.049	22.950	53.937	5.049	22.950	53.937	3.944	17.925	35.955
3	2.105	9.567	63.504	2.105	9.567	63.504	3.774	17.155	53.110
4	1.234	5.608	69.111	1.234	5.608	69.111	3.520	16.001	69.111
5	.787	3.577	72.688						
6	.765	3.479	76.167						
7	.699	3.178	79.345						
8	.654	2.974	82.319						
9	.526	2.393	84.712						
10	.471	2.143	86.855						
11	.436	1.980	88.835						
12	.407	1.851	90.686						
13	.363	1.649	92.334						
14	.293	1.330	93.664						
15	.261	1.187	94.851						
16	.247	1.121	95.971						
17	.198	.898	96.869						
18	.189	.859	97.728						
19	.163	.739	98.468						
20	.147	.668	99.135						
21	.115	.521	99.656						
22	.076	.344	100.000						

Extraction Method: Principal Component Analysis.

8.4 HYPOTHESIS INTERPRETATION

H_0: There is no significant relationship between human resource management practices and work life balance among women IT professionals of India.

H_1: There is significant relationship between human resource management practices and work life balance among women IT professionals of India.

TABLE 4: CORRELATION BETWEEN HRM PRACTICES & WLB

Correlations			
		HRM Practices	WLB
HRM Practices	Pearson Correlation	1	.545**
	Sig. (2-tailed)		.000
	N	130	130
WLB	Pearson Correlation	.545**	1
	Sig. (2-tailed)	.000	
	N	130	130
**. Correlation is significant at the 0.01 level (2-tailed).			

To test the relationship between human resource management practices and work-life balance among women IT professionals' of India bivariate correlation was applied. As shown in table 4 the value of r =.522 and p =.000. As the value of p is less than .05, hence null hypotheses is not accepted and alternate is accepted. Similarly value of correlation is also found positive, thus analysis indicates that there is significant positive relationship between human resource management practices and work-life balance among women IT professionals' of India. Positive relationship shows that implementation HRM practices self rostering, telecommuting, unpaid maternity leave, paid maternity leave, a carers room or bringing children to work in emergencies and carers leave will increase, so will be the work life balance among women IT professionals of India.

9. FINDINGS

Results reveals that human resource management practices plays significant role in attaining work life balance of women IT professionals. Positive correlation was found between human resource management practices and work life balance. This relationship indicates that implication of selected human resource practices increases work life balance among women IT professionals. Long working hours, shift system and other working conditions in Information technology sector make it more prone to disturb work and family equilibrium. In such environment human resource practices act as a support system for women employees who play dual role of house maker as well as professional. Situation become more difficult with working mothers and hence child care, maternity leave and other related policies provision contributes in balancing work and family both among working women.

Moreover, study also explored four factors of work life balance and indicates whether work will hinder or contribute in work life balance depends upon the policies followed by organization.

10. RECOMMENDATION & SUGGESTION

It is recommended that IT organization should take the issue of work life balance in priority and should take some initiative for their women employees to achieve work life balance. HRM practices like self rostering, telecommuting, paid & unpaid maternity leave and child care arrangement required to implement within IT organization to facilitate women IT professionals. It is recommended that travel time between home & work place need to be lessened; more supportive people at work place, family; and flexibility work rules along with good pay scale will help in achieving work life balance.

Effective implementation of HRM practices is required attain work life balance. Many IT organizations have HRM practices to attain work life balance but employees are not aware about availability of practices so it is suggested that employer should make aware employees about HRM practice so that they can take benefit of them. This will help them to manage work life imbalance and as a result employee performance will improve. Employee performance will help in increasing organization performance and decrease in employee absenteeism & turnover ratio.

11. CONCLUSION

Working women's are playing multifaceted role, same is with women IT professionals and IT industry follows the long working hours work culture. As a result the issue of work life imbalance came in front of women IT professionals. Literature reveals that they can cope up with work life imbalance only when organization provides them effective human resource management practices. Through extensive review of literature and experts opinion six major human resource management practices were identify which helps to attain work life balance among women IT professionals of India and these practices are practices self-rostering, telecommuting, unpaid maternity leave, paid maternity leave, a carers room or bringing children to work in emergencies and carers leave. The study attempted to measures the relationship between human resource management practices and work life balance among women IT professionals of India and findings reveals that's there is a positive significant relationship between human resource management practices and work life balance among women IT professionals of India. Hence, study concludes that IT organization should implement these above mention human resource management practices within their organization. Implementation of these practices will help IT women professionals to better manage their work & non work life. As result, their performance will increase and employee absenteeism & turnover will decrease and ultimately, organization performance will improve.

12. LIMITATIONS

Limitations of the study are:

- The study is limited to women IT professionals only.
- The findings of the study cannot be generalized as the data is only from a section of women IT employees from Pune.
- The study used the long instrument size which influences the attrition of respondents while filling questionnaire.

13. SCOPE FOR FURTHER STUDY

- The study includes only women IT professionals in future study can be done by covering women & men both.
- Current study includes six HRM practice to attain work life balance of women IT professionals. Further same study can be done by including more HRM practices like job sharing, health assessment program etc. to facilitate women IT professionals.
- Further comparative study can be done among married & unmarried women IT professionals.
- In future the study can be done between women IT professionals having child & not having child.
- IT organization can refer this study to get insight of HRM practices that help women IT professionals in maintaining their work life balance.

REFERENCES

1. Bharathi, S. Vijayakumar. (2015), "Work Life Balance of Women Employees in the Information Technology Industry", Asian Journal of Management Research 2229-3795. 5, pp 323-343.
2. Butts, M. M., Casper, W. J., & Yang, T. S. (2013), "How important are work–family support policies? A meta-analytic investigation of their effects on employee outcomes" Journal of Applied Psychology, Vol 98, pp 1–25.

3. Callan, S. (2007), "Implications of family-friendly policies for organizational culture: Findings from two case studies", Work, Employment & Society, 21, pp 673–691.
4. Clarke, M., Koch, L., and Hill E. (2004), "Differentiating balance and fit. The work–family interface"
5. Glass, J. L., & Finley, A. (2002), "Coverage and effectiveness of family-responsive workplace policies", Human Resource Management Review, 12, pp 313–337.
6. Grönlund, A. (2007), "More control, less conflict? Job demand–control, gender, and work–family conflict" Gender, Work and Organization, 14, pp 476–497.
7. Heywood, J. S., & Jirjahn, U. (2009), "Family-friendly practices and worker representation in Germany", Industrial relations: A Journal of Economy and Society, 48, pp 121–145.
8. Kelkar Govind (2003), "Women in the digital Era: Gender and Culture, (Keynote address)", International conference on women in the digital era; organized by STPI and Annamalai University, Annamalainagar, TN, Dec 10-13, 2003.
9. Kossek, E. E., &Ozeki, C. (1998), "Work–family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior–human resources research"' Journal of Applied Psychology, 83, pp 139–149.
10. Kumari K Thriveni, Devi V Rama (2012), "Impact of Demographic Variables on Work-Life Balance of Women Employees (with special reference to Bangalore City)",International Journal of Advances in Management and Economics, Vol.1, Issue 6, pp 226-229.
11. Niharika Doble and M. V. Supriya (2010), "Gender differences in perception of work life balance", Management (4), Volume 5, No.4- winter, pp 331-342
12. Rajadhyaksha, U. &Velgach, S. (2009), "Gender, gender role ideology and work-family conflict in India" Academy of Management, Chicago, IL, USA. Retrieved October 7, 2010.
13. Reimara Valk and Vasanthi Srinivasan (2011), "Work-family balance of Indian women software professionals: A qualitative study", IIMB Management Review, Vol. 23, pp. 39-50.
14. Rogier, S. A., & Padgett, M. Y. (2004), "The impact of utilising a flexible work schedule on the perceived career advancement potential of women", Human Resource Development Quarterly, 15,pp 89–106.
15. Sanjiv Gupta, Liana C Sayer, Philip N Cohen (2009), "Earnings and the Stratification of Unpaid Time Among US Women", Social Indicators Research, Dordrecht, Vol. 93, pp 153-158.
16. Sushree Sangita Das, Shashi A. Mishra (2016), "A Study on Work Life Balance of Women Working in IT Sectors of Mumbai City", International Journal of Humanities and Social Science Invention, Volume 5, Issue 9, pp 43-47.
17. Taneja, S., Pryor, M. G., &Oyler, J. (2012), "Empowerment and gender equality: The retention and promotion of women in the workforce", Journal of Business Diversity, 12, pp 43–53.
18. Van Veldhoven, M. J. P. M., & Beijer, S. E. (2012), "Workload, work-to-family conflict, and health: Gender differences and the influence of private life context", Journal of Social Issues, 68, pp 665–683.
19. Vandello, J. A., Hettinger, V. E., Bosson, J. K., & Siddiqi, J. (2013), "When equal isn't really equal: The masculine dilemma of seeking work flexibility", Journal of Social Issues, 69, pp 303–321.
20. Vanitha,A., & Meenakumari,S., (2011), "Family Vs Work Conflict among Working women in India with Special Reference to IT, Education and Banking Sector", International Journal of Research in commerce, IT and Management, ISSN 2231-5756, Volume No. 1, Issue No. 6 (November).pp. 113-119.
21. Vijya Mani (2013), "Work Life Balance and Women Professionals" Global Journal of Management and Business Research Interdisciplinary, Volume 13 Issue 5 Version 1.0, pp. 34-41.
22. Wang, P., Lawler, J. J., & Shi, K. (2011), "Implementing family-friendly employment practices in banking industry: Evidences from some African and Asian countries" Journal of Occupational & Organizational Psychology, 84, pp 493–517.
23. Wise, S., & Bond, S. (2003), "Work–life policy: Does it do exactly what it says on the tin?", Women in Management Review, 18, pp 20–31.

EVALUATION OF EMPLOYEES' PERFORMANCE USING DATA ENVELOPMENT ANALYSIS AS A TOOL: A PILOT STUDY OF HR EXECUTIVES OF THDCIL

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ABSTRACT

Global Competition has created a challenge for companies to either perform or perish. Therefore, Performance has become the litmus test for survival for any organization. It is generally said what cannot be measured cannot be managed. In order to manage and measure the performance of the employees companies use several types of methods, one being Performance Appraisal Method. Performance appraisal has been recognized as a strategic tool for improving organizational effectiveness. The success of any organization is dependent on how well the performance of every employee is effectively appraised, managed and measured. Performance Management System is therefore important process from the perspective of business alignment. Employee performance appraisal systems, which are well designed and properly used, are essential for the effective functioning of the organization. Due to some disadvantages of traditional methods, a need has been felt to develop new evaluation procedures. The main contribution of this paper is to apply a multidimensional approach, represented by the method of Data Envelopment Analysis (DEA) to measure the performance and efficiency of employees in association with the data accumulated from PARs.

KEYWORDS

performance appraisal, data envelopment analysis, performance analysis and THDCIL.

JEL CODE

M12

INTRODUCTION

Performance Management is both a strategic and an integrated approach to delivering successful results in organizations by improving the performance and developing the capabilities of teams and individuals.

Today, so many organizations face the problem of satisfying their workers, despite the fact that they are given incentives. This happens because most of these organisations are unable to manage & measure the performance of their employees appropriately.

Performance Appraisal System is widely used as one of the key methods for measuring and managing the performance efficiency of its employees and at the same time identify the star and weak performers for rewarding and working on those who are lagging behind. Therefore, great efforts have been spent in developing most objective and effective system by the performance can be evaluated.

The success or failure of performance appraisal in an organization depends upon the philosophy on which it is established. There have been efforts to devise transparent and efficient Performance Measurement System and lot has been achieved in this area but still there are issues. Appraisal systems have also become more results-oriented, which means that appraisals are more focused on a process of establishing benchmarks, setting individual objectives, measuring performance, and then judging success based on the goals, standards and accomplishments. PMS has become a very important process from the perspective of business alignment.

Appraisal systems have helped in measuring the efficiency and performance levels of employees and the data has been used in incentivizing performance as well as devising training needs and other developmental planning of employees. High-performing employees contribute superior performance, giving the companies they work for a competitive advantage and their extra effort differentiates great organizations from merely good ones. An effective system should encourage collaboration, teamwork, and communication. It's crucial for businesses to have systems in place to identify, recognize, reward, and retain their top performers to achieve sustainable growth.

Business Organizations establish robust and attractive appraisal systems are to help motivate their employees to strive hard to be recognized and rewarded. Once the employees are motivated, their performance reflects on productivity. Employees strive hard by pooling together skills, knowledge and efforts to achieve maximum output.

Performance Appraisal (PA) is an important management tool to assess employees' efficiency in the workplace, and may be defined (Pearce & Porter 1986), as a structured formal interaction between a subordinate and supervisor that usually takes the form of a periodic interview (annual or semi- annual) to evaluate the work performance. Performance Appraisal is intended to engage, and align individual and group effort to continually improve overall organizational mission accomplishment (Grubb 2007). It provides a basis for identifying accomplishments (Grubb 2007) and at the same time it provides a basis for identifying and correcting disparities in performance.

However, no system is perfect and there is a room for improvement in all system, Performance Appraisal is one among them. Although, in past years Performance Appraisal System has acted as an instrument to measure, manage and improve the efficiency of employees. But there are inherent limitations of the system. There are several errors that managers make while making performance appraisals. Several authors have pointed out several shortcomings of existing performance appraisal systems. Owing to personal biases of the assessor and are often influenced more heavily by personality than by performance.

In the highly competitive business world, remaining productive and innovative is tantamount to success. Corporations are increasingly utilizing performance appraisals to ensure that all employees are working at optimal capacity while staying focused on overall business objectives. Several tools are available to help streamline the appraisal process, making it less burdensome for both supervisors and their direct reports. Today's, owing to technological advancements several tools and software's are being used to measure and manage the performance and efficiency of employees. Data Envelopment Analysis (DEA) a computer based tool is also one such tool being used now-a-days to eliminate the shortcomings of PAR system.

Data envelopment analysis (DEA) is a nonparametric method in operations research and economics for the estimation of production frontiers. It is used to empirically measure productive efficiency of decision making units (or DMUs). Although DEA has a strong link to production theory in economics, the tool is also used for benchmarking in operations management, where a set of measures is selected to benchmark the performance of manufacturing and service operations.

DEA identifies a "frontier" which are characterized as an extreme point method that assumes that if a firm can produce a certain level of output utilizing specific input levels, another firm of equal scale should be capable of doing the same.

In this study Data Envelopment Analysis (DEA) has been used to evaluate the performance of executives in Corporate HR department of THDCIL and the use of DEA to improve methods of measuring employees' efficiency of executives of different sub departments of Corporate HR department of THDCIL.

OBJECTIVES

1. Evaluate and rank the employees based on their performance using the DEA in HR department of THDCIL.
2. Determine the peer for each underperforming employee.
3. Scope for using DEA as a tool for measuring performance.
4. Formulate recommendations and suggestions to the management, which should lead to enhancing employee efficiency using DEA.

REVIEW OF LITERATURE

Working towards common goals often employees get so caught up in our daily work routine that we forget about our purpose in an organization. Individual performance drives organizational performance. It is important to ensure everyone understands the organization's vision and goals, and how their work fits in to the organization, and how they contribute to our mission accomplishment. Doing this increases engagement and improves our program delivery.

Performance appraisal is an important step in the organization's HRM system and influences employee performance and then organizational performance. Therefore, devising Performance Appraisal System for efficiently managing the performance of employees is important. If there is no measure to performance, there will be no sign of feedback and continuous improvement.

Well designed and properly used appraisal systems are essential for effective functioning of organizations (Slusher 1975). A well devised Performance Appraisal System can tightly link strategy (mission, vision and values) with daily performance. Many companies pay close attention to the hard science of performance measurement, particularly the financial and operational sides, while successful companies play equal attention to the art, which is the softer aspect of selecting and applying performance measures (Singh & Finn 2003).

An effective PA programme should do more than set salary and promotion decisions on past performance. It should aid in the development of a performance improvement plan that utilizes coaching from the department supervisor or manager to increase skills development.

PRODUCTIVITY AND EFFICIENCY

Although, we often use the term productivity and efficiency. It is efficiency that leads to productivity and at the same time an increased productivity means that there is increased efficiency.

According to a classic definition (see *e.g.* Vincent 1968) *productivity* is the *ratio* between an output and the factors that made it possible. In the same way, Lovell (1993) defines the *productivity* of a production unit as the ratio of its output to its input. This ratio is easy to compute if the unit uses a single input to produce a single output. On the contrary, if the production unit uses several inputs to produce several outputs, then the inputs and outputs have to be aggregated so that productivity remains the ratio of two scalars.

Similar, but not equal, is the concept of efficiency. Even though, in the efficiency literature many authors do not make any difference between productivity and efficiency. For instance, Sengupta (1995) and Cooper, Seiford and Tone (2000) define both productivity and efficiency as the ratio between output and input.

Instead of defining the efficiency as the ratio between outputs and inputs, we can describe it as a distance between the quantity of input and output, and the quantity of input and output in an industry Efficiency and productivity, anyway, are two cooperating concepts.

PROFILE OF THDC INDIA LIMITED

Tehri Hydro Development Corporation India Limited (THDCIL) is a Joint Venture of Government of India and Government of Uttar Pradesh. The Equity is shared in the ratio of 75:25 between GoI and GoUP. The Company was incorporated in July' 88 to develop, operate & maintain the 2400 MW Tehri Hydro Power Complex and other hydro projects. The Company has an authorised share capital of INR 4000 cr. THDCIL is a Mini Ratna Category-I and Schedule 'A' CPSE.

Its greatest strength is highly skilled and committed workforce of 2000 employees. Every employee is given an equal opportunity to develop himself/herself and grow in his/her career. Continuous training and retraining, career planning, a positive work culture and participative style of management - all these have engendered development of a committed and motivated workforce setting new benchmarks in terms of productivity, quality and responsiveness

PERFORMANCE MANAGEMENT SYSTEM IN THDCIL

The world is a global village today where boundaries have diminished and due to liberalization of economy worldwide including India there has been tremendous change in the business scenario. Utmost utilization and effective management of human resource in era of competition is crucial and one of the tools to manage and motivate employees today is performance Appraisal System which has now been transformed to Performance management System.

The historic service culture was based on the principle of equality and experience and people in the same job with the same experience as well as same qualifications expected and got the same pay and had around the same prospects of promotion. By providing many years of service, one gained experience and showed loyalty and commitment as well as learned the corporate culture. Reward and their seniority were based on number of years of service and if people were in the same job they were paid equally, irrespective of performance.

To be competitive and to even retain market-share in the local economy, companies have to look beyond Indian shores and offer products and services of global quality and prices. This requires benchmarking of practices, standards of performance and efficiency in line with the worldwide competition. The performance management has importance wherein companies have to monitor their performance factors affecting them on a proactive and hands-on basis (Rao, A Srinivasa, 2007).

THDC India Limited is a Schedule "A" Mini Ratna Central Public Sector Undertaking under Ministry of Power. Erstwhile the name of the Company was Tehri Hydro Development Corporation. The company was earlier into Hydro power generation but in the past few years it has diversified into Thermal, Solar, Wind power as well.

The company has a stable financial performance earning profits and is known for its best HR policies and practices and also bagged several awards for it including SCOPE Meritorious Award for Best HR Practices. In the past few years company has revisited and modified several HR policies to synchronize them with the trends of time and industry standard. It has formulated and implemented several new policies and issued several guidelines one such improvement is in the field of managing performance of employees through Performance Management System.

Earlier the system of Annual Confidential report was closed system where the report was prepared by senior in confidential manner. The concerned employee who was rated by his senior was not informed of his rating and thus he was not given chance to know and improve upon.

Public Sector Undertakings function in a different atmosphere where skill, talent and potential of employees are to be nurtured properly and efficiently to gain competitive advantage over peer companies and sustain. These PSUs are further governed by guidelines issued by different agencies of Govt. who issue orders from time to time. There has been emphasis from the Govt. to bring in a culture of performance, its effective measurement and management to gain competitive advantage and transparency. Therefore, the govt. has issued various guidelines with regard to devising robust and transparent Performance Management System. While issuing directives with regard to pay revision of CPSEs in the year 2007, Department of Public Enterprises issued an Office Memorandum dated 26.11.2008 in this regard vide which not only guidelines with regard to Pay scales were issued but Govt. introduced the scheme of Variable pay/ Performance Related Pay and directed the CPSE to devise a robust and transparent Performance Management System. Therefore, for the first time performance of an employee was linked to payment of incentive. Department of Public Enterprises also introduced a method of "Bell Curve" one of the forced ranking method wherein direction with regard to rating employees was also given.

However, the new Performance Management System was introduced in THDCIL during the year 2006-2008. This new system of appraisal was a shift from the old system of annual appraisal method. The new Performance Appraisal System introduced in THDCIL started with setting of targets/key result areas(KRA) in consonance with the business objectives of the Organization. The system gradually modified and several improvements were made with introduction of Balance Score Card for executives of Sr. Manager and above.

DEA (*DATA ENVELOPMENT ANALYSIS*) @THDCIL

Data envelopment analysis (DEA) is a linear programming based technique for measuring the relative performance of organisational units where the presence of multiple inputs and outputs makes comparisons difficult.

DEA defines the relative efficiency for each decision making unit (DMU) (bank, department etc.) by comparing the DMU's inputs and outputs to other DMUs data in the same "cultural or working" environment. The outcomes of a DEA includes:

(i) A piecewise linear empirical envelopment frontier surface of the best practice internal benchmark, consisting of DMUs exhibiting the highest attainable outputs for their given level of inputs;

(ii) An efficiency metric (score) to represent the maximal performance measure for each DMU measured by its distance to the efficient frontier surface;

(iii) Efficient projections onto the efficient frontier to project improvement with an identification of a reference set of efficient units which consists of the "close" efficient DMUs to suggest internal benchmarks to guide inefficient units; a ranking of units from best (highest score) to worst (lowest score). There are mainly two types of DEA models: constant returns-to-scale (CRS, or CCR) model and introduced the variable returns-to-scale (VRS or BCC) model. The VRS model is one of the extensions of the CRS model where the efficient frontiers set is represented by a convex curve passing through all efficient DMUs.

There is an increasing concern with measuring and comparing the efficiency of organizational units such as industries, schools, hospitals, shops, bank branches and similar instances where there is a relatively homogeneous set of units.

The usual measure of efficiency, i.e.:

$$\text{efficiency} = \frac{\text{output}}{\text{input}}$$

is often inadequate due to the existence of multiple inputs and outputs related to different resources, activities and environmental factors. This problem can be illustrated for different departments of HR which are indulged in customer and employee delivery in an organization. In this case the inputs for an efficiency measure are taken to be the time taken in processing the different requests of fellow employees by number of employees in each department and the recurrent costs mainly in the form of wages, as these HR employees are resources supporting the people in line function and operation. Time taken and number of tasks processed is an input to an efficiency measure as an efficient department will attempt to give a good service at minimum time, saving on capital and resulting in satisfaction of employees.

The outputs correspond to activities of the department are measured by the number of issues representing failure of processing of such requests of fellow employees, number of grievance raised due to non-processing of such requests in time.

With two inputs and three outputs the difficulty of comparing the efficiency of department becomes apparent. Some statements concerning the relative efficiency of department can be made, for example comparing two sub departments of HR viz. Establishment and Welfare. These both have the same number of employees handling the tasks and the same costs but Welfare department has activity levels which are all as great or greater than those of Establishment department However the majority of comparisons are difficult to make

A formula for relative efficiency incorporating multiple inputs and outputs is introduced now, and the DEA model which allows relative efficiency measures to be determined is developed.

The main objective of this paper is to verify the possibility of using efficiency evaluation methodology Data Envelopment Analysis to measure performance of executives in the E2 to E5 grade of sub departments of HR at Corporate Office. The secondary purpose of this work is to examine the impact of ranking method used for finalizing Performance Appraisal Report on the calculated PMR score depicting the efficiency score of employees, using various statistical techniques.

Let us have n mutually compared decision making units (DMU) producing outputs yrj (r = 12,..., s), using inputs xij (i = 1, 2,..., m). If we use output-oriented model DEA with constant returns to scale for evaluation of decision making unit DMU0, then we are solving the following linear programming task:

Objective function:

$\varphi{*}o = \max \varphi o$

Subject to: $\sum_{J=1}^{n} x_{ij}\lambda_j \leq X_{io}$ $i=1,2,\ldots$

$-\varphi\, y_{ro} + \sum_{J=1}^{n} y_{rj}\,\lambda_j \geq 0$ r =1, 2,….,s

$\lambda_j \geq 0$ j = 1,2,…,n

where:

xij is i input of j employee*; yrj*is r output of j employee;

xio is i input of evaluated employee; *yro*is r output of evaluated employee; *λj* is intensity variable of j employee;

φo is the coefficient of expansion of output, the technical efficiency score of the evaluated employee.

The result of thus formulated linear programming task is technical efficiency score *φo* of evaluated decision making unit, in this case, the executive, which is defined as the ability to achieve maximum outputs at a given level of inputs. This measurement indicates how many times level of outputs has to be proportionally increased, maintaining the unchanged level of inputs, for executive to be technically efficient. If *φo* equals one and a variable *λj* is equal one for rated executive and zero for all other executives, the executive is technically efficient. Otherwise, if the technical efficiency measurement *φo* is greater than 1, the executive is not technically efficient in comparison with others and must increase outputs while level of inputs remains the same. If executive is rated inefficient, non-zero variables *λj* points to the elements of referential set. Convex combination of outputs and inputs of efficient employees' reference set with coefficients *λj* indicates so called target values, i.e. values of inputs and outputs of a virtual efficient reference employee on the frontier. Model assumes constant returns to scale, which means the proportional change in outputs due to the change of inputs. Therefore, if the inputs increase by 1%, outputs also increase by 1%.

Five input and Five output variables have been used in the work. Inputs were overall work atmosphere, salary (average salary including incentives as stated in employees' questionnaire), career progression opportunities, working condition and working time (ordinary scale of 1 - really poor and 10 - definitely suitable) and benefits (list of benefits provided by employer).

Performance Appraisal Report is also considered as the system used to evaluate employees' performance apart from other factors like production / generation figures in case of THDCIL being a power generating Company. Performance Appraisal Report which consists of Key Result Areas(the task or assignment that the employee has to perform in mutual consultation and agreement with reporting officer within designated time). PAR also consists of list of Competencies and Potential traits which employee exhibits at workplace and is rated by his superior. Since, career progression /promotion is determined though Performance Appraisal Reports but several other output factors have impact of employees efficiency and therefore, four other factors have been selected that have positive effect on it - work motivation, job satisfaction and commitment to the organization, Likelihood to stay with the company & Job Security.

The level of these outputs has been determined by the attitudes of employees to 35 questions in the questionnaire on a 6-level Likert-type scale from strongly disagree to strongly agree. The first 10 propositions ascertained the level of working motivation of employees. On the basis of the responses Motivating Potential

Score (MPS) of individual respondents have been calculated. (**Hackman and Oldham (1976)**. 15 statements has been taken from the job satisfaction research by **Brayfield and Rothe (1951)** and the last 15 ascertained commitments to the organization, according to research of **Mowday, Steers and Porter (1979)** and 03 statements has been taken from likelihood to stay with the company, 02 statements has been taken from Job Security.

TABLE 1: INPUTS AND OUTPUTS OF THE MODEL

Inputs	Outputs
Salary	Work motivation
Overall work atmosphere	Organization Commitment
Work condition and working time	Likelihood to stay with the company
Benefits	Job Satisfaction
Career Progression	Job Security & Retention

In order to test the validity of the hypotheses on the impact of demographic factors (age, gender, length of service, level of education, employment status and number of previous jobs) on the technical efficiency score of employees, the non-parametric tests of compliance of mean values to test validity of the hypotheses on the impact of demographic factors (age, gender, length of service, level of education, employment status and number of previous jobs) on the technical efficiency score of employees. Kruskal-Wallis test and Wilcoxon-Mann-Whitney two sample test was used.

The Kruskal-Wallis H test (sometimes also called the "one-way ANOVA on ranks") is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable.

The Mann Whitney U test, sometimes called the Mann Whitney Wilcoxon Test or the Wilcoxon Rank Sum Test, is used to test whether two samples are likely to derive from the same population (i.e., that the two populations have the same shape).

RESULTS AND DISCUSSION

THDC India Limited is engaged in power generation formerly it was only into Hydro Power generation but now it has diversified into Thermal, Wind and Solar Power generation. Like other companies THDCIL banks on its employees, its policies to gain competitive advantage against its competitors. Therefore, maintaining and making efforts to derive utmost performance from employees is must. HR executives serve an important role in catering to the day to day requirements of line managers/function and carrying out several crucial activities.

The DEA method for employee performance was used in Corporate HR department of THDCIL, where the number of Executives in the grade of E2 to E5 posted in different departments of Corporate HR is 25. The different wings of HR department are generally headed by executives in the rank of E7 (DGM). There are 03 DGMs and at least 03 -05 executives in the rank of E2 to E5 report to them functionally. All these 25 employees underwent a PA within a framework of DEA that provided data for this study. The DGMs are not included for PA. The Performance Appraisal Report is same for executives in the rank of E2 to E5.

Corporate Office is the main office of the company; the Board level Directors have their offices at corporate Office. The policies, procedures of the company are framed here. The Office has manpower of approx. 800 employees and the HR department caters to these 800 employees. HR department at Corporate Office has five wings: Policy and Promotions Department, Establishment Department, Employee Relation and recruitment, Employee Welfare Department and Administration Department.

The major functions of these wings relates to framing of HR policies, carrying out annual appraisals, doing promotions based of Annual Appraisal Reports, dealing with several day to day functions of HR department viz. Pay roll, Attendance, Employee Advances, Loans, Leave Management, Recruitment, Employee Relations, carrying out various employee welfare measures and office administration, Vehicle, Guest house Management etc.

The efficiency of HR department with regard to effective customer (employees are internal customers) service delivery has wide ramifications and satisfaction of employees. Therefore, it is required that Executives posted in HR department work with utmost efficiency, sincerity and dedication.

Questionnaire was used to collect information from these executives. The first part of questionnaire examined demographic characteristics of respondents. Further, the age, gender, employment status, highest level of education, length of service and number of previous jobs were also examined. The resulting statistics are presented in table 2:

TABLE 2

Variable	%
Gender	
Male	80
Female	20
Age	
18-25	0
26-35	10
36-45	7
46-55	8
more than 55	
Highest level of education	
Primary School	0
Secondary School	0
University	25
Employment status	
Operating Department	25
Length of Service	
0--1	0
1--5	0
5--10	10
More than 10 years	15
Nos. of previous jobs	
None	23
1--2	1
3--5	1
More than 5	None

The technical efficiency scores of individual employees were calculated by applying Data Envelopment Analysis model.

Results indicated 15 efficient employees whose technical efficiency score was equal to 1 and 48 employees with score greater than 1. These executives need to improve their performance to achieve full efficiency. Average technical efficiency score was 1.18, meaning that the average employee of Corporate HR deptt. had almost 85% of the best employee's performance. Worst employee had technical efficiency score of 2.08, which was only 36% of the employees with the maximum efficiency.

Time that employee spent in the company had a statistically significant impact on his efficiency measure. The longer employee worked in the company, the better his performance (efficiency score) was. Employees have built a relationship with organization over the years; they are more committed, willing to make greater effort than is expected of them. After 10 years of working, however, there has been deterioration in performance, which may be connected with reduced motivation to work after long years spent in the same company. The company should therefore try to motivate such employees, whether with new work tasks or greater independence. Results are presented in **table 3.**

TABLE 3

Length of service	Mean	St.Dev.	Min	Max	Mode	Median
0-1 year	0	0,000	0	0		0
1-5 years	0	0,000	1	0	0	0
5-10 years	1,131	0,208	1	1,43	1	1,035
more than 10 years	1,117	0,164	1	1,02	1	1,21

The impact of other demographic characteristics was not statistically significant. The efficiency score has detoriated in average with increasing age, men were on average slightly more efficient than women. Educated workers were slightly more efficient than employees with lower level of educational attainment. An interesting finding was that while the executives in Policy, Welfare department were more motivated, happier and more committed than their colleagues in Establishment & Administration department, however technical efficiency did not differ significantly between these groups of employees. So, from the overall perspective, both groups were equally efficient. There was no significant difference among workers with different numbers of previous employment.

CONCLUSION

The objective of this paper was to apply the method of Data Envelopment Analysis in assessing employee performance and using the PAR (Performance Appraisal Report) variables and scores.

Furthermore, it was discovered that the length of service has statistically positive impact on employee performance. This increases their commitment to the organization and they are willing to do more. The performance of the employees who have worked for the company for more than 15 years, were slightly low probably due to reduced work motivation. That is why the management of the organization should motivate them more and reinforce motivation through different HR interventions.

Because of distinct advantages of DEA method over traditional systems of employee performance evaluation it may be recommended that DEA method may be applied in future in THDCIL in conjunction with Performance Management System to better measure efficiency of employees and gain competitive advantage against its sectoral rivals.

REFERENCES

1. Alexouda, G. (2005). A user-friendly marketing decision support system for the product line design using evolutionary algorithms. *Decision Support System*, 38(4), 495-509.
2. Banker, R. D., Charnes, A., & Cooper, W. W. (1984). Some models for estimating technical and scale inefficiencies in data envelopment analysis. *Management Science*, 30(9), 1078-1092.
3. Becker, B. E., Huselid, M. A., & Ulrich, D. (2001). *The HR scorecard, linking people, strategy, and performance*. Harvard Business School Press: Boston.
4. Cooper, W.W. - Ruiz, J.l. - Sirvent, I. 2009. Selecting Non-zero Weights to Evaluate Effectiveness of Basketball Players with DEA. In European Journal of Operational Research, vol. 195, 2009, 563-574.
5. Favore, C. and Pappi L., (1995), Technical efficiency and scale efficiency in the Italian banking sector: a non-parametric approach Applied Economics, 27: 349-366
6. Ramanathan, R., 2003. An Introduction to Data Envelopment Analysis: A Tool for Performance Measurement. New Delhi: Sage Publications India Private Ltd., 2003.
7. Ruiz, J.L. - Pastor, J.T. 2011. Assessing Professional Tennis Players Using Data Envelopment Analysis (DEA). In Journal of Sports Economics, 2011.
8. Sueyoshi, T. - Ohnishi, K. - Kinase, Y. 1999. A Benchmark Approach for Baseball Evaluation. In European Journal of Operational Research, vol. 115, 1999, 429-448.

DIGITAL INDIA – A CRITICAL REVIEW

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ABSTRACT

Digital India was going at its slowest pace until in 2016 government began to give stress on accelerating digitization in every sphere of activity. Digitization comes with a cost and it is not only to sound politically for pleasing the people. The IT department which is the carrier of digitization is completely new in India and symbolical. Until the government strengthen the Ministry of IT with huge network of human resources and technology and progress would continue to move at snail pace. At tertiary level, the progress is very dismal. It is matter of opportunity that elite is grabbing the fruits of digitization because they are going along with IT which is a good source of income and consolidation of knowledge. We have seen the widening of knowledge gap across the country. The literacy knowledge is pre-requisite for acquiring the digital knowledge which about 70% of the people are lacking. The social cost of digitization is very high because India is still not into the production of telecom equipments and also optical fibers used for spreading digitization. Where wireless IT is used the cost is still higher evident from the fact that the government sold spectrum to the telephone operators since 2015 are winding up the business and these are replace by Reliance Jio whose primary equipment is costing Rs. 2700 alone. People have been fleeced to use Jio free of cost for last 6-7 months and now the bill will be minimum Rs. 1500-2000 for the same usage. Is it digital India the country wish to achieve? The digital India is possible only when the people of India are given their due status in terms of their education and activities and enhanced status is capable of giving good taxes which are to be used for transforming the raw literacy to digital literacy. The research paper will focus upon exploring new insights of online marketing, to what extent e-marketing helps in achieving these goals and enlighten the readers that digital India is a good spirit but achievement an uphill talks.

KEYWORDS

digitisation, digital literacy, e-commerce, infrastructure, smartphone.

JEL CODE

M3, M30.

INTRODUCTION

Prior to exploring the innumerable possibilities of 'Digital India', let us first understand the concept of the program. This is a program intended to transform India into a digitally empowered society and knowledge economy. The idea is to provide people with a 'cradle to grave identity' that is "unique, lifelong and online." The authorities have conveyed that the overall scope of this program is to prepare India to have the requisite knowledge to be equipped for the future and make technology the center that enables change. It envisions becoming the umbrella program across sectors. The project focuses on being transformative that helps realize the popular equation i.e. IT+IT= IT, which means India Today + Information Technology = India Tomorrow.

'Digital India' is a vision, which is based on three key areas. The first is to make various utilities available to the citizens through cutting-edge digital infrastructure. It will enable delivery of services like banking and access to service centers at the doorstep of citizens with the assistance of high speed internet. The second area of vision will be the focus on governance and services. This digital movement will bring everything in the palms of people across departments and places. It will enable providing services to people in real time, cutting across every hindrance. It will also enhance the usage of cloud services and enable citizens to receive their due just from these services. Furthering the benefits, it will ease the procedures for starting businesses in India and even the financial transactions will become effortless as people wouldn't have to set foot outside their houses. The third and the foremost vision would be to empower citizens digitally. The digital resources, like documents etc. will be easily available on the cloud, making access to information easier and faster. This will consequently lead to a digital revolution in the country. Further, the services would be friendlier as they would be available in native languages, making their penetration comprehensible and vast.

With e-Governance coming into power, the private sector sees a lot of opportunity in this space. This will magnify the efficiency of the Government and induce more transparency into the system. Digital payment companies stand to benefit with this move as it will increase the number of people accessing Internet in India. The future of a country is generally determined by the growth of its economy and the Digital India campaign is one such way that will not only strengthen the economy of India, but will also play a major role in putting India in the league of developed nations. The transformation of the country into a knowledge economy will ensure the industry gets rock solid support and a fertile ground to flourish in the time to come. Additionally, the huge investment of Rs. 1.13 lakh-crore and 18 lakh direct or indirect jobs in the country will generate trust among major investors across the globe making it the new mecca for emerging technologies. Consequently, the next Apple or Facebook might just come from India!

LITERATURE REVIEW

'Digital India' initiative has been an area of interest of numerous researches from various disciplines because of its great significance and influence on the economy as a whole and particularly the technological sector. Sundar Pichai, Satya Nadella, Elon Musk researched about Digital India and its preparedness to create jobs opportunities in the information sector. He concluded that creating new jobs should be continued with shifting more workers into high productivity jobs in order to provide long term push to the technological sector in India. Microsoft CEO, Satya Nadella intends to become India's partner in Digital India program. He said that his company will set up low cost broadband technology services to 5lakhs villages across the country.

Prof. Singh began with the basic overview of what Digital India entails and led a discussion of conceptual structure of the program and examined the impact of "Digital India" initiative on the technological sector of India. He concluded that this initiative has to be supplemented with amendments in labor laws of India to make it a successful campaign.

Arvind Gupta intends to say that Digital India movement will play an important role in effective delivery of services, monitoring performance, managing projects and improving governance. An Integrated Office of Innovation & Technology to achieve the same, for problem solving, sharing applications and knowledge management will be the key to rapid results, given that most departments work on their own silos. Tracking and managing the projects assumes significance because India has been busy spending money in buying technology that we have not used effectively or in some cases not even reached implementation stage. Sharing learning's and best practices across departments needs to be driven by this Office of Technology.

Gupta and Arora (2015) studied the impact of digital India project on India's rural sector. The study found that many schemes have been launched in digital India to boost agriculture sector and entrepreneurship development in rural areas. Digital India programme has also set the stage for empowerment of rural Indian women.

Rani (2016) concluded that the digital India project provides a huge opportunity to use the latest technology to redefine India the paradigms of service industry. It also pointed out that many projects may require some transformational process, reengineering, refinements to achieve the desired service level objectives.

Midha (2016) concluded that digital India is a great plan to develop India for knowledge future but its improper implementation due to inaccessibility and inflexibility to requisite can lead to its failure. Though digital India programme is facing number of challenges yet if properly implemented it can make the best future of every citizen. So we Indians should work together to shape the knowledge economy.

Furthering the benefits of Digital India, the roadmap ahead looks promising. By the year 2019, 2.5 lakh villages will have broadband connection along with the added feature of phone connectivity. The imports of the country will turn zero as India will have a staggering 400, 000 Public Internet Access Points. Not only that, over 2.5 lakh educational institutions including schools and universities will have Wi-Fi facility. The program aims to impact the employment scenario immensely by increasing skills and job prospects. It is estimated that by 2019, about 1.7 crore young Indians will have proper training in IT, Telecom and electronics. This directly leads to 1.7 crore jobs for Indian Youth in about four years from now.

With these developments, India is expected to become the world leader in IT interface with e-Governance and e-services getting maximum exposure. Driven by such digital engagement, Indian firms are expected to leave the best-in-the-world companies behind, with their IT expertise permeating into services like health, education and banking. The efforts made by present government to ramp-up the agenda of Digital India is to reinvigorate India's digital infrastructure. The initiative introduces nine "pillars" that the government will expand on, in its push to try to bridge the country's digital divide.

Digital India aims to have broadband networks that will span India's cities, towns and 250,000 villages by end-2016, along with a system of networks and data centres called the National Information Infrastructure. It could transform citizen access to multimedia information, content and services. It also gives the government access to a great deal of information. After years of broadband and nationwide fibre-optic infrastructure targets, India remains stuck at a total of 15 million wire line broadband users. Yet mobile broadband use has exploded, currently standing at 85 million users, driven by apps like Facebook and WhatsApp, and the sharing of images and videos. Experience shows that it is communications and content, not empty pipes that drive network usage. And manufacturing content is not government strength. This project needs content and service partnerships with telecom companies and other firms, with new entrepreneurs.

These are the low-hanging fruits and the projects already under way. For instance, a new messaging platform for government employees has over 13 million mobiles and 2 million emails in the database; biometric attendance for all central government offices in Delhi, wi-fi in universities and in public locations, eBooks in schools, SMS-based weather information, disaster alerts. For instance, the project aims to provide secure email as the primary form of communications within the government, and to the outside world. Official email has been available for well over a decade in India, though its security is debatable. Yet most government officials and politicians prefer to use personal email services from Gmail and other public providers that can be accessed on their mobile phones.

The discussion on Information Explosion, Challenges and opportunities documents that digital revolution has been sweeping the world and there is already explosion of information at an unprecedented scale, so much so that storage and retrieval of the available data is assuming challenging proportions. Further, what is more challenging is the analysis and processing of data for possible economic and social gains. There is empirical evidence to substantiate that those societies and individuals who can operate computer - based tools and related software are able to develop software(s) that can adapt to the emerging challenges and develop skills to analyze the avalanche of data, thus entering the higher pay brackets. On the other side, those who are not able to cope with the digital tools and remain digitally illiterate are being down the ladder in the job market. To bridge the digital divide between the societies and individuals, governments should encourage education planners to reorient the functioning of the schools and institutions of higher learning in favour of a technology-friendly environment. This will, not only enable students to become digitally literate and essentially inquisitive, but also help dig gold nuggets out of the data mines to facilitate economic and social benefits. Further, this move will also help address existing negativities of the growing digitization which impinge on the privacy of individual firms and the government and also on easy availability of tools for mischief mongers who spread misinformation.

Digital India vision is going to be imperative to propel the country into its next phase of growth. While the government is trying to connect remote areas/ villages via high-speed Internet services to digitally empower people it has to deal with multiple issues. **The demand side of digital in a country like India is a no-brainer but it is the supply side management and operating model of the proposed transformation that requires thoughtful planning and phased implementation to ensure that the impact is as immense as envisaged. What have been the efforts by the government on this?** The supply side can be put into three sets of initiatives. The first is the digital infrastructure, which requires to be put in place. For this the telecom infrastructure will form the base. On top of this layer we need the IT infrastructure in the form of apps, software etc. The second set is content that needs to be relevant to the citizens and address their real-time requirements. The third layer is capacity. Unless we have the all these three sets (i.e. telecom infrastructure, content, capacity) we won't be able to meet the supply commence rate of the demand. The reason of separating them into these three elements is because they are different departments with different sets of issues (policy issues as well as operational concerns around each). But by no means is government the only player in these three areas. For example, today telecom infrastructure is largely been provided by the private sector whereas the role of the government is to provide the right policies. Now there is a vision which brings all these elements together and then breaks that vision into road maps. For example, telecom infrastructure, broadband, mobile, digital identity, etc. are some areas or building blocks of the infrastructure which are clearly identified.

Actual programs and roadmaps like BharatNet and National Optic Fibre Network (NOFN) have delivered quantifiable objectives and milestones. Now mobile payments are going to kick-in in a big way and we see mobile operators coming together with banks. So basic building blocks are in place, but for the next level of digital transformation to happen the content, applications and capacity need to come together. **The government plans to make India a truly digital nation by offering a plethora of e-governance services across sectors by using cloud, mobility, and analytics. What are the execution challenges when it comes to the implementation of these solutions across implementation government departments, state governments and the UTs (Union territories)?** True value of digital means that work flow becomes automated. Efficiencies have to be brought in the processes, and it needs to be much faster and transparent. Only then it makes sense to be called digital.

The challenge is around change management as the government has been working in a particular way and suddenly, we want them to work in a completely different environment. We are now asking them to put information online, respond to grievances and criticism. All this is difficult for people who are not used to function in this manner. Another aspect is to make them understand and educate on the advantages that digital will bring in running the government. If we were to take a single organization like the Election Commission of India with a single objective of conducting elections; then technology becomes much easier to implement. But if we are dealing hundreds of government organizations, each having a different objective and diverse kind of citizen problems, the implementation is challenging. We are trying to address these issues by opening up multiple information and communication channels for the masses. An example in this context would be MyGov, an innovative platform to build partnership between citizens and government with the help of technology for growth and development of India. One positive aspect is that we have witnessed a rise in accountability from various departments. This is because for every major program that the government has taken; we have been asked to benchmark ourselves and put the information online. **With over a billion dollars of cess collected from Operators for universal access, how is USOF building a digital India? What role is it taking to lead and orchestrate the ecosystem?** Right now USOF is working on to provide broadband to every single panchayat in India. This translates into enabling a quarter million by broadband access. Another step that we have taken is in the form of six major schemes in which we are in the process of rolling out access to ensure that every single villager and village in India is covered and connected. The Digital India program was launched in July 2015, with the objectives of offering seamless e-Governance services available on demand, providing infrastructure as a utility to every citizen, bringing about digital empowerment of citizens and more. As part of this highly ambitious project of the Modi Administration, the last year saw an increased focus on the Indian government to provide:

- Internet access across rural and urban regions of India;
- Digital lockers for verifying documents;
- e-Governance as well as government services; and
- More cashless and electronic transactions across India.

But, where do we stand with regard to the Digital India campaign? What progress has been made, and what significant roadblocks lie ahead? In order to get answers to these queries and more, let us take an in-depth look at the Digital India initiative and the related accomplishments.

OBJECTIVE
The objective of the research paper is to focus upon exploring new insights of digital marketing and to what extent digital marketing has achieved its goals in various fields.

RESEARCH METHODOLOGY
For the purpose of collecting data, qualitative and quantitative information has been collected related to various fields using digital concept.

UNIVERSAL ACCESS TO PHONES

This focuses on mobile network penetration, with a plan to fill the gaps in connectivity in India by 2018. Though mobile networks have reached most populated parts of India, the last mile is a long one: 42,300 villages still exist outside the reach of a mobile signal. "Universal access" does not, however, guarantee a working network. Even in its major cities, India's mobile network is so stressed that many say it's broken, with call failures and drops a common complaint. An intense shortage of spectrum has driven up costs and driven down service quality for India's telecom industry. But the problem is much bigger than dropped calls. As many as 85% of India's 100 million broadband users are mobile. As users ramp up multimedia use, and the next 100 million mobile broadband users come on board, networks will not be able to keep up which justifies the need of more spectrum.

PUBLIC INTERNET ACCESS

This aims to increase the number of government-run facilities (Common Service Centres or CSC) that provide digital services to citizens, especially in remote or rural areas with low connectivity. The objective is to increase the 140,000 facilities to 250,000, or one in nearly every village. It also aims to convert 150,000 post offices into multi-service centres. The vision is that the longest distance a villager or tribesperson should have to travel should be to the nearest CSC. This project was first approved in 2006, but moved slowly in its initial years. One of the big boosts from Digital India could be the dramatic ramp-up the mega-project is setting as a target. Citizen services will be one driver of adoption.

e-GOVERNANCE: REFORMING GOVERNMENT THROUGH TECHNOLOGY

Of all the "pillars" of Digital India, this is the oldest and most mature initiative. For decades, hundreds of e-governance projects have been piloted across India. Many were quick successes that however died out once the chief promoter, often a bureaucrat on a two-year posting, moved on. The processes and services include digitising manual databases, introducing online applications and tracking, using online repositories for citizen documents, introducing publicly-visible government workflow automation, and public grievance redress. Experts say that almost every e-governance project that India needs has been successfully piloted somewhere in the country. The daunting task for Digital India will be to take successful pilot projects, replicate and scale them up.

e-KRANTI - ELECTRONIC DELIVERY OF SERVICES

e-Kranti comprises 41 large e-governance initiatives, called "mission mode projects". They span e-education (all schools to get broadband and free wi-fi, as well as MOOCs - Massive Online Open Courses), e-Healthcare and technology for farming, security, financial inclusion, justice, planning and cyber-security. The sheer scale of these projects helps ensure that they do not meet the fate of most e-governance projects in India, which remain pilots. Several have been completed successfully, including the overhauled passport service, and the "MCA21" project for company registration from the Ministry of Corporate Affairs.

ELECTRONICS MANUFACTURING

This plan aims for "net zero imports" in electronics, or imports that match exports by value, by 2020. As of now, India stands to import three quarters of the $400bn worth of electronics products it will consume in the next five years. Hardware exports as of now are still under $10bn. This calls for a very big ramp-up in local manufacturing. The plan includes incentives for big chip fabrication as well for mobile and set-top box manufacturers, and clusters and incubators for start-ups. There is another school of thought that "net zero" imports should be seen on a wider canvas - for instance across technology products and services. India exports nearly $100bn worth of technology and business process services.

IT FOR JOBS

This is a project to train 10 million students from smaller towns and villages for IT sector jobs over five years. Among the plans: Business Process Outsourcing (BPO) locations in every north-eastern state, 300,000 service delivery agents to be trained for IT services, and 500,000 rural workers to be trained by telecom operators for their own needs. The challenge here is not just the numbers, but quality. The technology sector increasingly finds that the dwindling manpower resources available for its jobs are under-trained and mismatched to its needs. Most firms are forced to invest a great deal into their own training for "fresher" recruits.

MAJOR ACCOMPLISHMENTS
- Launch of the MyGov.in portal, with more than 19 lac citizens interacting on it.
- Establishment of BharatNet for the distribution of broadband connectivity, using fibre cable technology.
- Training of 55 lac people under the digital literacy programme and allotment of INR 6 crores for the programme, during the last budget.
- Enrollment of 15 lac pensioners onto the biometric-enabled digital service, Jeevan Pramaan.
- Initiation of the E-sign framework to digitally sign documents.
- Generation of interest among Silicon Valley tech giants, such as Google, Microsoft, Qualcom and Cisco, to participate in the Digital India and Smart City projects.
- Bharat Sanchar Nigam Limited (BSNL) to undertake large-scale deployment of WiFi hotspots across India.
- Introduction of the Unified Payment Interface (UPI) by National Payments Corporation of India (NPCI) to enable citizens to carry out instant push and pull transactions without issues.
- Launch of an exclusive job portal dedicated to the differently abled people.
- Kickstart of Mahila-E-Haat programme and encouragement of aspiring women entrepreneurs.
- Introduction of free “mobile TV” by a public broadcaster, Doordarshan, to air free TV content on mobile phones across 16 cities initially (without any internet connection).

CAMPAIGN STATUS AND PROGRESS REPORT
Some of the Digital India programme goals may not be easily achieved by 2019-20. The initial phase to kick start new initiatives has been difficult and it will get even more so as the deadline looms. So, if we go by the figures (as detailed hereunder) and compare them with the targets, it may seem that the campaign is lagging behind. But, the progress is still significant and it is sure to help bring about digital empowerment in the lives of millions of Indians by the time it comes to an end.

Let us track the progress until June-July 2016 below:

- According to the World Bank’s Doing Business 2016 report, India has raised their rank by 12 places from rank 142 (in 2015) to rank 130 (in 2016), showcasing tremendous improvement rarely seen in an economy as large as India’s and within such a short timeframe. The two major contributors towards this improvement in rank for India have been the greater ease of starting a business (through the elimination of the minimum capital requirement and the need of a certificate to start business operations) as well as greater availability of electricity.
- The extensive use of the eBiz portal (India’s single window government to business online platform) helped to provide more eGovernance services on demand. The portal now offers more than 16 services, against the 12 that it offered initially. It has contributed to reducing the average time it takes to start a business in India from more than 30 days to an average of only 29 days.

- BharatNet aims to connect 2,50,000 gram panchayats across India. As per this scheme, the OFC pipe laid (till July 2016) is around 1,40,742 km (against 2,292 km in 2014), while the OFC fibre laid is approximately 1,12,871 km (against 358 km in 2014). It has offered optical fibre connectivity to around 48,199 gram panchayats so far.
- This campaign has managed to make the internet reach out to around 40 crore Indian citizens, while the number of broadband users has increased to 12.088 crore.
- Out of the 40,000 Wi-Fi hotspots planned by BSNL for important locations across India, it has managed to commission around 2,504 Wi-Fi hotspots at 1,227 locations.
- The number of Common Service Centres (CSCs) has rose from 80,000 (before this digital movement) to around 1,66,000.
- Digitisation of around 21,319 post offices has occurred, out of a target of 1,55,000 post offices.

DIGITAL LITERACY

One of the major challenges for the Digital India programme from the start has been to increase digital literacy. Even after making the internet available and offering low-cost computing devices the question remains, will the citizens use the internet? This question persists even today as there is little demand seen for state-offered broadband internet and even less interest in booking rail tickets online or checking mark sheets over the internet. To overcome this hurdle, a Digital Literacy Mission with estimates of about INR 1,800 crore ($26.5 crore) is in the pipeline to train 6 crore rural people (at INR 300 for training one person). Also, earlier this year, Intel India initiated three projects to accelerate digital literacy and upskill people at the grassroots level (non-urban regions, tier two cities and beyond). It will be interesting to see if the government is able to fast track the key measures to enable timely achievement of all the objectives of the Digital India initiative.

CONCLUSION

Therefore, it can be concluded that 'Digital India' is all set to transform the interface of the country's socio-economic dynamics. It is deemed to bring systems and infrastructure up to speed and leverage the country's workforce, establishing a firm foundation towards sustainable practices and eventually progress.

REFERENCES

1. Arvind, P. P., Vitthalrao, M. P., & Mukund, J. M. (2015). Digi Locker (Digital Locker): Ambitious aspect of Digital India Programme. GE- International Journal of Management Research, 3(6), 299-308.
2. Gupta Neeru and Arora Kirandeep (2015). Digital India: A Roadmap for the development of Rural India. International Journal of Business Management, vol (2)2, pp1333-1342. Retrieved from www. ijbm.co.in
3. Gupta, N., & Arora, K. (2015). Digital India: A Roadmap for the Development of Rural India. International Journal of Business Management, 2(2), 1333-1342.
4. http://egovernance.in/news/digital-indiaachievements-concerns
5. http://www.digitalindia.gov.in/content/trans formingindia-ebook
6. http://www.indiacelebrating.com/governme nt/digital-india
7. Midha Rahul (2016). Digital India: Barriers and Remedies. International Conference on Recent Innovations in Sciences, Management, Education and Technology. Retrieved from http:// data. Conference world.in/ICISMET/P256-261. Pdf.
8. Rani Suman (2016).Digital India: Unleashing Prosperity. Indian Journal of Applied Research, volume-6, Issue 4, pp187-189.

A STUDY ON CUSTOMERS ATTITUDE TOWARDS SOCIAL MEDIA NETWORKING

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ABSTRACT
Social Media Networking makes the employers to have their transactions and share their information through online. It has many facilities like communicating, texting, images sharing, audio and video sharing, fast publishing, linking with all over world, direct connecting. The growth of social sites shows a significant change in the social and personal behaviour of internet users. Social Networking sites can make a change on socio- political awareness, enhance the different skills like increase language proficiency, develop online communication skills, create broader visionary power and connectivity. It will help them for advertising, job hunting portals, publishing research articles and other techniques etc. Its use makes them to increase day by day with high rate in all over the world. In this research we conclude that more number of respondents was belonging to the age group of 16-30, because social media is highly used only by the college students and youngsters. In spite of all such entertainment, people should be balanced in their life and give proper time to the co- curricular activities in their daily life. Finally, we must be vigilant that e- world cannot be a substitute for the real world.

KEYWORDS
social media networking, customer attitude.

JEL CODE
D19

1. INTRODUCTION AND DESIGN OF THE STUDY
Social media is becoming an integral part of life through online as social websites and applications proliferate. The online social networking site that allows users to create their personal profiles, share photos and videos, and communicate with other users. In business, social media is used to market products, promote brands and connect to current customers and foster new business.

Social media has lessened the use verbal communication and increased the use of online messaging. Most of the social sites have now incorporated webcams for their subscribers. Webcams enables 'friends' to have a one on one conversation while at the same time watching each other. The mode of communication is more private and very effective as subscribers are tend to know each other. There has really been an increase in popularity in webcam conversations. Privacy has been become a rising issue in social media and networking with the addition of locations and GPS tracking.

1.1 STATEMENT OF THE PROBLEM
Social media networking means opening up and sharing information online with others, but there is some information you should never share online.Analysis of customer attitude towards social media networking has to investigate the motivation behind the consumer usage on the social media networking. It is also important to identify the satisfaction and behaviours towards social media networking. The study analysis the factors influencing to use social media networking and the problems faced by them.

1.2 OBJECTIVES OF THE STUDY
1. To study the factors influencing to use social media networking.
2. To study about the customers satisfaction towards social media networking.
3. To study the problems faced by using social media networking.

1.3 SCOPE OF THE STUDY
Researchers are therefore interested to study the factors influencing the use of social media networking and its satisfaction in the city of Coimbatore. This research will result the awareness that how social media is involved in day to day life of every individual. It will be an eye opener for the future generation, to know how much they were involved in social media than in real life. In addition, it is important to know that the social media is the medium of communication and entertainment. But it should not be an addictive and health spoiler. Privacy terms are also expected to be taken care by user, as it is confidential state for each individual.

1.4 METHODOLOGY OF THE STUDY
In this study, the customer's attitude towards social media networking in Coimbatore city has been obtained from the respondents who are residing in the Coimbatore city.

I. SOURCES OF DATA
Data has been collected from two sources.

- **PRIMARY DATA**

Primary data has been collected from customers who are using social media networking by administering a questionnaire.

- **SECONDARY DATA**

Secondary data has been collected from various journals, books, magazines and websites.

II. SAMPLE SECTION
Sample has been selected at random based social media networks.

III. SAMPLING TECHNIQUE
Convenient random sampling method has been adopted to collect the data with structured questionnaires.

IV. SAMPLE SIZE
A total of 120 respondents have been considered for the study.

V. TOOLS USED
- Simple percentage analysis
- Descriptive analysis
- ANOVA- one way analysis variance
- T- test

1.5 LIMITATIONS OF THE STUDY

The following are the limitations:

- The study is restricted to Coimbatore city.
- The research is done on the basis of only 120 samples. The results of customer's perception and expectation cannot be generalized.

2. REVIEW OF LITERATURE

Williams & Williams,(2008)[1] more industries try to benefit from social media as they can be used to develop strategy, accept their roles in managing others' strategy or follow others' direction.

Pal and Kapur (2010)[2] pointed out the pertinent use of blogs as a tool of marketing media for emerging economies.

3. AN OVERVIEW OF THE STUDY

3.1 SOCIAL MEDIA

Social media plays a vital role in the lives of the people around the world. The extent of its impact was very high and their impact where being used by the business people for fitting a new trend in the marketing process. Recent studies show that their form of marketing was more effective than all other methods combined. Social media was a web-based communication tool that enables people to interact with each other by both sharing and consuming information that was being shared. People feel so proud that they are depending upon technology in their day to day life. Right after getting up in the morning till their last work before sleep, they make use of technology. To fulfil their need of communication, the most often used technology driven media are computers and mobile phones.

3.1.1 FEATURES OF SOCIAL MEDIA

- It enables people to create a personalised account and become a user that was unique and will relate to any activity or activities performed by them.
- It allows the user to send, share and receive information on anything around the world by helping in forming a global community among the users.
- It allows the user to share their personal views and ideas that can be recognised by all.

3.2 SOCIAL NETWORKING

Social networking has grown to become one of the largest and most influential components of the web. Social networking was that connecting people from different places. It was easy to assess social network with few basic profile questions and wonder what users are supposed to do next.

3.2.1 FEATURES OF SOCIAL NETWORKING

- Connect with people for the purpose of sharing information
- A social networking sight provides information regarding to job opportunities.
- As it an open source to user, it can be used in wide sense.
- It provides information regarding all the queries of general public.

3.3 ADVANTAGES OF SOCIAL MEDIA

- Public problem resolution
- Direct engage
- Social profile
- Prominent role
- Education
- Help
- Information and Updates
- Noble Cause
- Awareness
- Helps Government and Agencies Fight Crime

3.4 DISADVANTAGES OF SOCIAL MEDIA

- Cyber bullying
- Hacking
- Reputation
- Health issues
- Social Media causes deathGlamorizes Drugs and Alcohol
- Security issues
- Addiction

4. ANALYSIS AND INTERPRETATION

Tool used in the project were:

- Percentage Analysis
- Descriptive analysis
- Anova- One way analysis of variance
- T-test

PERCENTAGE ANALYSIS

Percentage analysis is carried out for all the questions specified in the questionnaire. This analysis illustrated the classification of the respondents falling under each category. The percentage analysis is used mainly for standardisation and comparison. Charts depicted are in support of analysis.

TABLE 4.1: AGE OF THE RESPONDENTS

AGE	RESPONDENTS	PERCENTAGE
Below 15 Years	4	3.3
16-30 Years	94	78.3
31-45 Years	10	8.3
46 Years and above	12	10.0
TOTAL	120	100.0

Source: Primary Data

It had been inferred from table 4.1 that 78.3% of the respondents' belong to the age group of 16-30 years, 10.0% of them are in the age group of 46 years and above, 8.3% of the respondents' were between 31-45 years and 3.3% of the respondents' age were below 15 years.

Hence, it had been found that more number of respondents belong to the age group of 16 -30 years.

EXHIBIT 4.1: AGE OF THE RESPONDENTS

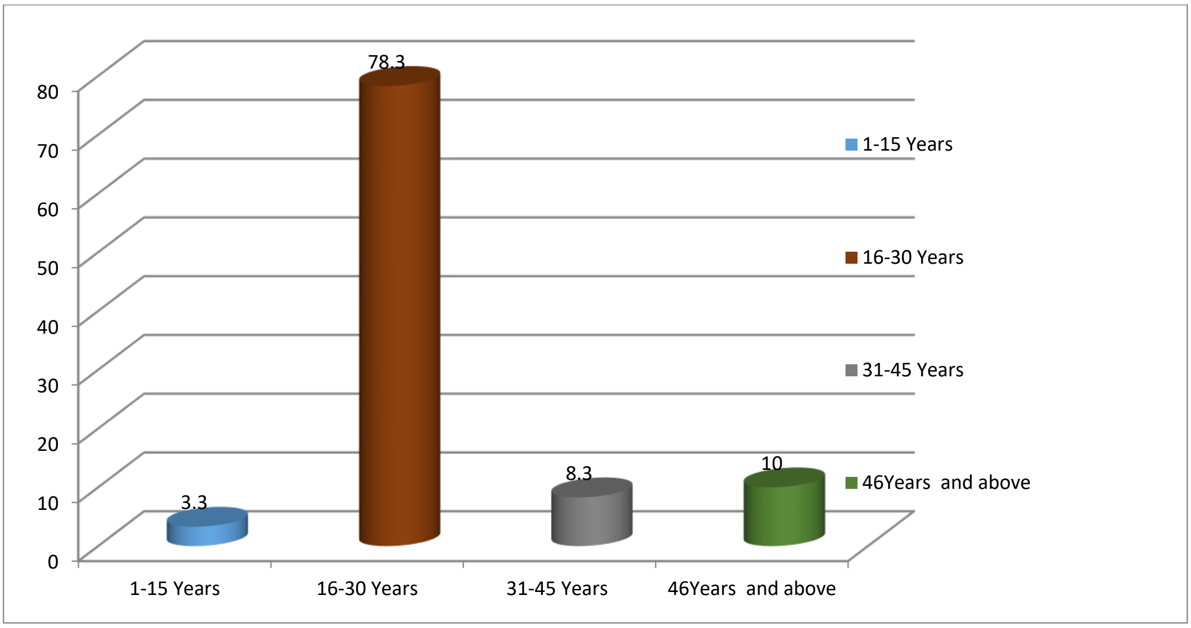


TABLE 4.2: INCOME OF THE RESPONDENTS

INCOME	NO. OF RESPONDENTS	PERCENTAGE
Below Rs 10000	19	15.8
Rs 10000 – 20000	30	25.0
Rs 20000 - 30000	25	20.8
Rs 30000 & above	46	38.3
TOTAL	120	100.0

Source: Primary Data

It had been inferred that majority of 38.3% of the respondents stated in the income level of Rs. 30000 and above were using the social media networking, 25% of the respondents belong to the income level of Rs. 10000 – 20000, 20.8% of the respondents belong to the income level of Rs. 20000-30000 and finally 15.8% of the respondents belong to the income level below Rs. 10000 were using the social media networking.

Hence, from the above inference it was stated that majority of the respondents were under the income level of Rs. 30000 and above.

EXHIBIT 4.2: INCOME OF THE RESPONDENTS

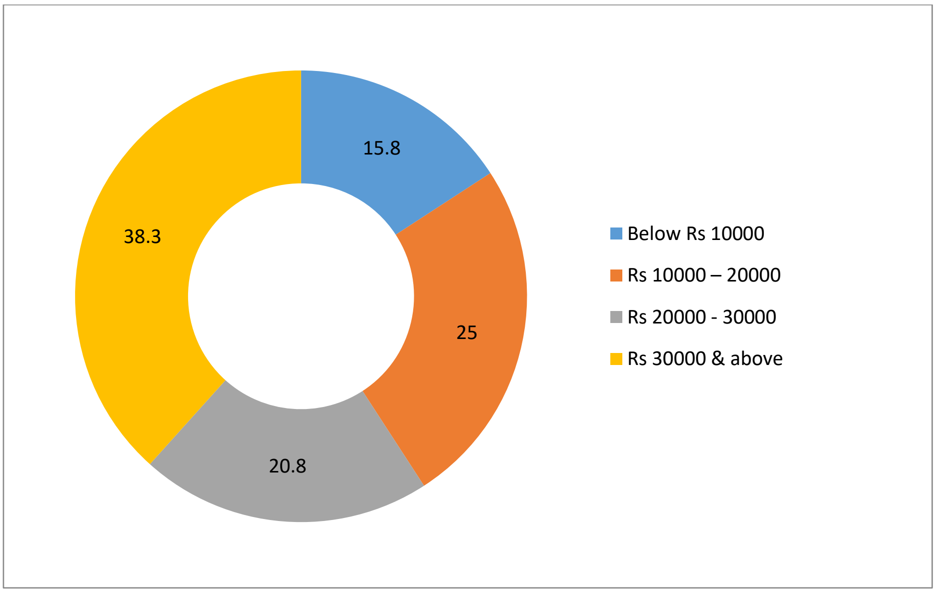


TABLE 4.3: EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

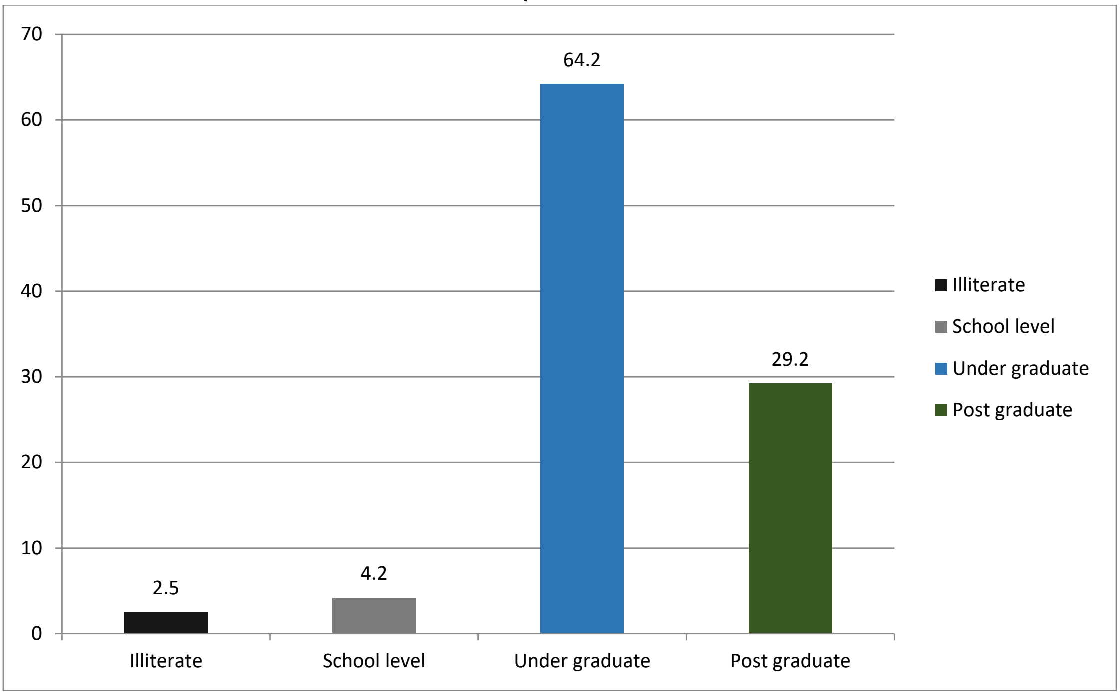
EDUCATIONAL QUALIFICATION	NO. OF RESPONDENTS	PERCENTAGE
Illiterate	3	2.5
School level	5	4.2
Under graduate	77	64.2
Post graduate	35	29.2
TOTAL	120	100.0

Source: Primary Data

It had been inferred that majority of 64.2% of the respondents are under- graduate, 29.2% of the respondents are post - graduate, 4.2% of the respondents are school level and finally 2.5% of the respondents are illiterate.

Hence, it had been found that majority of users of social media networking had completed under- graduation degree.

EXHIBIT 4.3: EDUCATIONAL QUALIFICATION OF THE RESPONDENTS



DESCRIPTIVE ANALYSIS

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

TABLE 4.4: LEVEL OF USAGE OF SOCIAL MEDIA NETWORKING

PARTICULARS	No.	Minimum	Maximum	Mean	Std. Deviation
Entertainment	120	1	5	4.12	1.101
Information	120	1	5	3.88	.894
Business	120	1	5	3.08	1.234
Connectivity	120	1	5	3.88	.862
Easy way to communicate	120	1	5	4.16	.850
Time spending	120	1	5	4.01	1.049

Source: Computed

A five point rating scale ranging from 1 to 5 where 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, 5 for strongly agree has been constructed to obtain the opinion of the respondents on their level of satisfaction on social media usage. From the mean ratings computed based upon the response of the respondents it is evident that most of them have been satisfied about the various attributes of social media usage namely, 'Easy way to communicate' (Mean 4.16), 'Entertainment' (Mean 4.12), 'Time spending' (Mean 4.01), Information' (Mean 3.88), 'Connectivity' (Mean 3.88), ' Business' (Mean 3.08).

Therefore based on the high mean rating it has been concluded that most of the respondents have been satisfied with all the social media offered.

ANOVA

ANOVA has been used to examine whether there has been significant variation between respondents' 'demographic and usage social media related variables' on social media networking'. Higher the score more is the agreeability on the statements. The mean scores have been compared with the independent variables – demographic and social media networking factors, to know the level of variance in the usage of the respondents classified under different categories.

H_0 : The usage of social media scores do not vary significantly based on the selected demographic factors.

The null hypotheses has been tested for each of the personal and social media networking related variables separately and are presented in the table 4.6

TABLE 4.5: LEVEL OF USAGE OF SOCIAL MEDIA Vs. DEMOGRAPHIC VARIABLES

PARTICULARS		LEVEL OF USAGE OF SOCIAL MEDIA			TABLE VALUE	F	SIG.
		MEAN	SD	NO.			
Age	1-15 years	4.7500	.82260	4	.95	.229	NS
	16-30 years	4.6149	.61539	94			
	31-45 years	4.5400	.90456	10			
	46 years and above	4.7333	.56138	12			
Income	Below 10000	4.6526	.67607	19	.572	1.423	NS
	10000-20000	4.5667	.63914	30			
	20000-30000	4.4400	.61101	25			
	30000 and above	4.7522	.62565	46			
Educational qualification	Illiterate	4.4667	1.28582	3	.091	.219	NS
	School level	4.5200	.72938	5			
	Under education	4.6571	.62480	77			
	Post graduate	4.5829	.61810	35			

Source: Computed

AGE

The F-ratio value has shown that there has been no significant difference in the respondents' level of usage score on social media networking when they have been classified based on their age, thereby, accepting the null hypothesis.

EDUCATIONAL QUALIFICATION

It has been concluded with the F-ratio value that there is no significant difference in the usage which proves that the respondents' level of usage score on social media networking do not vary based on their educational qualification. Hence, the null hypothesis has been accepted with respect to educational qualification.

INCOME

The F-ratio value has shown that there is no significant difference in the respondents' level of usage on social media networking when they have been classified based on their income, thereby, accepting the null hypothesis.

t - TEST

t- Test has been employed to examine whether the scores obtained for ' usage of social media' has varied significantly among the respondents classified based on ' demographic variables' with the following null hypothesis:

H_0 : There has been no significant difference in the scores of usage of social media by the respondents classified based on demographic variables namely, gender and marital status.

TABLE 4.6: USAGE OF SOCIAL MEDIA Vs. DEMOGRAPHIC VARIABLES

PARTICULARS		LEVEL USAGE OF SOCIAL MEDIA			TABLE VALUE	T	SIG.
		MEAN	SD	NO.			
Gender	Male	4.7333	.72673	42	1.371	.191	NS
	Female	4.5667	.58057	78			
Marital Status	Married	4.5643	.64877	28	.574	.949	NS
	Unmarried	4.6435	.63649	92			

Source: Computed

GENDER

The t values suggest that there is no significant difference in the respondents' level of usage of social media when they are classified based on their gender. Thus, the null hypothesis has been accepted with respect to the factor 'gender'.

MARITAL STATUS

There has been no significant variation in the respondents' level of usage of social media when they have been classified based on demographic variables, thereby, accepting the null hypothesis.

DESCRIPTIVE ANALYSIS

TABLE 4.7: LEVEL OF SATISFACTION TOWARDS THE SOCIAL MEDIA NETWORKING

PARTICULARS	No.	Minimum	Maximum	Mean	Std. Deviation
Social media answers customers' question and solves the problems	120	1	5	3.70	.992
Social media keeps customers informed/ alert them to problems or promotion	120	1	5	3.62	.927
Social media helping you in updating up to date information to your necessity	120	1	5	3.96	.902
Social media helpful in highlighting your profile of lifestyle	120	1	5	3.67	.823
Social media getting feedback from you answer satisfy your needs	120	1	5	3.44	1.011
It is satisfied with the level of consumption of internet usage by the social media	120	1	5	3.33	1.014
Social media is easily accessible for the adults	120	1	5	3.77	.950

Source: Computed

A five point rating scale ranging from 1 to 5 where 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, 5 for strongly agree has been constructed to obtain the opinion of the respondents on their level of satisfaction towards the social media networking. From the mean ratings computed based upon the response of the respondents it is evident that most of them have been satisfied about the various attributes of satisfaction towards the social media networking namely, " social media helping you in updating up to date information to your necessity" (mean 3.96), " social media is easily accessible for the adults" (mean 3.77), "social media answering customer question and solves the problems" (mean 3.70), " social media helpful in highlighting your profile of lifestyle" (mean 3.67), " social media keeps customers informed/ alert them to problems or promotion" (mean 3.62), " social media getting feedback from you answer satisfy your needs" (mean 3.44), "it is satisfied with the level of consumption of internet usage by the social media" (mean 3.33).

Therefore, based on the high mean rating it has been concluded that most of the respondents have been satisfied with all the social media offered.

ANOVA

H_0 : The level of satisfaction scores do not vary significantly based on the selected demographic factors.

The null hypotheses has been tested for each of the personal and social media networking related variables separately and are presented in the table 4.10

TABLE 4.8: LEVEL OF SATISFACTION TOWARDS THE SOCIAL MEDIA NETWORKING vs. DEMOGRAPHIC VARIABLES

PARTICULARS		LEVEL OF SATISFACTION OF SOCIAL MEDIA			TABLE VALUE	F	SIG.
		MEAN	SD	NO.			
Age	1-15 years	4.3500	.57446	4	.359	1.000	NS
	16-30 years	4.3021	.55007	94			
	31-45 years	4.6400	.96056	10			
	46 years and above	4.4000	.62085	12			
Income	Below 10000	4.3684	.46314	19	.242	.669	NS
	10000-20000	4.2267	.69626	30			
	20000-30000	4.3120	.49356	25			
	30000 and above	4.4217	.63698	46			
Educational qualification	Illiterate	4.4000	1.60000	3	.205	.564	NS
	School level	4.6800	.30332	5			
	Under education	4.3273	.59992	77			
	Post graduate	4.3200	.52289	35			

Source: Computed

AGE

The F-ratio value has shown that there is no significant difference in the respondents' level of satisfaction on social media networking when they have been classified based on their age, thereby, accepting the null hypothesis.

EDUCATIONAL QUALIFICATION

It has been concluded with the F-ratio value that there is no significant difference in the mean satisfaction scores which proves that the respondents' level of satisfaction on social media networking do not vary based on their educational qualification. Hence, the null hypothesis has been accepted with respect to 'educational qualification'.

INCOME

The F-ratio value has shown that there is no significant difference in the respondents' level of satisfaction on social media networking when they have been classified based on their income, thereby, accepting the null hypothesis.

t- TEST

t- Test has been employed to examine whether the level of satisfaction scores of usage of social media has varied significantly among the respondents classified based on ' demographic variables' with the following null hypothesis:

H_0 : There has been no significant difference in the level of satisfaction scores of social media by the respondents classified based on demographic variables namely, gender and marital status.

TABLE 4.9: SATISFACTION TOWARDS SOCIAL MEDIA NETWORKING vs. DEMOGRAPHIC VARIABLES

PARTICULARS		SATISFACTION SCORE ABOUT LEVEL OF SATISFACTION			TABLE VALUE	T	SIG.
		MEAN	SD	NO.			
Gender	Male	4.4000	.61684	42	.781	.741	NS
	Female	4.3103	.59141	78			
Marital status	Married	4.4143	.67094	28	.731	.327	NS
	Unmarried	4.3196	.57803	92			

Source: Computed

GENDER

The t values suggest that there is no significant difference in the respondents' level of satisfaction about usage of social media when they are classified based on their gender. Thus, the null hypothesis has been accepted with respect to the factor 'gender'.

MARITAL STATUS

There has been no significant variation in the respondents' level of satisfaction about the usage of social media when they have been classified based on demographic variables, thereby, accepting the null hypothesis.

DESCRIPTIVE ANALYSIS

TABLE 4.10: PROBLEMS FACED BY USING SOCIAL MEDIA NETWORKING

PARTICULARS	No.	Minimum	Maximum	Mean	Std. Deviation
Addiction	120	1	5	1.79	.878
Misuse	120	1	5	1.98	.917
Fake information	120	1	5	2.06	.919
Ignoring responsibility like homework / chores because of social networking sights	120	1	5	2.16	.907
Interact with people on social networking sights rather than face to face	120	1	5	2.09	.810
Social media is frustrating when social networking sight goes down/ is unavailable	120	1	5	2.27	1.069

Source: Computed

A five point rating scale ranging from 1 to 5 where 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, 5 for strongly agree has been constructed to obtain the opinion of the respondents on their level of satisfaction on problems faced by using social media websites. From the mean ratings computed based upon the response of the respondents it is evident that most of them have been satisfied about the various attributes of the problems faced by the social media websites namely, "social media is frustrating when social networking sights goes down/ is unavailable" (mean 2.27), "ignoring responsibility like homework/ chores because of social networking sights" (mean 2.16), "interact with people on social networking sights rather than face to face" (mean 2.09), "fake information" (mean 2.06), "misuse" (mean 1.98), "addiction" (mean 1.79).

Therefore, based on the high mean rating it has been concluded that most of the respondents have been satisfied with all the social media offered.

ANOVA

H_0 : The usage of social media scores do not vary significantly based on the selected demographic factors.

The null hypotheses has been tested for each of the personal and social media networking related variables separately and are presented in the table 4.13

TABLE 4.11: PROBLEM FACED BY USING SOCIAL MEDIA NETWORKING vs. DEMOGRAPHIC VARIABLES

PARTICULARS		PROBLEM OF SOCIAL MEDIA			TABL VALUE	F	SIG.
		MEAN	SD	NO.			
Age	1-15 years	2.0500	.34157	4	.518	1.067	NS
	16-30 years	2.4574	.68822	94			
	31-45 years	2.4600	.69314	10			
	46 years and above	2.7333	.82829	12			
Income	Below 10000	2.5368	.56589	19	.285	.580	NS
	10000-20000	2.5267	.74738	30			
	20000-30000	2.5520	.81093	25			
	30000 and above	2.3652	.65361	46			
Educational qualification	Illiterate	3.0000	.87178	3	.309	.629	NS
	School level	2.5200	.62610	5			
	Under education	2.4416	.68004	77			
	Post graduate	2.4857	.74088	35			

Source: Computed

AGE

The F-ratio value has shown that there is no significant difference in the respondents' level of usage on social media networking when they have been classified based on their age, thereby, accepting the null hypothesis.

EDUCATIONAL QUALIFICATION

It has been concluded with the F-ratio value that there is no significant difference in the usage which proves that the respondents' level of usage score on social media networking do not vary based on their educational qualification. Hence, the null hypothesis has been accepted with respect to educational qualification.

INCOME

The F-ratio value has shown that there is no significant difference in the respondents' level of usage on social media networking when they have been classified based on their income, thereby, accepting the null hypothesis.

t-TEST

t- Test has been employed to examine whether the problems' scores obtained from the 'usage of social media' has varied significantly among the respondents classified based on 'demographic variables' with the following null hypothesis:

H_0: There has been no significant difference in the problems' scores obtained from the usage of social media by the respondents classified based on demographic variables namely, gender and marital status.

TABLE 4.12: PROBLEM SCORES ON USAGE OF SOCIAL MEDIA Vs. DEMOGRAPHIC VARIABLES

PARTICULARS		PROBLEM SCORES ON USAGE OF SOCIAL MEDIA			TABLE VALUE	T	SIG.
		MEAN	SD	NO.			
Gender	Male	2.5286	.69257	42	.655	.862	NS
	Female	2.4410	.70203	78			
Marital status	Married	2.6286	.77692	28	.1365	.323	NS
	Unmarried	2.4239	.66817	92			

Source: Computed

GENDER

The t value suggests that there is no significant difference in the respondents' level of problem in the usage of social media when they are classified based on their gender. Thus, the null hypothesis has been accepted with respect to the factor 'gender'.

MARITAL STATUS

There has been no significant variation in the respondents' level of problem in the usage of social media when they have been classified based on demographic variable, thereby, accepting the null hypothesis.

The overall result of t-Test has revealed that respondents' level of problem faced on usage of social media has varied at a significant level for the factor 'marital status', whereas, there has been no significant variation in the level of problems faced when there gender has been considered. Hence, the null hypothesis has been accepted with respect to 'gender' of the respondents.

DESCRIPTIVE ANALYSIS

TABLE 4.13: PREFERENCE OF CUSTOMER TOWARDS SOCIAL MEDIA NETWORKING

PARTICULARS	No.	Minimum	Maximum	Mean	Std. Deviation
Meet new people	120	1	5	3.84	1.138
Make new business contact	120	1	5	3.43	.968
Share pictures, videos and games	120	1	5	3.93	1.047
Promote business	120	1	5	3.48	.996
Promote ideas	120	1	5	3.95	.969

Source: Computed

A five point rating scale ranging from 1 to 5 where 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, 5 for strongly agree has been constructed to obtain the opinion of the respondents on their level of satisfaction on your preference in social media networking. From the mean ratings computed based upon the response of the respondents it is evident that most of them have been satisfied about the various attributes of social media preference namely, "promote ideas" (mean 3.95), "share pictures, videos and games" (mean 3.93), "meet new people" (mean 3.84), "promote business" (mean 3.48), "make new business contact" (mean 3.43).

Therefore, based on the high mean rating it has been conclude that most of the respondents have been satisfied with all the social media offered.

TABLE 4.14: THE USAGE PATTERN OF SOCIAL MEDIA NETWORKING

PARTICULARS	No.	Minimum	Maximum	Mean	Std. deviation
Chatting	120	1	5	4.23	1.059
e-mail	120	1	5	3.92	.940
Video calls	120	1	5	3.62	1.197
Online games	120	1	5	2.96	1.239
Online videos	120	1	5	3.72	1.189
Dubsmash	120	1	5	2.62	1.490

Source: Computed

A five point rating scale ranging from 1 to 5 where 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, 5 for strongly agree has been constructed to obtain the opinion of the respondents on their level of satisfaction on your pattern of usage. From the mean ratings computed based upon the response of the respondents it is evident that most of them has been satisfied about the various attributes of social media pattern of usage namely, "chatting " (mean 4.23), "e-mail" (mean 3.92), "online videos" (mean 3.72), "video calls" (mean 3.62), "online games" (mean 2.96), "dubsmash"(mean 2.62)

Therefore based on the high mean rating it has been concluded that most of the respondents have been satisfied with all the social media offered.

5. FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

PERCENTAGE ANALYSIS

The result of the percentage analysis has been presented in the following necessitate aspects:

- 78.3% of the respondents are 16-30 years.
- 65.0% of the respondents are Female.
- 38.3% of the respondents have a family income of Rs 30000 & Above.
- 64.2% of the respondents are under graduate.
- 76.7% of the respondents are Unmarried.

ANOVA

- There is no significant difference in the perception about customers' attitude among the respondents in different age group.
- There is no significant difference in the perception about customers' attitude among the respondents in different income level.
- There is no significant difference in the perception about customers' attitude among the respondents in terms of educational qualification.

t –TEST

- There is a no significant difference in respect of perception among the respondents based on the gender
- There is a no significant difference in respect of perception among the respondents based on the marital status.

5.2 SUGGESTIONS

- Majority of internet users are aware about social media but they need to have a best tool for brand promotion, if it needs to be used efficiently.
- The social media networking strategy should be sufficiently flexible to allow to adopt new developments and to determine what works and what does not work.
- Apps should be more users friendly and free from complexity.
- Advertisement on social media should not create disturbance or unnecessary interruptions while usage of the social medias in the online.
- The reviews and complaints raised by the customers on the social networking services should be effectively managed and proper action should be taken by the social media service providers and the action taken should be communicated to the customers.

- Besides entertainment, customers prefer safety to protect them from third parties, so that social media should sincerely concrete to make an effort in strengthening it i.e., identity theft was a serious thread these days and users would never want to put themselves at risk through unsafe medium of app.
- It was an addictive part of human life as people were using it continuously. In such cases, social media should provide them effective information and services than entertainment through their service and survey.

5.3 CONCLUSION

Social Media Networking makes the employers to have their transactions and share their information through online. It has many facilities like communicating, texting, images sharing, audio and video sharing, fast publishing, linking with all over world, direct connecting. The growth of social sites shows a significant change in the social and personal behaviour of internet users.

Social Networking sites can make a change on socio- political awareness, enhance the different skills like increase language proficiency, develop online communication skills, create broader visionary power and connectivity. It will help them for advertising, job hunting portals, publishing research articles and other techniques etc. Its use makes them to increase day by day with high rate in all over the world. In this research we conclude that more number of respondents was belonging to the age group of 16-30, because social media is highly used only by the college students and youngsters. In spite of all such entertainment, people should be balanced in their life and give proper time to the co- curricular activities in their daily life. Finally, we must be vigilant that e- world cannot be a substitute for the real world.

REFERENCES

JOURNALS

1. **Williams, T., & Williams, R. (2008)**[1]**.** Adopting social media: Are we leaders, managers or followers? *Communication World, 25*(4), 34-37.
2. **Pal,S.K; &Kapur,V.(2010)**[2] " Blog marketing strategies for mature and emerging market" :International journal of innovation management and technology, 1(4),411-418.

BOOKS

3. *Platform* by Michael **S.Hyatt**
4. *Social media marketing* by **Doug Sahlin** and **Jan Zimmerman**

ASSESSMENT OF EMOTIONAL INTELLIGENCE AND ITS IMPACT ON LEADERSHIP STYLE OF LEATHER ENTREPRENEURS AND EXECUTIVES

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ABSTRACT

Emotional Intelligence has become an essential leadership trait in workplace. This paper tries to explore the leadership styles of leather entrepreneurs and determine the influence of emotional intelligence factors on different leadership styles adopted. The study also tries to find out the extent of relationship between Emotional Intelligence factors and leadership style in Leather. For this purpose, 118 respondents (managers, executives and entrepreneurs) were selected as a sample size for the study from 15 leather companies and tanneries situated in Vellore district of Tamilnadu in India. Primary data is collected with the structured Questionnaire adopted from Tannenbaum and Schmidt (1958) Leadership style Scale and Daniel Goleman (1998) Self Assessment Questionnaire scale on emotional Intelligence. The result reveals that 49.2% were tell leaders and the emotional intelligence factors such as Self Awareness, Managing Emotions and Managing Oneself is needed for effective leadership style in managing the businesses successfully in Leather industry.

KEYWORDS

emotional intelligence, leadership style, leather entrepreneurs.

JEL CODE

M10

1. INTRODUCTION

An unpredictable economic condition in the modern day globalized economies has affected the stability of almost all business organizations. The issues of psychological contracts, leadership and trust, performance management, information and communication technology have added up to the complexity of effectively managing these organizations Emotional intelligence is known to be a key part of effective leadership. A leader lacking in emotional intelligence will not be able to effectively measure the needs, requirements and expectations of their team members. Leaders who react from their emotions can create mistrust amongst their team and can seriously jeopardize their working relationships. Good leaders must be self aware and understand that how their verbal and non-verbal communication influences their group.

2. STATEMENT OF PROBLEM

Leading people in the organization is the major challenge in VUCA (Volatility, Uncertainty Complexity, Ambiguity) world. An effective leader influences followers in desired way to achieve desired goals. Every successful manufacturing company needs a leader, and someone whose decisions and values make them look different from others. Long-term success in manufacturing companies such as Leather companies and tanneries depend on a number of factors, such as the ability to deliver a marketable product and continue to develop it, the ability to establish relationships with loyal buyers, and the ability to operate with strong profit margins. A person with high emotional intelligence will not only understand, adjust and manage the emotions of self and others but also lighten emotional disturbances and anxieties, which will contribute considerably to productivity and performance at the workplace on both personal and organizational level (Seipp, 1991). Thus, this study helps to access the leadership styles of the leather entrepreneurs and executives and their capability to cope up with emotions.

3. REVIEW OF LITERATURE

3.1. EMOTIONAL INTELLIGENCE

Thorndike (1920) identified social intelligence as a dimension of intelligence. He described it as "an ability to understand and manage men and women, boys and girls, to act wisely in human relations." In 1989 Stanley Greenspan put forward a model to describe Emotional Intelligence. But, the original definition is coined by the team of Salovey and Mayer (1990) as follows- **"**Emotional intelligence (EI) refers to the collection of abilities used to identify, understand, control and assess the emotions of the self and others". However, the term became widely known with the publication of Goleman's book: Emotional Intelligence – Why it can matter more than IQ (1995). According to Daniel Goleman (1998), an American psychologist emotional intelligence, there are five key elements for effective leadership namely :Self-awareness,. Self-regulation, Motivation, Empathy and Social skills.

3.2. LEADERSHIP STYLES

Leadership styles are the approaches used to motivate followers. There are different types of Leadership styles. In the 1930s, Kurt Lewin developed a framework based on a leader's behavior. He argued that there are three types of leaders: Autocratic, Democratic and Laissez-faire leaders, Leadership styles should be selected and adapted to fit organizations, situations, groups, and individuals. In this modern and competitive environment and workplace, the leadership styles are classified in different ways namely Authentic Leadership., Autocratic Leadership, Laissez-Faire Leadership, Transformational Leadership, Transactional Leadership., Bureaucratic Leadership, Charismatic Leadership. And Participative Leadership.

Tannenbaum and Schmidt (1958) provide a continuum for leadership and involvement that includes an increasing role for employees and a decreasing role for supervisors in the decision process. The continuum includes this progression.

Tell Leadership Style: The superior makes the decision, provides specific instructions and closely supervises performance

Sell Leadership Style: The leader explains decisions and provides opportunity for clarifications

Consult Leadership Style: Leader shares ideas and facilitates in the juniors in decision making process while retaining authority to make the final decision himself.

Join or Empower: the supervisor invites employees to make the decision with the supervisor. The supervisor considers the junior's voice equal in the decision process.

3.3. RELATIONSHIP BETWEEN LEADERSHIP STYLE AND EMOTIONAL INTELLIGENCE

Ashleigh D. Farrar (2009) evaluates the possible link between emotional intelligence and leadership effectiveness. Meta analytic techniques were used to analyze this relationship. Results revealed that over all, there is a positive relationship between emotional intelligence and leadership effectiveness. Also, while the type of emotional intelligence measure used served as a moderator to this relationship, a second and third meta-analysis supported the overall positive relationship of emotional intelligence and leadership effectiveness.

Ming-Ten Tsai et al. (2011) studies the impact among the emotional intelligence and leadership style, self-efficacy and organizational commitment of employees in the banking industry in Taiwan. This study has found that a supervisor's emotional intelligence has a significant positive influence on his/her personal leadership style, that a supervisor with high emotional intelligence is able to perform excellent leading skills to elevate the employee self efficacy, and that employees self-efficacy results in a significant positive influence on organizational commitment.

Iaon Pastor (2014) carried out a study in a sugar factory, and tried to characterise the internal environment of the organisation and the relationships that dominate them in order to identify and understand the situation the organisation is confronted with in terms of the relationship between managers and subordinates, empathy, nonverbal communication, self-control, handling relationships, emotional intelligence. We tried to provide exploratory evidence for the effects that emotional intelligence has on leaders and followers in terms of performance, results and work satisfaction.

Deepika Dabke (2016) studied the relationship between performance-based EI and transformational leadership as exhibited by participants in the work role with leadership effectiveness as perceived by their superiors and subordinates. The sample comprised 200 managers who were administered the Mayer, Salovey, and Caruso EI Test and the Multifactor Leadership Questionnaire (MLQ) 5X scale. A Pearson's correlation coefficient revealed that there was a significant positive correlation between subordinates' perception of leadership effectiveness and overall EQ. All transformational behaviors showed a significant positive correlation with perceived leadership effectiveness.

Nishant Gaur & Vikas Gupta (2017) in their paper identify Emotional Intelligence (EI) competencies mandatory for leadership position in knowledge based organization and the role Emotionally Intelligent leader plays in creating Emotional Intelligent teams. The research paper utilizes and adapts questionnaire framework with 12 questions by Buckingham and Coffman (1999, on employee engagement) to make leader and team members aware of emotions and understand emotions of self and others. The results reveal that Knowledge based leader plays significant role towards development of knowledge based organization. Knowledge based leader possess competencies which includes building relationships, sharing information, developing novel ideas and enhance personal as well as group learning awareness. These competencies bear a very similar resemblance to EI competencies.

Though there are various studies to find out the relationship between leadership style and emotional intelligence, the low level workers in leather industries are volatile and they change the jobs often depending on their convenience. They shift to other companies if they are offered higher pay. Therefore, the leadership style and emotional intelligence of the high level executives, managers and entrepreneurs play a significant role in managing the employees in the organization successfully. Thus, with this aspect, the relationship between leadership styles, which is the main independent variable and dependent variable Emotional Intelligence and its sub variables are Self-awareness, Self-regulation, Motivation, Empathy and Social skills in Leather manufacturing companies are unearthed.

4. OBJECTIVES OF THE STUDY

1. To identify the leadership styles adopted by the respondents in Leather companies
2. To study the extent of relationship between Emotional Intelligence factors and leadership style in Leather Industry
3. To determine the influence of emotional intelligence factors on different leadership styles

5. HYPOTHESIS

Ho1: There is no significant relationship between Emotional Intelligence factors and Leadership Styles

Ho2: Emotional Intelligence factors has an impact on different leadership styles

6. RESEARCH METHODOLOGY

The study is exploratory and descriptive in nature. Primary data is collected from Tannenbaum and Schmidt (1958) Leadership style 5x scale and Daniel Goleman (1998) Self Assessment Questionnaire on emotional intelligence for effective leadership 5x scale Questionnaire by obtaining the answers from the respondents and Secondary sources of data, is obtained from various research papers, published article in journals, web articles (internet sources), past studies and newspaper etc.

6.1. SAMPLE AND DATA COLLECTION

Stratified Random sampling method was used for this research study. 118 respondents (managers, executives and entrepreneurs) were selected as a sample size for the study from 15 leather companies and tanneries situated in Vellore district of Tamilnadu in India. A Response rate of the questionnaire was 90.76 % as 130 out of 118 questionnaires were received back. The questionnaires were designed for a nominal and Likert scale. Percentage analysis, regression and correlation techniques were used to analyze the results.

7. ANALYSIS AND FINDINGS

TABLE 7.1: RELIABILITY STATISTICS

Variables	No of items	Chronbach Alpha
Emotional Intelligence Scale		
Self Awareness (SA)	10	0.810
Managing Emotions (ME)	10	0.725
Motivating Oneself (MO)	10	0.807
Empathy (E)	10	0.766
Social Skill (SS)	10	0.783
Leadership Style Scale		
Tell Leadership style	12	0.848
Sell Leadership Style	11	0.714
Consult Leadership Style	12	0.894
Empower Leadership style	12	0.877

The above table gives Cronbach's Alpha value for each variable. As every value of Cronbach's Alpha is 0.7 and higher, it means that these variables have relatively high internal consistency and good reliability.

TABLE 7.2: DEMOGRAPHIC FACTORS

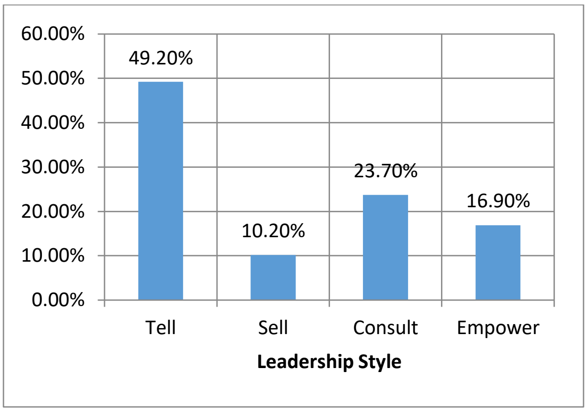
Demographic factors	No of Respondents	Percent
Age		
25-45 years	78	66.1
Above 45 years	40	33.9
Marital Status		
Married	103	87.3
Single	15	12.7
Annual Income		
Upto 10 Lakhs	88	74.6
10 Lakhs and above	30	25.4
Experience		
Up to 10 years	45	38.1
More than 10 years	73	61.9
Designation		
Owners	45	38.1
Chief Technical Executives	35	29.7
Managers	38	32.2

The above table shows that 66.1% of the respondents were in the age group of 25-45 years and 33.9% of the respondents are in the age group of above 45 years. It can also be noted that at the higher level of the organisation, all the respondents were male and there were no female executives. 87.3% were married, 74.6% were earning up to 10 lakhs per annum and 61.9% of them had more than 10 years of experience. Among the respondents 38.1% are owners,29.7% are Chief Technical Executives and 32.2% are managers.

TABLE 7.3: LEADERSHIP STYLE

	Frequency	Percent
Tell	58	49.2
Sell	12	10.2
Consult	28	23.7
Empower	20	16.9
Total	118	100.0

CHART 7.1



Among the respondents, 49.2% of them are follow Tell leadership style, 10.2% are Sell leadership, 23.7% are Consult leadership and 16.9% are Empower Leadership style.

TABLE 7.4: CORRELATION BETWEEN LEADERSHIP STYLES AND EMOTIONAL INTELLIGENCE FACTORS

Tell Leadership Style and Self Awareness	0.555**
Sell Leadership Style and Self Awareness	0.680**
Consult Leadership Style and Self Awareness	**0.799****
Empower Leadership Style and Self Awareness	0.526**
Tell Leadership Style and Managing Emotions	**0.773****
Sell Leadership Style and Managing Emotions	0.197*
Consult Leadership Style and Managing Emotions	0.429**
Empower Leadership Style and Managing Emotions	0.648**
Tell Leadership Style and Motivating Oneself	0.529**
Sell Leadership Style and Motivating Oneself	0.606**
Consult Leadership Style and Motivating Oneself	**0.687****
Empower Leadership Style and Motivating Oneself	0.632**
Tell Leadership Style and Empathy	0.729**
Sell Leadership Style and Empathy	0.817**
Consult Leadership Style and Empathy	0.742**
Empower Leadership Style and Empathy	**0.895****
Tell Leadership Style and Social Skill	0.541**
Sell Leadership Style and Social Skill	0.708**
Consult Leadership Style and Social Skill	**0.792****
Empower Leadership Style and Social Skill	0.664**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The relationship among all the variables was found by using Pearson's Correlation Coefficient. There was a significant relationship between all the leadership styles and Emotional Intelligence scales. Among the Leadership styles and Emotional Intelligence factors, the high correlation relationship existed between consult leadership style and self awareness (r-=0.799), Tell Leadership style and managing emotions (r=0.773), Consult Leadership Style and Motivating Oneself (r=0.687), Empower Leadership style and Empathy (r=0.895) and Consult Leadership style and Social Skill (r=0.792).

TABLE 7.5: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688[a]	.473	.450	.88115
a. Predictors: (Constant), awareness, Managing Emotions, Motivating Oneself, Empathy and Social Skill				

Table 7.6: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.193	5	15.639	20.142	.000[b]
	Residual	86.960	112	.776		
	Total	165.153	117			
a. Dependent Variable: Leadership styles						
b. Predictors: (Constant), awareness, Managing Emotions, Motivating Oneself, Empathy and Social Skill						

The Linear Regression Model was used to determine the relationship between dependent and explanatory variables. The value of adjusted "R2" is 0.473 which shows that there is 47.3% variance in organizational effectiveness can be explained by the predictors Self awareness, Managing Emotions, Motivating Oneself, Empathy and Social Skill. The 52.7% variation in organizational effectiveness is due to some other factors.

TABLE 7.7: COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.999	.794		6.296	.000
	Self Awareness	1.085	.507	.314	2.139	.035
	Managing Emotions	-1.702	.191	-.677	-8.918	.000
	Managing Oneself	-1.125	.478	-.298	-2.353	.020
	Empathy	-.176	.262	-.066	-.671	.504
	Social Skill	.585	.507	.169	1.153	.251
a. Dependent Variable: Leadership Style						

The explanatory variable leadership style has (β=1.085, p=.035) which means that each single unit change in employee turnover brought 1.085 unit change in Self Awareness ss while keeping other variables constant. The second explanatory variable firm stability has (β= -1.702. p=.000) which means that for every unit change in firm stability there was a 1.702 unit inverse change in leadership style while keeping other variables constant. Coming to third independent variable Managing Oneself l, we have (β= -1.125, p=.035) which shows that there was 1.125 unit inverse change in leadership style due to single unit change in managing oneself while keeping other variables constant.

8. CONCLUSION

This research study was conducted and confined only to Vellore district of Tamilnadu, future research can be conducted in cities outside Vellore. The current research study found that reliability test results have relatively high internal consistency and good reliability. It was also found out 49.2 % of the respondents follow Tell Leadership type. From the assessment of emotional intelligence the impact in leadership style of entrepreneurs in leather industry is found to be significant. The analysis reveals that the emotional intelligence factors such as Self Awareness, Managing Emotions and Managing Oneself is needed for effective leadership style in managing the businesses successfully in Leather industry. Further research can be conducted on the other factors impacting emotional intelligence like demographic, environmental, job satisfaction, Organizational Stressors etc that the present study has not taken into consideration.

REFERENCES

1. Ashleigh D. Farrar (2009) The role of Emotional intelligence in Leadership Effectiveness : A Meta Analysis, Thesis Presented for the Master of Science Degree The University of Tennessee at Chattanooga
2. Deepika Dabke (2016). Impact of Leader's Emotional Intelligence and Transformational Behavior on Perceived Leadership Effectiveness: A Multiple Source View, *Business Perspectives and Research* First Published January 13, 2016. Vol 4, Issue 1, pp. 27 – 40
3. Goleman, D. (1998). What makes a leader? Harvard Business Review, *76*(6), 93-102.
4. Goleman, D. (1998). Working with Emotional Intelligence. New York: Bantam Books
5. Ioan Pastor (2014) Leadership and emotional intelligence: the effect on performance and attitude, Emerging Markets Queries in Finance and Business, Procedia Economics and Finance 15 (2014), 985 – 992
6. Mayer, J. D. & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), Emotional Development and Emotional Intelligence: Implications for Educators (pp. 3-31). New York: Basic Books
7. Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. [Comment/Reply]. Emotion, 1(3), 232-242.
8. Ming-Ten Tsai1, Chung-Lin Tsai2 and Yi-Chou Wang (2011), A study on the relationship between leadership style, emotional intelligence, self-efficacy and organizational commitment: A case study of the Banking Industry in Taiwan, African Journal of Business Management, Vol. 5(13), pp. 5319-5329, 4 July, 2011
9. Nishant Gaur & Vikas Gupta (2017) Emotional Intelligence as Predictor of Leadership Development in Knowledge-based Organizations, International Journal of Management Research, Vol. 8, No. 1, June 2017,39-46.
10. Seipp, B. (1991). Anxiety and academic performance: A meta-analysis of findings. Anxiety Research, 4(1), 27-41.
11. Singh, S.K. (2007) ‗Emotional Intelligence and organisational leadership: a gender study in Indian context', *Int. J. Indian Culture and Business Management*, 1(1/2),48–63
12. Tannenbaum, A.S. and Schmitt, W.H. (1958). "How to choose a leadership pattern". Harvard Business Review, 36, March-April, 95-101.

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