



ETHOS

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Authors can submit their contributions for possible publication in ETHOS.

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From the Desk of Editor

It is a moment of pride to place before you the second issue of 11th volume of Ethos. The journal has completed its ten years of publishing the research articles in Management, Information Technology and allied areas. Present volume consist five articles.

In first article Dr Ananad G Jumle conduct the evaluation of methods of reducing absenteeism and implementation of business process re-engineering in manufacturing industry. Author suggested that the two way communication method to reduce absenteeism than the other methods of reducing absenteeism such as congenial work environment, training & counseling.

Miss Gouri.V.Salunkhe and Dr.Sarang.S.Bhola evaluate impact of celebrity advertisement and its importance. In third article Mr. Sajal Adlak and Abhijit S. Desai analyzed need of digital detoxification among students. Dr Pravin Narayan Mahamuni and Dr. Anand Ganpatrao Jumle conducted analytical study of profitability performance of Mahindra and Mahindra Ltd: using DuPont Model. Researchers has attempted to measure ROE & ROI to find out the profitability by using DuPont Analysis. At the end, it is concluded that the DuPont analysis made by calculating ROE and ROI for Mahindra & Mahindra Ltd. and result portrays that Mahindra & Mahindra Ltd. have better profitability performance. In fifth article Dr.Nitin Nayak and Dr. Sampada Gulavani done study of work life balance for women faculty in higher education especially in professional education, Researcher concluded that there is a need that management and family members should cooperate women faculty members working in higher education.

I hope that the articles contributed by research scholars and academicians would be immensely beneficial to stakeholders. I look forward to your valuable feedback to enable us enthrall readers and ensure continuous improvement.

DR. B. S. SAWANT
Editor-in-Chief

Evaluation of Methods of Reducing Absenteeism & Implementation of Business Process Re-Engineering in Manufacturing Industry

Anand G. Jumle

Abstract:

Absenteeism has become a vogue within the industries nowadays. The development of absence is sort of universal, although its incidence and magnitude is extremely high in Indian Industrial Organizations, wherever its frequency is commonly an excellent handicap, each to staff and therefore the management. Once associate worker becomes absent, he makes the machine idle or keeps the work house unoccupied and consequently, it directly or indirectly reduces the quantity of production. The loss in production is that the loss of community at giant.

The HR department is at a loss of how to cope with this problem that is reducing the absenteeism level of employees in organizations. Keeping this in view, the researchers have come up with their paper, The paper examines the different methods of reducing absenteeism while implementing Business Process Re-engineering (BPR), in manufacturing companies in Pune region, Maharashtra. It was found that ‘Two- Way communication and prompt redressal of grievances helps in the reduction of absenteeism to quite some extent as compared with other methods.

Keywords : Business Process Re-Engineering, Absenteeism, Manufacturing Companies, Methods of Reducing Absenteeism.

Introduction :

As early as in 1946, the Labour Investigation Committee pointed out that loss due to absenteeism is two fold. Firstly, there is a distinct loss to workers, because the irregularity in attendance reduces their income, when “no work no pay” is the general rule. The loss to employer is still greater as both discipline and efficiency suffer.

Moreover, either an additional complement has to be maintained throughout the year to meet this emergency or the industries have to depend solely on the workers who present themselves at the gate and who are generally not up to the mark. But, the maintenance of an extra complement of workers leads to serious complications and evils. For example, it provides a justification to the employer to provide sufficient work to the substitute workers and force some of the existing workers to take compulsory leave. This was happening in some of the industrial centers. But, this has been resented by the workers who feel that the employers maintain extra labor and force the workers to take compulsory leave, etc.

Anand G. Jumle

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On the other hand, employers argue that they have no option but to maintain extra labor, in view of high rate of absenteeism among the workers. Thus, absenteeism adversely affects both the employers and the workers, and gives rise to many industrial labor and social problems. It also reflects the attitude of the workers towards industry. It affects Industrial Relations adversely.”

Very few industrial concerns collect figures on “absenteeism and even do not appear to have been based upon any standard definitions of absenteeism. Data on turnover were also not reliable. The difficulty in the past has been that no such definitions have been uniformly suggested. Therefore, the precise position in regard to the loss in efficiency on this score could not be ascertained. The position does not seem to be very satisfactory even now. However, the Government of India and the State Government have made efforts to calculate the rate of absenteeism and labour turnover in recent years in different industries.

Review of Literature:

Employee absenteeism is a costly HR problem that has concerned employers and attracted researchers. Absenteeism is universal. Studies show consistent patterns of absence behavior across organizations of various sizes, industries and in different regions of the country. Hence, reducing absenteeism of employees by using different methods becomes pertinent for the HR department while implementing BPR in manufacturing companies.

Dr. B.R. Tyagi, in his paper, “Absenteeism and Labor Turnover,” states that it is very important to reduce the rate of absenteeism and labor turnover for increasing industrial production, as the production of an industry largely depends upon the efficiency and experience of its workers. Hence, the extent to which absenteeism and labor turnover is reduced, the success of an industry is assured. Besides, the workers organizations should be also encouraged to maintain contact with the workers and redress their grievances. This may

also develop good relations between the employers and the workers, that is, two way communication.

Baldev and Sharma have found in their research in automobile plant in Bombay that rural exodus of workers and involvement of Trade Union is the major reasons of absenteeism.

Bhatia S. K. and Valetid G.K. in their study, “An empirical study of factors associated with absenteeism” conclude that longer distance from factory is the main cause to create the chronic absentees.

Morris David examined in his study, “Seasonal fluctuations in absenteeism” stated that the reasons of absenteeism are associated with social causes, and migratory character as well as the rural exodus of the workers.

Angus Hone reveals in his article “ High absenteeism and high commitment”, that values and norms which evolve among the workers as a result of development in technology work and leisure , are now cherished for by the workers, and these they want to enjoy along with monetary benefits by way for his services. Economic consideration, therefore, decides whether one would like to be absent or not from work.

K. N. Vaid in his paper “Work behavior and Work attitude” conducted the survey of 12 years experienced workers and identified chronic absentees, and regular workers. The survey shows that those who are in chronic absenteeism group give importance to agreeable work group, helpful supervisor, reputed company, opportunity for advancement and labor welfare services; while those who were regular gave importance to clean and safety environment and agreeable workgroup, bonus, manageable workload, reputed company and helpful supervisor. None of the group gave importance to wages, job security, and company house. As a whole all the workers agree that they need the helpful supervisor, workable group and seem happy with the fringe benefits. The points where absentee workers stress is the grievances are not redressed, they feel that the committees

are only set to show and do not work. They were least bothered about the company's products, production process. All this shows that two way communication between workers and managers must be very strong which will make workers feel about the company give ownership of the effects to the workers, which will naturally help in reducing the absenteeism.

In the book titled "Business method Reengineering: associate Introductory Guide" by Peter Carter, the author states that Business method reengineering (often remarked by the form BPR) is that the main method during which organizations become additional economical and modernize. Business method reengineering transforms a corporation in ways in which directly have an effect on performance.

The authors, V. S. Lai; R. K. Mahapatra, in their analysis paper, "Correlating business method re-engineering with the knowledge systems department" agitate the role of associate information systems department within the success of business method re-engineering comes was through empirical observation investigated. Structured interviews with twenty seven executives were at first conducted to spot crucial info systems department roles in business method re-engineering. These roles were then through empirical observation valid victimization survey analysis methodology to work out their extent of impact on business method re-engineering success.

The results of hierarchal multivariate analysis show that support of prime data system management, the existence of technology champion, the management of resistance to vary, the standard of data system coming up with, the combination of associate info system-business strategy, the sophistication of user's pc ability and therefore the extent of integration of data with knowledgedesign are the foremost crucial information systems department roles in business method re-engineering success.

Business method reengineering and considers it as a main method during which organizations

become additional trendy and economical. It's a management approach geared toward creating enhancements to your business through elevating the potency and effectiveness of the processes that exist inside and across organizations. If you wish business method reengineering to achieve success then the key for organizations is to seem at their business processes from a chance perspective so as to work out however they will best construct these processes to enhance however they conduct business.

It has been ascertained within the literature review that the most reasons of absence are that there's no prompt redressal of grievances or 2 method communication, presence of structure pathology, socio-economic factors, cultural and legislative structure of the state, sickness, and private factors. Beside this, implementation of BPR helps the businesses herald a radical amendment within the operating structure, that is that the encumbrance of the unit of time department. Therefore it's up to the unit of time department to do and use completely different ways to cut back absence, whereas implementing BPR.

Research Methodology:

Present study put test hypothesis i.e. two way communication and prompt redressal of grievances has a positive impact on absenteeism.

Study has been undertaken with objectives,

1. To study the different methods of reducing absenteeism.
2. To study the role of HR department in implementing BPR for reduced absenteeism.
3. To know the implementation of BPR in selected manufacturing companies in Pune.

The research is based on the primary data. For the purpose of studying different methods of reducing absenteeism in the implementation of Business Process Re-engineering in manufacturing companies, the primary data has been collected through a structured questionnaire.

The respondents for the questionnaire are the HR managers (Top & middle level management) in

manufacturing companies in Pune and around Pune City. The data is collected through the questionnaire from 40 manufacturing companies in and around Pune.

These companies have satisfied the following conditions:

1. These companies had given their contact number to the Industrial Consultants.
2. These companies were registered with the Maharashtra Chamber of Commerce, Industries and Agriculture (MCCIA).
3. Out of the manufacturing companies, only those practicing BPR were contacted.
4. Prior appointment was taken from the HR Managers of the respective companies, from those who have responded.

Likert's five point scale is used to measure the perceived qualitative response & opinion of the respondents of the selected companies.

The analysis of the data is made with the help of percentile method. Manufacturing companies have been selected because all processes are perfectly streamlined, therefore the study becomes relevant. Moreover, all the four factors, viz. people, land, money and labor - are found in manufacturing units, whereas in service units, some elements are missing. Therefore, it becomes a complete study.

The study is focusing on the reduction of absenteeism of employees in effective implementation of BPR in manufacturing industries by the HR department in Pune.

In order to test the hypothesis i.e. methods to reduce absenteeism by two way communication i.e. Method 4 has been compared with the rest of the different methods of reducing absenteeism i.e. Method 1, Method 2 and Method 3, while implementing BPR in manufacturing companies.

Analysis and Findings:

Table-1: Analysis of Different Absenteeism Methods of Comparison by Means

Values	Method-1	Method-2	Method-3	Method-4
1	2	1	1	1
2	1	4	5	1
3	8	3	3	0
4	25	24	20	22
5	4	8	11	16
Means	3.7	3.85	3.875	4.275
Variiances	0.76	0.8775	1.059375	0.649375
z value =	-3.0632	-2.1753	-1.93531	

Source: Collected from the primary data of the research.

H0: mean responses for reducing absenteeism by Congenial work environment i.e. (method 1) = mean responses for reducing absenteeism by method 4 i.e. by the two way communication.

Against

H1: mean responses for reducing absenteeism by method 1 < mean responses for reducing absenteeism by method 4 i.e. by the two way communication

Under H0, $z = (\text{mean } X1 - \text{Mean } X4) / \text{Standard error}$
 $= - 3.0632$

< -1.64 (z table value at 5% level of significance for one sided test)

It can be concluded that rejection of H0 at 5 % level of significance; i.e. acceptance of the alternative hypothesis that the mean of the method 1 is less than that of method 4 i.e. the two way communication method is appreciated by the employees than the Congenial work environment.

H0: mean responses for reducing absenteeism by Training & counseling i.e. (method 2) = mean responses for reducing absenteeism by method 4 i.e. by the two way communication

Against

H1: mean responses for reducing absenteeism by method 2 < mean responses for reducing absenteeism by method 4 i.e. by the two way communication

Under H0, $z = (\text{mean } X_2 - \text{Mean } X_4) / \text{Standard error}$

$$= - 2.1753$$

< -1.64 (z table value at 5% level of significance for one sided test)

It can be concluded that rejection of H0 at 5% level of significance; ie acceptance of the alternative hypothesis that the mean of the method 2 is less than that of method 4 i.e. the two way communication method is appreciated by the employees than the Training & counseling.

H0: mean responses for reducing absenteeism by Employee welfare i.e. (method 3) = mean responses for reducing absenteeism by method 4 i.e. by the two way communication

Against

H1: mean responses for reducing absenteeism by method 3 < mean responses for reducing absenteeism by method 4 ie by the two way communication

Under H0, $z = (\text{mean } X_3 - \text{Mean } X_4) / \text{Standard error}$

$$= - 1.93531$$

< -1.64 (z table value at 5% level of significance for one sided test)

It can be concluded that rejection of H0 at 5% level of significance; i.e. acceptance of the alternative hypothesis that the mean of the method 3 is less than that of method 4 i.e. the two way communication method is appreciated by the employees than the Employee welfare.

Graph-1: Presentation of Acceptance and Rejection area for the testing of Hypothesis

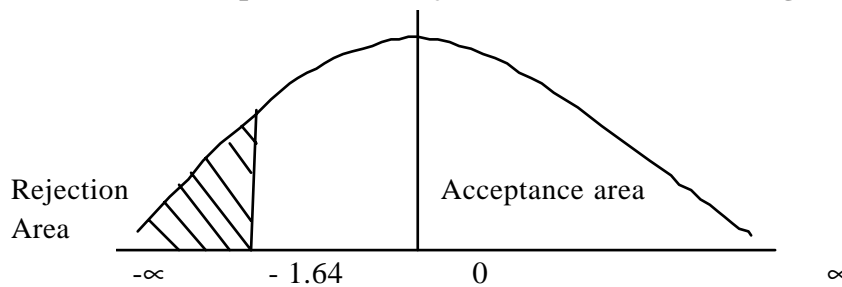
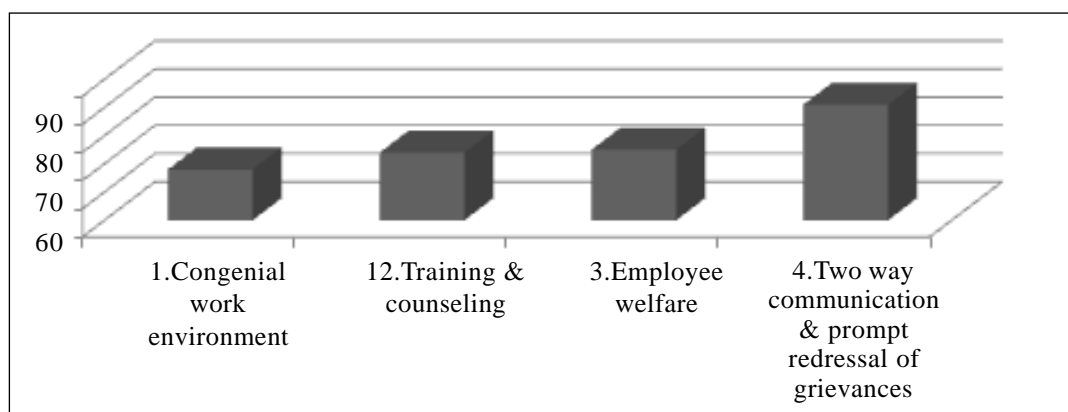


Table-2: Analysis of Different Ways of Controlling Absenteeism While Implementing BPR

Measures to control Absenteeism	Strongly disagree	Disagree	Neutral	Agree agree	Strongly	Total
Congenial work environment	2	1	8	25	4	40
Training & counseling	1	4	3	24	8	40
Employee welfare	1	5	3	20	11	40
Two way communication & prompt redressal of grievances	1	1	0	22	16	40

Source: Primary data of the research.

Graph-2: Comparison of Absenteeism Methods



Source: Collected from the primary data of the research.

It can be inferred from Table-2, that ‘Two way communication & prompt redressal of grievances’ is the best way to control absenteeism, as it appears to be extensively used method in the companies by the HR while implementing BPR. Further, this two-way communication is extremely beneficial to both the parties as the management gets better returns & the employees are satisfied and refrain from being absent. They also develop a sense of belonging and loyalty to the enterprise.

Conclusions:

Based on the analysis of the manufacturing industries, we could conclude that the two way communication method is the best method to reduce absenteeism than the other methods of reducing absenteeism such as congenial work environment, Training & counseling, Employee welfare by the HR department while implementing BPR to meet the organizational goals.

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A Study of Celebrity Endorsement with reference to Television Advertisement

Gouri V. Salunkhe, Sarang S. Bhola

Abstract:

Today celebrity endorsement becomes the multi-million industry in the world. Marketers endorsed celebrities with their products and brands in the advertisement to increase their sales and influence the perception of viewers regarding their brand, which impacts on their buying behavior. This research study focuses on the celebrity endorsement and its impact on the customers buying behavior and their perception regarding the product or brand of the company. The data of 141 respondents is collected using structured schedule and result were analyzed using SPSS. The students of different institutes as respondents has been taken to know their perception regarding the celebrity gender and the type of celebrity whether from film or sports and its attributes and the impact of celebrity endorsement on their buying behavior. It is concluded that celebrity endorsed advertisement does not found to have influence on buying. Moreover, the tested attributes of celebrity shows, no association between gender of respondent and gender of celebrity and no association between gender of respondent and type of celebrity. Finally, the result of the study further depicts that there is no significant impact of celebrity endorsement on the buying behavior of customers.

Keywords : Celebrity Endorsement, Television Advertisement, Male & Female Celebrities.

Introduction :

Celebrity branding or celebrity endorsement is a form of advertising campaign or marketing strategy used by brands, companies, or a non-profit organization which involves celebrities or

a well-known person using their social status or their fame to help promote a product, service or even raise awareness on environmental or social matters. It includes famous person from film fraternity, athletes, and sports, modeling world etc. it helps in promoting brand and also increasing the sale of the product. Marketers use celebrity endorsers in hopes that the positive images of the celebrity endorser of the brand will also be passed on to the products or the brand image associated with the celebrities. Celebrity endorsement not only has developed in recent years; it is being used from the past for promoting the product. It is mainly used to influence the consumer who come across these advertisements as it is accessed in the consumers mind for many days even after the advertisement.

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Research Problem:

Study has undertaken on the premise that the celebrity influences people which may leads to purchase action. The celebrity advertisements are growing day by day and marketers are pouring money on the same. The major question is to be answered that whether the celebrity advertisements leads to remembrance of advertisements? Do television viewers really remember the celebrity advertisements? This study is an effort to find the answer for this question.

Research Methodology:

Present study set to test the hypotheses i.e., there is no association between gender of respondent and gender of celebrity and the second hypotheses is there is no association between gender of respondent and type of celebrity.

Present study has been undertaken with following objectives,

1. To study the television channels that are preferred the most.
2. To study the television watching habits.
3. To study the top of mind recall of celebrity advertisement.
4. To study the celebrity male & female together or individually endorsing.
5. To study the social campaign advertisement by celebrities.
6. To study the impact of celebrity endorsement on society.

The research is descriptive in nature and the data collected using inferential approach. 141 sample students from undergraduate and postgraduate were conveniently visited from two higher educational institutes in Satara to seek the opinion on effectiveness of celebrity endorsement. A structured codified schedule was executed on these samples and the data analysis was undertaken using Ms-Excel and SPSS. Percentage, mean, standard deviation has been used for data analysis and hypotheses testing has been under taken using chi-square test.

Data Analysis:

Data analysis is done using Ms-Excel and hypothesis test using SPSS. Initially sample profile is mentioned followed by opinions of samples on celebrity endorsement in Hindi followed by celebrity endorsements in Marathi and at the end hypotheses testing has been presented.

Following table shows gender of samples participated in the study. Two options were facilitated to mark the gender one is male and second is female.

Table 1:
Gender of Sample

Sr.	Gender	Frequency	Percent
1	Male	51	36.2
2	Female	90	63.8
	Total	141	100.0

Source: (Field data)

Above table, number 1 revels male and female gender.

As from the participation of sample is considered, it has found that participation of female sample are more in number i.e. 63.8%.

Following table shows age of sample participated in the study.

Table 2:
Age of Sample

Sr.	Age	Frequency	Percent
1	17	4	2.8
2	18	30	21.3
3	19	33	23.4
4	20	35	24.8
5	21	16	11.3
6	22	4	2.8
7	23	2	1.4
8	24	3	2.1
9	Not Responded	14	9.9
	Total	141	100.0

Source: (Field data)

Above table, number 2 reveals the age of sample participated. 24.8% samples students having age 20 followed by 23% students of 19 years age and 21% of students having 18 years of age. In all 68% of the total samples are from the age group of 18-20 years. Around 17% of the samples form to have age between 21-24 years. It is concluded from the discussion that young age group have been participated in the study.

Following table shows education of sample participated in the study. Two options were facilitated to mark the education one is undergraduate and second is postgraduate.

Table 3:
Education of Sample

Sr.	Education of samples	Frequency	Percent
1	Undergraduate	139	98.6
2	Postgraduate	2	1.4
	Total	141	100.0

Source: (Field data)

Above table number 3 reveals the educational qualification of sample participated. It has found that undergraduate sample are more in number i.e. 98.6% and rest 1.4% are postgraduate.

Following table shows the samples having television. Two options were facilitated to mark one is yes and second is no.

Table 4:
Samples having television

Sr.	Having Television	Frequency	Percent
1	Yes	131	92.9
2	No	10	7.1
	Total	141	100.0

Source: (Field data)

Above table number 4 reveals the samples participated having television. It has found that samples having television are more in number i.e. 92.9% and rest 7.1% samples do not have television.

Following table shows the samples having television connection participated in the study. Two options were facilitated to mark one is cable connection and second is dish connection.

Table 5 :
Samples having cableconnection

Sr.	Television Connection	Frequency	Percent
1	Cable	68	48.2
2	Dish	63	44.7
3	Not Responded	10	7.1
	Total	141	100.0

Source: (Field data)

Above table number 5 reveals the sample participated having cable connection or dish connection.

As far as participation of samples is considered, it has found that samples participated having cable connection are more in number i.e. 48.2% followed by 44.7% samples found to have dish connection.

Following table shows the television watching habits of sample participated in the study. Three options were facilitated to mark the TV watching habits one is morning, second is afternoon and third is evening. The data were taken in number of hours which is then converted into minutes.

Table 6:
Television watching habits of sample

Sr.	TV watching habits	Mean minutes	Standard deviation
1	Morning	59.53	24.834
2	Afternoon	85.71	44.785
3	Evening	101.87	50.472

Source: (Field data)

Above table, number 6 reveals on the basis of periodically that sample watch TV in the evening by afternoon and morning. It has seen that average

101.87 minutes television watching in the evening with a standard deviation of 50.47 min followed by 85 min in the afternoon with standard deviation of 44 min and 59 min in the morning with standard deviation of 24 min.

Television watching periodicity is considered, it has found that 50.472% samples watch television

more in evening, which is 101.87 minutes with 50 min of standard deviation.

Following table shows preferred channels by samples participated in the study. Five options were facilitated to write the top five preferred channels they watch daily.

Table 7:
Preferred Channels by sample

Sr.	Name of the channel	1 st Preference		2 nd Preference		3 rd Preference		4 th Preference		5 th Preference		Total		Rank
		F	%	F	%	F	%	F	%	F	%	F	%	
1	Sony SAB	4	2.8	3	2.1	2	1.4	1	.7	2	1.4	12	8.5	11
2	Star Gold	6	4.3	7	5.0	6	4.3	7	5.0	0	0.0	26	18.4	5
3	Sony Max	12	8.5	7	5.0	7	5.0	8	5.7	7	5.0	41	29	2
5	Pogo	1	.7	2	1.4	5	3.5	1	.7	2	1.4	11	7.80	12
7	9XM	2	1.4	4	2.8	1	.7	4	2.8	3	2.1	14	9.92	9.5
11	Discovery	2	1.4	6	4.3	3	2.1	3	2.1	8	5.7	22	15.60	7
15	Zee Marathi	16	11.3	11	7.8	10	7.1	5	3.5	4	2.8	46	32.62	1
16	MTV	9	6.4	4	2.8	6	4.3	3	2.1	2	1.4	24	17.02	6
18	Zee Tv	18	12.8	12	8.5	3	2.1	3	2.1	0	0.0	36	25.53	3
19	Zee Yuva	0	0.0	4	2.8	1	.7	2	1.4	3	2.1	10	7.09	13
22	Star Plus	5	3.5	9	6.4	7	5.0	4	2.8	3	2.1	28	19.85	4
37	ABP Maja	2	1.4	4	2.8	4	2.8	4	2.8	2	1.4	16	11.34	8
74	Star Sports	5	3.5	1	.7	4	2.8	3	2.1	1	.7	14	9.92	9.5

Source: (Field data)

It has seen from table 7 that Zee Marathi is the most preferred channel amongst the samples since 32.62% of samples has extended the opinion towards Zee Marathi. Followed by Sony Max since 29%. Zee TV since 25.56%. Star Plus 19.85%. Star Gold 18.4% and MTV 17.02%.

The five most preferred channels viewed are Zee Marathi, Sony Max, Zee TV, Star Plus, Star Gold and MTV. The most preferred channel is mix of Marathi channels, Hindi and music channels.

It has seen in the channel preference, that entertainment channels mostly carrying feature serials are more preferred that to in vernacular language Marathi followed by Hindi.

Following table shows the opinions of samples on necessity of celebrity endorsement. Opinion were taken on five point likert type scale ranging from one is strongly disagree, two is disagree, three is neither agree nor disagree, four is agree and five is strongly agree.

Table 8:
Necessity of celebrity endorsement

Sr.	Description	Mean	Standard Deviation
1	Celebrity endorsement is really necessary	3.44	.967

Source: (Complied by Researcher)

Above table number 8 reveals the mean score 3.44 with standard deviation 0.967 which shows little

agreement since the mean score has not crossed agreement figure i.e., 4 it can be said that samples are not seconding the statement that celebrity endorsement is really necessary.

Following table shows the brand or product endorsed by the celebrities. Samples participated in the study were asked to name any five advertisement that comes first to their mind that featured celebrities.

Table 9:
Top of mind recall

Sr.	Brand/Product & Celebrity	1 st Preference		2 nd Preference		3 rd Preference		4 th Preference		5 th Preference		Total		Rank
		F	%	F	%	F	%	F	%	F	%	F	%	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	Cold drink-Salman Khan	8	5.7	7	5.0	3	2.1	3	2.1	0	0	21	14.89	1
4	Chips-Virat Kohli	8	5.7	5	3.5	3	2.1	2	1.4	0	0	18	12.76	2
6	Fair & Lovely-Yami Gautam	7	5.0	5	3.5	2	1.4	0	0.0	1	.7	15	10.63	3
7	Axis Bank-Dipika Padukon	1	.7	1	.7	1	.7	2	1.4	0	0	5	3.54	9
11	Dairy Milk-Amitabh Bacchan	7	5.0	1	.7	2	1.4	0	0.0	0	0	10	7.09	5
12	Liver Ayush-Akshay Kumar	1	.7	2	1.4	0	0	2	1.4	0	0	5	3.54	9
20	Lux-Dipika Padukon	5	3.5	3	2.1	1	.7	0	0.0	0	0	9	6.38	6
22	Kalyan Jewellers-Amitabh Bacchan	1	.7	1	.7	2	1.4	1	.7	0	0	5	3.54	9
26	Vicks-Virat Kohli	4	2.8	1	.7	2	1.4	0	.0	1	.7	8	5.67	7
38	Colgate Maxfresh-Ranveer Singh	0	0.0	1	.7	1	.7	2	1.4	0	0	4	2.83	10
39	Lifebouy-Kajol	0	0.0	2	1.4	3	2.1	1	.7	0	0	6	4.25	8

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
42	Nerolac Paints-Shahrukh Khan	3	2.1	5	3.5	2	1.4	2	1.4	2	1.4	14	9.92	4
50	Maggi-Amitabh Bacchan	2	1.4	0	0.0	1	.7	1	.7	0	0	4	2.83	10
51	Ching Chinese Noodles-Ranveer Kapoor	1	.7	3	2.1	3	2.1	0	.0	1	.7	8	5.67	7
69	Lifebouy-Ajay Devgone	2	1.4	1	.7	0	.0	1	.7	0	0	4	2.83	10
72	Goodday biscuit-DipikaPadukon	2	1.4	1	.7	0	.0	0	.0	0	0	3	2.12	11
86	Make My Trip-Ranveer Singh	1	.7	1	.7	1	.7	0	.0	0	0	3	2.12	11
88	Culf oil-M.S.Dhoni	3	2.1	1	.7	0	.0	0	.0	0	0	4	2.83	10
103	Vivo-Amir Khan	2	1.4	0	.0	1	.7	2	1.4	0	0	5	3.54	9
126	Lux-Kareena Kapoor	3	2.1	0	.0	3	2.1	0	.0	0	0	6	4.25	8
128	Slice-Katrina Kaif	1	.7	1	.7	2	1.4	0	.0	0	0	4	2.83	10
144	Not Responded	34	24.1	47	33.3	74	52.5	97	68.8	125	88.7	377		

Source: (Field data)

Above table, number 9 reveals the brand/product which are recalled by the samples endorsed by celebrities.

It has found that the cold drink advertisement endorsed by Salman Khan is the most famous advertisement among the samples since 14.89% of samples has recalled the advertisement. At the second recall of advertisement it is chips advertisement endorsed by Virat Kohli since 12.76% samples recall the advertisement. Third ad found to be Fair and Lovely by Yami Gautam recalled by 10.63% samples followed by a fourth place Nerolac paints by Shahrukh Khan recalled by 9.92% samples and the advertisement of Dairy milk by Amitabh Bacchan is at fifth place with 7.09% sample recall.

Top of mind recall celebrity advertisements shows the top three recall products are soft drink, chips and cosmetic crème the products which are most nearer to the youths. The samples consist of college students which found to be fascinated towards these products and celebrities. The next two advertisements surprisingly Nerolac Paints which are generally not the area of decision by students but might be because of Shahrukh Khan the ad might have been registered in the memory of samples. Chocolate is a weak point of youths hence the fifth ad might have been registered in the memory of samples. The analysis still leaves a question that is it due to celebrity or due to product the top of mind recall has been marked ?

Following table shows celebrities with product categories. Sample participated in the study were asked to identify the brand they are endorsing. The name of celebrity was given and samples were told

to identify the brand they endorse. The tabulation shows brands rightly identified and otherwise. Data analysis has been done using frequency and percentages.

Table 10:
Latest Endorsement

Sr.	Celebrity & Product and Brand	Right		Wrong		Not Responded		Total	
		F	%	F	%	F	%	F	%
1	Dipika Padukon (Banking) - Axis Bank	33	23.4	6	4.3	102	72.3	141	100
2	Salman Khan (Cold drink) - Thumsup	56	39.7	37	26.2	48	34	141	100
3	Shahruk Khan(Paint) - Nerolac	35	24.8	37	26.2	69	48.9	141	100
4	Sahuti Hasan (Chocolate bar) - Munch	23	16.3	16	11.3	102	72.3	141	100
5	Virat Kolhi (Chips) - Too Yumm	20	14.2	26	18.4	95	67.4	141	100
6	Sonam Kapoor (Toothpaste) - Colgate visible white	26	18.4	9	6.4	106	75.2	141	100
7	Ranveer Singh (Noodles) - Chings Chinese	50	35.5	5	3.5	86	61	141	100
8	Yami Gautam (Beauty Cream) - Fair & Lovely	62	44	4	2.8	75	53.2	141	100
9	Aishwarya Rai Bacchan (Shampoo) - Loreal Paris	41	29.1	25	17.7	75	53.2	141	100
10	John Abraham (Energy Drink) - Sofit	7	5	7	5	127	90.1	141	100

Source: (Field data)

Above table, number10 reveals the celebrity who endorse the products. Samples participated in the study were asked to identify the brand of respective celebrity.

The correct identification are marked as right and wrong identification are marked as wrong. It has seen that 62 samples have identified correctly beauty cream product's brand which is 44% of total samples, followed by Thumsupendorsed by Salman Khan has identified by 39.7% of samples followed by chings Chinese endorsed by RanveerSingh has identifies by 35.5% of samples followed by Nerolac by Shahrukh Khan and Axis bank of DipikaPadukon.

Again with brand identification with respect to celebrity the results are same i.e., Salman Khan, Yami Gautam, Dipika Padukon, and Ranveer Singh secures first five.

Following table shows the brands which are endorsed both by male and female celebrities. They appear together or individually in the advertisement. Samples participated in the study were asked to identify both the celebrities who endorse the brand together.

Table 11:**Male & Female Celebrities**

Sr	Brand	Male & Female Celebrity	Right		Wrong responded		Not		Total	
			F	%	F	%	F	%	F	%
1	Prestige	Abhishek & Aishwarya Rai Bacchan	38	27	1	0.7	102	72.3	141	100
2	Kalyan Jewellers	Amitabh & Jaya Bacchan	28	19.9	4	2.8	109	77.3	141	100
3	Make My Trip	Ranveer Singh & Alia Bhatt	35	24.8	7	5	99	70.2	141	100
4	Lifebouy	Ajay & Kajol Devgan	64	45.4	0	0	77	54.6	141	100
5	Liver Ayush	Akshay Kumar & Tammana	23	16.3	2	1.4	116	82.3	141	100
6	Oppo F5	Siddharth Malhotra & Kriti Kharbanda	0	0	34	24.1	107	75.9	141	100
7	D'ecore home decorations	Shahrukh & Gouri Khan	3	2.1	0	0	138	97.9	141	100
8	Wirlpool AC	Ajay & Kajol Devgan	0	0	2	1.4	139	98.6	141	100
9	Manyavar Mohey Collections	Virat Kohli & Anushka Sharma	8	5.7	1	0.7	132	93.6	141	100
10	All Clear Shampoo	Saif Ali Khan & Kareena Kapoor Khan	3	2.1	6	4.3	132	93.6	141	100

Source: (Field data)

Above table, number 11 reveals the Brand endorsed by the male and female celebrities together.

It has seen that 45.4% samples have identified the Lifebouy brand right followed by prestige by 27%, make my trip by 24.8% and Kalyan Jewellers by 19.9%.

Celebrities endorsement are used not only for commercial purpose but also for spreading social message. Following table shows social campaign which are endorsed by male or female celebrities. Sample participated in the study were asked to identify the celebrities who endorse the social campaign.

Table 12:**Social Endorsement Male or Female Celebrities**

Sr.	Social Campaign	Celebrities	Right		Wrong		Not responded		Total	
			F	%	F	%	F	%	F	%
1	Nutrition & Child rights	Amir Khan	3	2.1	12	8.5	126	89.4	141	100
2	Sanitation Campaign	VidyaBalan	3	2.1	11	7.8	127	90.1	141	100
3	Swachh Bharat Abhiyan	Shilpa Shetty	30	21.3	31	22	80	56.7	141	100
4	Polio Eradication	Amitabh Bacchan	45	31.9	4	2.8	92	65.2	141	100
5	Eye Donation	Aishwarya Rai Bacchan	6	4.3	4	2.8	131	92.9	141	100
6	Tree Plantation	Amitabh Bacchan	3	2.1	13	9.2	125	88.7	141	100

Source: (Field data)

Above table, number 12 reveals the social campaign that are endorsed by the celebrities. The frequency and percentage indicated the right and wrong identification of the celebrities by samples participated.

It has seen that 45 samples i.e., 31.9% identified the polio eradication social campaign correctly followed by 21.3% identified Swachh Bharat Abhiyan and only 4.3% have identified Eye Donation.

Analysis of Marathi Celebrity Endorsements
Same as Hindi celebrity Marathi celebrity are also endorsing the products and brand.

Following tabulation deals with the analysis of Marathi celebrities.

Following table shows the brand or product endorsed by the celebrities. Samples participated in the study were asked to name any five advertisement that comes first to their mind that featured celebrities

Table 13 :**Top of mind recall**

Sr.	Brand/Product & Celebrity	1 st Preference		2 nd Preference		3 rd Preference		4 th Preference		5 th Preference		Total		Rank
		F	%	F	%	F	%	F	%	F	%	F	%	
		3	4	5	6	7	8	9	10	11	12	13	14	15
1	Tea-Nana Patekar	11	7.8	2	1.4	0	0	0	0	0	0	13	9.21	1
2	Masala - Reema Lagoo	3	2.1	1	0.7	0	0	1	0.7	0	0	5	3.54	2
3	Tirumala Oil - Sachin Pilgaonkar	3	2.1	1	0.7	0	0	0	0	0	0	4	2.83	3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	Everest - Ashok Saraf	2	1.4	1	0.7	1	0.7	0	0	0	0	4	2.83	3
5	Stayfree-Rinku Rajguru	1	0.7	0	0	0	0	0	0	0	0	1	0.709	6
6	Suhana Masala-AtulTodankar	0	0	0	0	1	0.7	0	0	0	0	1	0.709	6
7	Vivel Soap-Supriya Pilgaonkar	0	0	1	0.7	0	0	0	0	0	0	1	0.709	6
8	Bulb-ReemaLagu	0	0	1	0.7	0	0	0	0	0	0	1	0.709	6
9	Ram bandhu Masale-Prashant Damle	2	1.4	0	0	0	0	0	0	0	0	2	1.41	5
10	Matrimony-Mrunmayee Deshpande	2	1.4	1	0.7	0	0	0	0	0	0	3	2.12	4
11	Ghadi Detergent-AmrutaShubhash	1	0.7	0	0	0	0	0	0	0	0	1	0.709	6
12	Expert Dishwash bar-Tejashri Pradhan	0	0	1	0.7	0	0	0	0	0	0	1	0.709	6
13	Paytm-Girija Oak	0	0	0	0	1	0.7	0	0	0	0	1	0.709	6
14	PNG Jewellers-Shruti Marathe	1	0.7	1	0.7	0	0	0	0	0	0	2	1.41	5
15	Chinese food-Usha Nadkarni	0	0	0	0	1	0.7	0	0	0	0	1	0.709	6
16	Pashukhadya-RinkuRajguru	0	0	1	0.7	0	0	0	0	0	0	1	0.709	6
17	Manapurna gold loan-Sachin Khedkar	1	0.7	0	0	0	0	0	0	0	0	1	0.709	6
18	Not Responded	114	80.9	130	92.2	137	97.2	140	99.3	141	100			

Source: (Field data)

Above table, number 13 reveals the brand/product which are recalled by the samples endorsed by celebrities.

It has found that the tea advertisement endorsed by Nana Patekar is the most famous advertisement

among the samples since 7.8% of samples have recalled the advertisement. At the second recall of advertisement it is masala advertisement endorsed by Reema Lagu and Tirumala oil advertisement endorsed by Sachin Pilgaonkar

since 2.1% samples recall the advertisement. Third ad found to be Everest endorsed by Ashok Saraf, Rambandhu Masale endorsed by Prashant Damle & Matrimony endorsed by Mrunmayee Deshpande since 1.4% samples followed by fourth place PNG jewelers by Shruti Marathe by 0.7% samples.

Following table shows some celebrities (with

product categories). Sample participated in the study were asked to identify the brand they are endorsing. The names of celebrity were given and samples were told to identify the brand they endorse. The tabulation shows brands rightly identified and otherwise. Data analysis has been done using frequency and percentages.

Table 14:
Latest Endorsement

Sr.	Celebrity and Product category	Brand	Right		Wrong		Not responded		Total	
			F	%	F	%	F	%	F	%
1	Mrunmayee Deshpande (matrimony)	Marathi matrimony	22	15.6	4	2.8	115	81.6	141	100
2	Ashok Saraf (spices)	Everest Masale	11	7.8	7	5	123	87.2	141	100
3	Girija Oak (antiseptic)	Detol	0	0	2	1.4	139	98.6	141	100
4	Nana Patekar (tea)	Vikram Tea	11	7.8	28	19.9	102	72.3	141	100
5	Usha Nadkarni (chinese food)	Chings Chinese	2	1.4	6	4.3	133	94.3	141	100
6	Gauri Sukhtankar (balm)	Iodex	1	0.7	2	1.4	138	97.9	141	100
7	Reema Lagu (bulb)	Wipro LED bulb	1	0.7	1	0.7	139	98.6	141	100
8	Swapnil Joshi (biscuit)	Krack-Jack	2	1.4	1	0.7	138	97.9	141	100
9	Prashant Damale (spices)	Rambandhu Masale	3	2.1	2	1.4	136	96.5	141	100
10	Girija Oak (detergent)	Surf Excel Matic	0	0	0	0	141	100	141	100

Source: (Field data)

Above table, number 14 reveals the celebrity who endorse the products. Samples participated in the study were asked to identify the brand of respective celebrity.

The correct identification are marked as right and wrong identification are marked as wrong. It has seen that 22 samples have identified correctly Matrimony ad which is 15.6% followed by the spices endorsed by Ashok Saraf and Tea endorsed by Nana Patekar which is 7.8% followed by spices endorsed by Prashant Damale since 2.1%.

Again the brand identification with respect to celebrity the results are Mrunmayee Deshpande, Ashok Saraf, Nana Patekar, Prashant Damale secures first four.

Following table shows the brands which are endorsed both by male and female celebrities. They appear together or individually in the advertisement. Samples participated in the study were asked to identify both the celebrities who endorse the brand together.

Table 15:**Male & Female Celebrities**

Sr	Brand	Male & Female Celebrity	Right		Wrong		Not responded		Total	
			F	%	F	%	F	%	F	%
1	Tirumala Refined Oil	Sachin & Supriya Pilgoankar	14	9.9	0	0	127	90.1	141	100

Source: (Field data)

Above table, number 15 reveals the Brand endorsed by the male and female celebrity together. It has seen that 9.9% sample have identified the Tirumala Refined oil brand right.

Hypotheses Testing:

This section of analysis deals with hypotheses testing. Present study set to test two hypotheses.

H0 1: There is no association between gender of respondent and gender of celebrities.

Table 16:**Case processing summary of gender of sample and gender of celebrity**

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender of samples*	107	75.90%	34	24.10%	141	100.00%
Gender of celebrities						

Above table number 16 shows 141 samples were processed out of which 107 samples were present and rest are missing.

Following table shows cross tabulation of gender of samples and gender of celebrities. The effort has made to see whether gender of samples and gender of celebrities are associated.

Table 17:**Cross tabulation of gender of sample and gender of celebrity**

		Gender of celebrities		Total
		Male	Female	
Gender of samples	Male	41	1	42
	Female	31	34	65
	Total	72	35	107

Source: (Complied by researcher)

Above table number 17 shows gender of sample and gender of celebrity cross tabulation. It has seen that 41 male samples top of mind recall is male celebrity and 31 female samples top of mind recall is male samples. Whereas very few male remember female celebrity and 34 female samples remembers female celebrity.

Table 18:

Chi- square tests of gender of sample and gender of celebrity

Following table shows the Pearson Chi-Square test.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.894a	1	0
N of Valid Cases	107		

- a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.74.
- b. Computed only for a 2x2 table

Above table 18 shows chi-square test where Pearson chi-square value is 28.894 at 1 df. The 'p' value is 0.000 reveals to reject null hypotheses and accept alternative hypotheses i.e., the gender of samples and gender of celebrities are associated.

H0 2: There is no association between gender of respondent and type of celebrities.

Table 19:

Case processing summary of gender of sample and type of celebrity

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender of samples* Type of celebrity	107	75.90%	34	24.10%	141	100.00%

Source: (compiled by researcher)

Above table 19 shows 141 samples were processed out of which 107 samples were present and rest are missing.

Following table shows the cross tabulation of gender of sample and type of celebrities i.e., celebrities from film or sports.

Table 20 :

Cross tabulation of gender of sample and type of celebrity

Sr.	Gender of sample	Type of Celebrity		Total
		Film	Sports	
1	Male	25	17	42
2	Female	57	8	65
	Total	82	25	107

Source: (compiled by researcher)

Above table 20 shows gender of sample and type of celebrity cross tabulation. It has seen that 25 samples top of mind recall is male celebrity and 57 female samples top of mind recall is

Table 21 :

Chi-square tests of gender of sample and type of celebrity

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.306a	1	0.001
N of Valid Cases	107		

- a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.81.
- b. Computed only for a 2x2 table

Findings:

Findings revealed from data analysis has presented below.

1. Among the total 141 samples, 63.8% are female and remaining is male.
2. The average age of samples is 20 years.
3. Around 98.6% samples are undergraduate and 1.4% is postgraduate.
4. Around 92.9% samples own TV and 7.1% do not have TV. However, 48.2% have cable connection and 44.7% have dish connection. 50.47% samples watch TV in morning, followed by 44.78% samples watch TV in afternoon and only 24.83% watch TV in morning.
5. The samples have preferred various channels. The first most preferred channel is Zee Marathi which is preferred by 32.62% of samples followed by Sony Max by 29%, Zee TV by 25.53%, Star Plus by 19.85% and Star Gold by 18.4%. It has seen in the channel preference, that entertainment channels mostly carrying feature serials are more preferred that to in vernacular language Marathi followed by Hindi.
6. The mean score for the statement celebrity endorsement is really necessary is 3.44 with standard deviation of 0.967 reveals unwillingness towards statement.
7. TOM i.e. top of mind recall shows recall of Salman Khan (cold drink) by 14.89% samples at first rank followed by Virat Kohli (Chips) by 12.876% at second rank, Yami Gautam (Fair & Lovely) by 10.63% at third rank, Shahrukh Khan (Nerolac Paints) by 9.92% at fourth rank and Amitabh Bacchan (Dairy Milk) by 7.09% at fifth rank. Top of mind recall celebrity advertisements shows the top three recall products are soft drink, chips and cosmetic crème the products which are most nearer to the youths. The samples consist of college students which found to be fascinated towards these products and celebrities.
8. With identification of latest endorsement in case name of celebrity is given and ask to identify the brand. Samples has correctly identified Yami Gautam (Fair and Lovely) at first rank followed by Salman Khan (Thumsup), Ranveer Singh (Chings Chinese) and Aishwarya Bacchan (Loreal Paris) .
9. Male and female have endorsed few brands samples have rightly identified Lifebouy endorsed by Ajay and Kajol Devgan followed by Prestige by Abhishek and Aishwarya Rai Bacchan and Make my trip by Ranveer Singh and Alia Bhatt.
10. In social endorsement samples remember Polio eradication by Amitabh Bacchan followed by Swachh Bharat Adhiyan by Shilpa Shetty.
11. TOM i.e. top of mind recall shows recall of Nana Patekar (tea) by 9.21% samples at first rank followed by Reema Lagoo (masala) by 3.54% at second rank, Sachin Pilgaonkar (Tirumala oil) by 2.83% and Ashok Saraf (Everest Masala) by 2.83% at third rank, Mrunmayee Deshpande (matrimony) by 2.12% at fourth rank, and Prashant Damle

(Rambandhu masale) & Shruti Marathe (PNG Jewelers) by 1.41% at fifth rank. Top of mind celebrity advertisement shows the top three products are tea, Masala, Tirumala oil, Everest Masala the products which are nearer to the youth. The samples consist of college students which found to be fascinated towards these products and celebrities.

12. With identification of latest endorsement in case name of celebrity is given and ask to identify the brand. Samples have correctly identified Mrunmayee Deshpande (Marathi Matrimony) at first rank followed by Ashok Saraf (Everest masale), Nana Patekar (Vikram Tea), Prashant Damale (Spices), Usha Nadkarni (Chings Chinese), Swapnil Joshi (Krack-Jack biscuit).
13. Male and female have endorsed few brand samples have rightly identified Tirumala Oil endorsed by Sachin and Supriya Pilgaonkar.
14. Null hypothesis, There is no association between gender of respondent and gender of celebrities is rejected since chi-square value is 28.894 at 1 df. 95% level of significance. This shows that there is an association between gender of sample and gender of celebrity.

15. Another null hypothesis, There is no association between gender of respondent and type of celebrities, i.e. film and sports is rejected at 95% level of significance where value of Chi-square is 11.306 at 1 df. This shows that there is an association between gender of samples and type of a celebrity.

Conclusion:

From the present research study it has seen that celebrity endorsement is known and popular since the top cine and sports celebrities with respect to the products that they are endorsing are being recalled by reasonably good number of samplings. The impact of celebrity advertisement is for most important where samples rated the statement, celebrity endorsement is really necessary, with an average of 3.44 with standard deviation 0.967 reveals that celebrity endorsement is not necessary.

Reference:

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Digital Detoxification : Need of the Hour

Sajal Adlak, Abhijit S. Desai

Abstract :

In the today's knowledge era, world is becoming a smart global village, with increasing number of smart phones, laptops, tablets, and wireless internet. Users of internet are able to stay connected in all the time. These digital devices are more convenient, efficient and help in effective communication. It has resulted in technology addiction amongst the internet users, which sometimes results in anxiety and depression. It is found that a gaming disorder is now a mental health condition worldwide. It is also revealed that more the digital media leads to less exercise and less outdoor activity time amongst the internet users. This mindset amongst the internet users leads to a serious need of a research study about how online activity and access to digital media consumption affect both mental and physical health, leads to the term 'digital detoxification'. In this research paper, authors make an attempt to study the need of digital detoxification amongst professional students. This study gives hint of how technology is affecting students' life while using latest technological advancement. It is also identified as there is need of digital detoxification for students in the era of excessive technological advances.

Keywords : Digital Detoxification, Social Media, Technology Addiction.

Introduction :

A digital detoxification refers to a state when an individual quits or suspends use of digital equipment and devices to utilize that time for social interactions and activities. It is a technique that enables an individual to relieve stress and anxiety incurred from being over occupied by a high utilization of digital devices.

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A digital detoxification is the time period when an individual refrains from using any digital or electronic device. These devices generally include portable handheld devices such as smart-phones and tablets as well as computers, laptops and even televisions.

A digital detoxification is primarily done to avoid being addicted or obsessed with digital devices and mentally relaxed by taking some time to enjoy the physical or real world. This enables maintaining a healthy balance between normal life and the time a person spends using such electronic devices.[1]

A digital detoxification, sometimes referred to as a media fast, content fast, or technology detox, will help bring your mind, body, and spirit back into balance. Digital detoxification is the

purposeful process of absolute or conditional abstinence from some (or all) of the technology present in your life for a specific period of time to restore balance and thus overall well-being.

A Digital Detox or digital fast can take many forms. No matter which you choose, periodically unplugging from technology may be one of the healthiest things you can do for yourself [2].

Following are some ways to do digital detoxification:-

1. Remove distractions
2. Do not glamorize busyness

Researchers has selected this set of questions for the present study, which are represented in the following table.

Table No. 1 : Set of question in the survey to determine need of digital detoxification for a student

Sr. No.	Question
1	How likely are you to use Screens just before Bed ?
2	In total, how many different social media platforms do you use ?
3	How would you rate your attention span?
4	How often do you media multi-task ? (Use more than one device at once. E.g. Scroll through social feeds while watching TV ?)
5	How likely are you to compare yourself to others when online/using social media ?
6	How many hours a day do you think you spend on social media
7	How likely are you to check your work emails during the weekend/While on holiday ?
8	How often do you get Back Pain, Eye-Strain or Headaches from using your devices ?
9	When the WIFI goes down, You Feel:

Sampling:

For the present study, researcher s have selected 120 students from various professional courses offered by the Bharati Vidyapeeth’s Educational Complex Navi Mumbai. These courses includes Management institute, Pharmacy, Hotel management, Engineering and architecture.

Following table no. 2 shows the distribution of course wise respondents/students.

Table No.2 : Number of students selected course wise

Sr. No.	Name of the Professional institute	No. of students selected
1	Management institute [MMs/MCA]	35
2	Pharmacy [B. Pharm]	30
3	Hotel Management	15
4	Engineering	25
5	Architecture	15
	Total	120

Matrix to Identify the Need of Digital Detoxification.

Each and every question selected was given four options to choose from. Every option has assigned a value and a matrix is created, which helps to count the score of options selected by the respondents and a combination of choices answered by the respondents will give us the opinion about the present technology usage level and it helps us to suggest the respondent about the need of digital detoxification. The following table no.3 represents the matrix, which helps in the determination of need of digital detoxification.

Table No. 3: Matrix for determination of need of digital detoxification

Q. No	Answers combination			
1	1	2	3	4
2	4	3	2	1
3	1	2	3	4
4	1	2	3	4
5	1	2	3	4
6	4	3	2	1
7	1	2	3	4
8	1	2	3	4
9	1	2	3	4
	You Need Digital Detox	You're technology obsessed !	You're fairly dependent on technology	You have a healthy balance with technology !

Results :

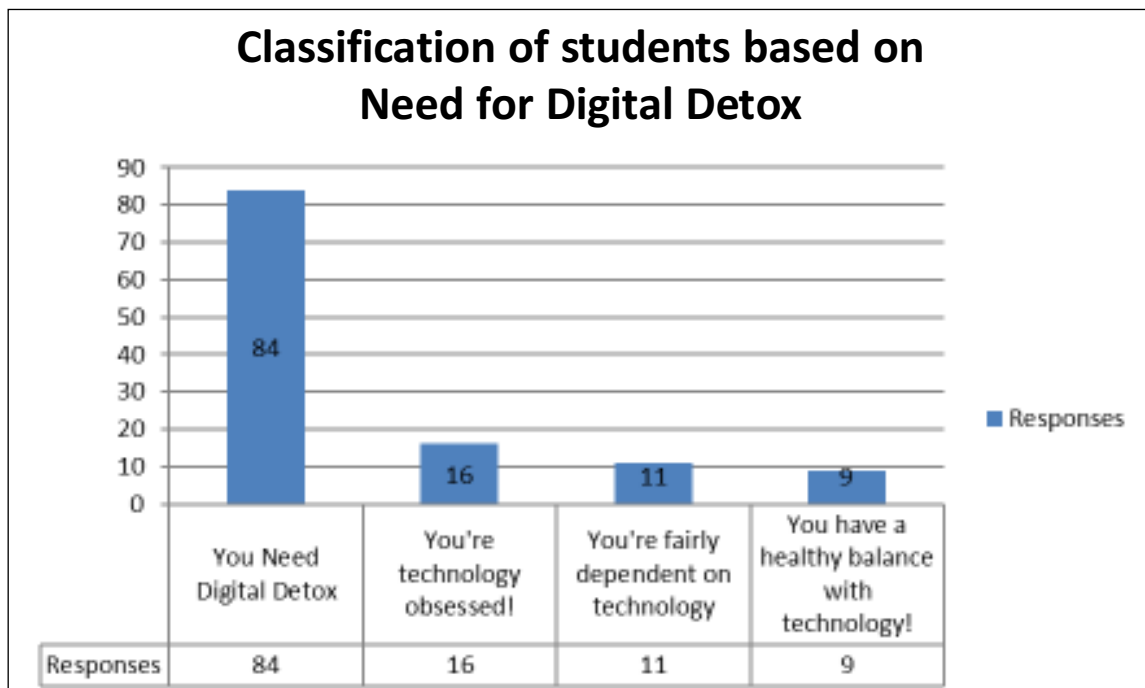
After data collection, data is analyzed question-wise and then a consolidated datasheet is tabulated and score for each student’s responses were calculated and interpreted for the need for digital detoxification. There were four different options in which all respondents were classified, based on the score obtained by computation based on options answered by the students.

Following Table No 4 and Graph No.1 represents the findings of the study, which reveals 84 out of 120 students (70%) are suggested that they need a digital detoxification, 16 out of 120(13.33%) students were identified as they are obsessed by the technology, 11 out of 120 (9.17 %) are classified in the category of “fairly dependent on technology” and remaining 9 out of 120 (7 %) are classified as maintaining balance with technology.

Table 4: Classification of students with need of digital detoxification

Suggestions	Responses
You Need Digital Detox	84
You're technology obsessed!	16
You're fairly dependent on technology	11
You have a healthy balance with technology!	9
Total	120

Graph 1: Classification of students based on Need of Digital Detox.



Suggestion and Conclusion :

It has been found that majority of the respondents are identified as they require to go for digital detoxification for a while, we conclude that today’s students of professional education are excessively using technology for their academic as well as personal use, which is harmful for their growth in the future, as they are becoming technology dependent, which may be hampering their

analytical, reasoning process and this many results affecting their learning process.

Hence researchers suggest a need of detailed study to be undertaken for further analyzing these problems with today’s students of professional education and also there is need of campaigns for increasing awareness of digital detoxification amongst the professional student.

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Analytical Study of Profitability Performance of Mahindra and Mahindra Ltd. : Using DuPont Model

Pravin Narayan Mahamuni, Anand Ganpatrao Jumle

Abstract:

This research paper is all about to measure and compare the profitability performance of the one of the top Indian Automobile company i.e. Mahindra & Mahindra Ltd. by using DuPont. In this paper, researcher uses DuPont analysis, is a method for assessing a company's return on equity (ROE) breaking it into three parts i.e. Profit Margin (Profit/Sales), Total Asset Turnover (Sales/Assets) and Equity Multiplier (Assets/Equity). Researchers have used as base to our conclusions the DuPont analysis known as the DuPont formula, DuPont method, DuPont Model or DuPont equation, is a method for assessing a company's return on equity (ROE) breaking it into three parts. The researcher used 't' test for analyzing and comparing previous 5 years financial data to find out level of significant change. The result reveals that, M&M Ltd. shown better performance in terms of operating efficiency, assets utilization and maintaining financial leverage.

Keywords : DuPont Analysis, Return on equity, Return on Investment, Financial Performance

Introduction :

For any business in the private sector there are numerous models to describe how well the business is running. Among these the DuPont model was created in the early 1900s but is still a model valid to use for assessment of the profitability. Using the DuPont model for risk analysis is not very common but if you as a risk

analysis specialist want to talk the language of the business, it can be valuable to you.

The model was created by F. Donaldson Brown who came up with the model when he was assigned to clean up the finances in General Motors and has ever since been an important model for financial analysis. Remarkably it has not been used in the security community for risk prioritization or impact analysis. The original DuPont method of financial ratio analysis was developed in 1918 by an engineer at DuPont who was charged with understanding the finances of a company that DuPont was acquiring. He noticed that the product of two often-computed ratios, net profit margin and total asset turnover, equals return on assets (ROA). The elegance of ROA being affected by a profitability measure and an efficiency measure led to the DuPont method becoming a widely-used tool of financial analysis Liesz, (2002). In the

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1970s, emphasis in financial analysis shifted from ROA to return on equity (ROE), and the DuPont model was modified to include the ratio of total assets to equity.

Before discussing the mechanics and usefulness of Du Pont, it may be of some interest to learn about its development. The maturation of the Du Pont model parallels the progress made in the field of financial analysis itself. Three distinct versions of Du Pont have been created and used to help unravel the underlying drivers of profitability and return over time, beginning nearly 90 years ago.

In 1918, four years after he was hired by the E. I. DuPont Corporation of Wilmington, Delaware, to work in its treasury department, electrical engineer F. Donaldson Brown was given the task of untangling the finances of a company of which Du Pont had just purchased 23 percent of its stock. (This company was General Motors!) Brown recognized a mathematical relationship that existed between two commonly computed ratios, namely net profit margin (obviously a profitability measure) and total asset turnover (an efficiency measure), and ROA.

Significance of the Study :

Investors use return on equity (ROE) to measure the earnings a company generates from its assets. With it, they can determine whether a firm is a profit-creator or a profit-burner and management's profit-generating efficiency. Why is this important to investors? Companies that are good at coaxing profits from their operations tend to have competitive advantages, which can translate into superior investment returns. The DuPont Model is a useful tool in providing both an overview and a focus for such analysis. It can be used as a compass in the process by directing the analyst toward significant areas of strength and weakness evident in the financial statements. Hence, this research effort is taken for comparing previous 5 years profitability performance of the Mahindra & Mahindra Ltd. by using DuPont.

Literature Review :

*Kasilingam,R.;**Jayabal,G.(July 2012): Profitability*

and Solvency Analysis of A Manufacturing Company using Dupont and Altman Model - Performance appraisal is very essential to take right decision. Profitability and solvency analysis are the two important factors in the performance appraisal of any organisation. The profitability analysis will not complete with just computing ROE. It is very essential to find out the factors which are having impact on ROE. For this purpose much published DuPont model is considered. To estimate the level of solvency Altman Z score is used. The study results indicate that the company is in poor shape both in profitability as well as in solvency. The correlation and regression analysis reveals that both profitability and solvency can be improved by increasing the sales volume.

Dr Ahmed Arif Almazari (February 2012): Financial Performance Analysis of the Jordanian Arab Bank by Using the DuPont System of Financial Analysis - This study attempts basically to measure the financial performance of the Jordanian Arab commercial bank for the period 2000-2009 by using the DuPont system of financial analysis which is based on analysis of return on equity model. From the study, it was found that the financial performance of Arab Bank is relatively steady and reflects minimal volatility in the return on equity. Net profit margin and total asset turnover exhibit relative stability for the period from 2001 to 2009. The equity multiplier also show almost stable indicators for the period from 2001-2005 and the ratios declined from 2006-2009 which indicates that the Arab bank had less financial leverage in the recent years, which means the bank is relying less on debt to finance its assets.

Nihar Kiran Nanavati (March 2013): Dupont Analysis to Measure Return on Equity of Satyam Computer Services Limited (Now Known As Mahindra Satyam Limited) - Return on equity can be measured by traditional method as well as using DuPont chart. Here is an attempt to calculate the Return on Equity Satyam Computer Services Limited (now known as Mahindra Satyam Limited) hereinafter refer to as Satyam using 3

step and 5 step DuPont model for the financial year 2010- 2011 and 2011-2012 to measure efficiency of the Company in respect of profit earning capacity as well as managerial effectiveness. The data analysis is made on the basis of annual report of the Company for the financial year 2011 – 2012. Conclusion is drawn by comparing the ROE of peer group (Average of TCS, INFOSYS & WIPRO) with The Company's Return to measure the efficiency.

Christina Sheela & Dr. K. Karthikeyan (2012): *Financial Performance of Pharmaceutical Industry in India using DuPont Analysis* - This study attempts basically to measure the financial performance of the Pharmaceutical Industry taking top three companies like Cipla, Dr. Reddy's Laboratories, Ranbaxy for the period 2003-2012. From the study it is found that Cipla pharmaceutical Financial performance is high followed by Dr.Reddy's Laboratories and then Ranbaxy Pharmaceutical. The three companies are significant at their level. In conclusion, ROE & ROI is the most comprehensive measure of profitability of a firm. It considers the operating and investing decisions made as well as the financing and tax-related decisions.

Brigham and Houston, (2001) : The modified model was a powerful tool to illustrate the interconnectedness of a firm's income statement and its balance sheet, and to develop straight-forward strategies for improving the firm's ROE.

Sundararajan, et al (2002) : Various measures of rates of return are used mainly for that purpose. We fully agree with the opinion that "Relaying too heavily on just a few indicators of bank profitability can be misleading. While ROI, ROE, and interest margin (and non interest expenses) to gross income remain the key measures, they should ideally be supplemented by the analysis of other operating ratios".

Debasish Sur & kaushik Chakraborty (2006) : In this study of financial performance of Indian Pharmaceutical Industry, the comparative analysis the financial performance of Indian pharmaceutical

industry for the period 1993 to 2002 by selecting six notable companies of the industry. The comparison has been made from almost all points of view regarding financial performance using relevant statistical tools.

T. Vanniarajan and C. Samuel Joseph (2007) : In his study An Application of DuPont Control chart in analyzing the financial performance of Banks. The liberalization of the finance sector in India is exposing Indian banks to a new economic environment it is characterized by increased competition and new regulatory requirements. Indian and foreign banks are exploring growth opportunities in India by introducing new products for different customer segments, many of which were not conventionally viewed as customer for the Banks have, in the last ten years, witnessed new shareholders. All banks are in a position to evaluate its performance compared to others. In general, the performance of the banks may be viewed on three dimensions namely structural, operational and efficiency factors are suggested by India Bank Association.

Dr. Pravin Narayan Mahamuni & Dr. Anand Ganpatrao Jumle (2016) : In this research, researchers have attempted to measure ROE & ROI to find out the profitability and made comparison against its competitors by using DuPont Model of the Tata Motors Ltd. and Mahindra & Mahindra Ltd. It is concluded that the DuPont analysis made by calculating ROE & ROI for top two Indian automobile companies and result portrays that Mahindra & Mahindra Ltd. have better profitability performance rather than its competitors Tata Motors Ltd.

Mihaela Herciu, Claudia Ogrean & Lucian Belascu (2011) : This study aims to demonstrate that in most cases the most profitable companies are not the most attractive for investors – through Du Pont Analysis method. In order to do this, we take into account the top 20 most profitable companies in the world in 2009 (according to Fortune). By using Du Pont analysis we came to the results that the ranking is not preserved when indicators (ratios) such as ROA

(return on assets) or ROI (return on Investment), ROE (return on equity) or ROS (return on sales) are taken into consideration.

Dr Ahmed Arif Almazari (2012) : This study attempts basically to measure the financial performance of the Jordanian Arab commercial bank for the period 2000-2009 by using the DuPont system of financial analysis which is based on analysis of return on equity model and return on investment model. The return on equity model disaggregates performance into three components: net profit margin, total asset turnover, and the equity multiplier. It was found that the financial performance of Arab Bank is relatively steady and reflects minimal volatility in the return on equity. Net profit margin and total asset turnover exhibit relative stability for the period from 2001 to 2009. The equity multiplier also show almost stable indicators for the period from 2001-2005 and the ratios declined from 2006-2009 which indicates that the Arab bank had less financial leverage in the recent years, which means the bank is relying less on debt to finance its assets.

Objectives of the Study :

- 1) To overview the financial performance of the Mahindra & Mahindra Ltd in terms of profitability by using DuPont Model.
- 2) To compare the ROE & ROI of the Mahindra & Mahindra Ltd for past 5 years.

Methodology :

Type : Analytical Research

Data Type : The present study is mainly based on secondary data.

Tools used for Data Collection : The availability of secondary data is collected from ACEEQUITY Software.

Sample : Mahindra & Mahindra Ltd. (one of the Top Indian Automobile Company)

Period of Study : 5 years i.e. 2010 to 2014.

Tools used for Data Analysis : The data have been analyzed using financial ratios, as well as statistical tools and techniques i.e. ‘t’-test.

Formula :

$ROE = \text{Profit Margin (Profit/Sales)}$

* $\text{Total Asset Turnover (Sales/Assets)}$

* $\text{Equity Multiplier (Assets/Equity)}$

$ROI = \text{Asset Turnover}$

* $\text{Profit Margin (EBIT/Operating Income)}$

This formula is used to discover if there are significant differences between how the performance of the company is assessed. Being perhaps one of the most important indicators of performance, DuPont formula measures operating efficiency, asset use efficiency and financial leverage.

Data Analysis and Interpretation

ROE & ROI

Figure 01: Mahindra & Mahindra Ltd. – ROE & ROI

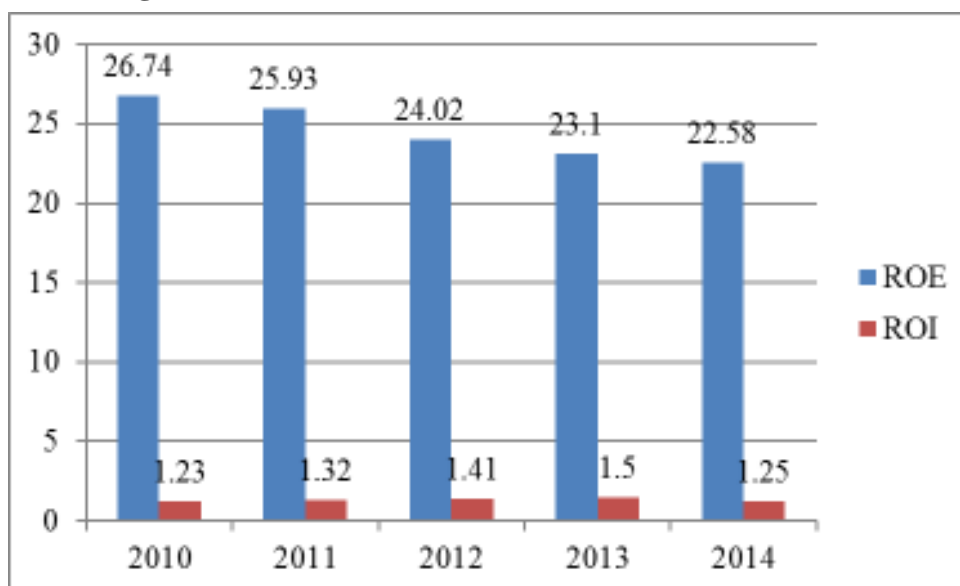


Table No. 01. – Return on Equity

Year	PAT (A) (Rs.in Crores)	NS (B) (Rs.in Crores)	PM (A/B) = C %	TA (D) (Rs.in Crores)	TAT (B/D) = E	Eq (F) (Rs.in Crores)	EM (D/F) = G	ROE (C*E*G) %
2014	3758.35	40508.50	9.28	31288.65	1.29	16641.70	1.88	22.58
2013	3352.82	40441.16	8.29	27453.59	1.47	14516.62	1.89	23.10
2012	2878.89	31847.19	9.04	23769.96	1.34	11983.08	1.98	24.02
2011	2662.10	23460.26	11.35	19539.78	1.20	10268.24	1.90	25.93
2010	2087.75	18602.11	11.22	16147.25	1.15	7807.09	2.07	26.74
Mean	2947.98	30971.84	9.84	23639.85	1.29	12243.35	1.95	24.47
t value	10.27	7.01	16.02	8.75	23.02	7.89	54.41	30.45
p value	0.001	0.002	0.000	0.001	0.000	0.001	0.000	0.000

Above Table indicates that, the net sales (t value = 7.01 & p < 0.05) and profit after tax (t value = 10.27 & p < 0.05) has shown significant increased but company unable to generate higher profit margin, averaged 9.84%.

Total Assets Turnover averaged 1.29 times, minimum is 1.15 in 2010 and maximum in 1.47 in 2013. It indicates that, the company is able to use its assets are more effectively to generate the cash from sales. Also it shown significant growth in Total Assets Turnover ratio (t value = 23.02 & p < 0.05).

Financial leverage of the company is significantly declined (t value = 54.41 & p < 0.05), it indicates management of company has decided to use its debts to finance its assets rather than on equity capital.

Table No. 02. – Return on Investment

Year	AT (A)	EBIT (B) (Rs.in Crores)	OI (C) (Rs.in Crores)	PM (B/C) =D	ROI (A*D) %
2014	1.47	4628.65	5439.20	0.85	1.25
2013	1.70	4638.28	5258.47	0.88	1.50
2012	1.59	3768.64	4236.51	0.89	1.41
2011	1.43	3592.1	3888.48	0.92	1.32
2010	1.35	3003.6	3283.63	0.91	1.23
Mean	1.51	3926.25	4421.26	0.89	1.34
t value	24.45	12.45	10.80	69.32	26.82
p value	0.000	0.000	0.000	0.000	0.000

It is observed from the above Table that, the ROI of M&M avergaed 1.34%, the highest in the year 2013 i.e. 1.50 & lowest in 2010 i.e. 1.23%. The operating income has significantly increased (t value = 10.80 & p < 0.05), that leads to maintain the profit margin ratio.

Results :

- **Profitability** : Net sales of the M&M Ltd have been continuously increasing year by year & that have reflected in increase in net profit. It shows that due to operating efficiency they were able to maintain their profit margin ratio.
- **Assets Efficiency** : Management of M&M Ltd has effectively utilized their total assets to generate the cash from net sales.
- **Financial Leverage** : The management of M&M Ltd used its debts to finance its assets rather than equity capital. It reflected to maintain their financial leverage. Since their ROE is declined slightly hence, the management of company have focus on use its debts to finance its assets rather than on equity capital.
- **ROI & ROE** : ROI of M&M Ltd is better due to increased in operating income of the M&M Ltd from 2010 to 2014, resultant in increase in net profit of the company. But on the other side, it is observed that, the ROI & ROE is somewhat diminutive decreased as year passes.

Conclusion :

In this research, researcher has attempted to measure ROE & ROI to find out the profitability Mahindra & Mahindra Ltd by using DU Pont Analysis. At the end, it is concluded that the DuPont analysis made by calculating ROE and ROI for Mahindra & Mahindra Ltd. and result portrays that Mahindra & Mahindra Ltd. have better profitability performance.

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Abbreviations

PAT – Profit after Tax
NS – Net Sales
PM – Profit Margin
TA – Total Asset
TAT – Total Asset Turnover
AT – Asset Turnover
Eq – Equity
EM – Equity Multiplier
EBIT – Earning Before Interest & Tax
OI – Operating Income
ROE – Return on Equity
ROI – Return on Investment
SD – Standard Deviation

A Study of Work Life Balance for Women Faculty in Higher Education

Nitin Nayak, Sampada Gulavani

Abstract:

Work life balance is a broad concept including proper prioritizing between career and ambition on one hand, compared with pleasure, leisure, family and spiritual development on the other. Work life balance is a daily effort to make time for family, friends, community participation, spirituality, personal growth, self care and other personal activities, in addition to the demands of the workplace. Balanced employees tend to feel more motivated and less stressed out at work, which increases the organizational productivity and builds a sustainable workforce. Working women face conflicts due to their continuing role as primary caretakers for their homes, children, and elderly parents. Also women faculty in higher education has to spend extra time for own development effective and productive in their profession so that they could reach higher levels and face the challenging atmosphere. Hence support from family members and spouse is required to the women faculty working in higher education. Also management should take care to maintain healthy work environment, increase employee morale and managing proper employer employee relationship in the higher education institutions.

Keywords : Working Women, Work Life Balance, Higher Education, Women Faculty

1. Introduction :

In 21st century due to increase in competition, major changes took place in different sectors including education. Work is central to an individual's lives. Balancing work and home life is a growing concern for both employers and employees. Work has to be organized along life. Since life is assumed about family activities,

mystical developments, pleasure and leisureliness, while work is supposed for a person's aspiration and professional responsibilities. When people need to split their time in these two important and vital elements of our living, they have to build a balance between them. The best work life balance for an individual will vary with different stages of life and career, as priorities of that individual change over time. Work life balance is a daily effort to make time for family, friends, community participation, spirituality, personal growth, self care, and other personal activities, in addition to the demands of the workplace. Work life balance not only equally dividing the time spent on one's work and personal life, but establishing a harmony that reflects an individual's priorities. Work Life Balance is ? satisfaction and good functioning at

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work and at home with minimum role conflict (Clark, 2000).

The paper addresses concept of work life balance, need of work life balance for women, women in teaching profession in higher education, variables identified in work life balance, findings, suggestions and conclusion. The topic under consideration is purely a descriptive one and therefore only secondary sources of data are used. The information has been gathered from authentic books, journals, articles and websites have been accessed for the study.

2. Need of Work Life Balance for Women

Now a day's time have changed, since from the time the husband earned, and the wife stayed at home, to the time now when the husband earns and the wife earns too. Work life balance of women's representatives has developed as an intriguing issue since the time has turned into a need that both a couple need to work to have an ordinary life as a result of the expanding financial conditions and social request. Hence it is exceptionally important to know how the women's adjust proficient and local life. Working women face well-documented conflicts due to their continuing role as primary caretakers for their homes, children, and elderly parents. Women's greater responsibility is to take care for children and other family members and they experience more interruptions than men. Women and men generally have a different perception of what the "life" part of the balance involves. For women, it tends to be devoting more time to family, while for men it is spending more time pursuing personal interests. It causes to the psychological strain to the women employees, which in turn affects the health. The mentioned stresses and strains could lead in the long term to irreversible, physical signs of wear like body pain, eye sight problem, obesity as well as to negative effects on the human cardiovascular and immune systems. So, how does she balance her work with life at home? There are different components affecting work life balance,

for example, push, struggle and workload, nature of work life, work family bolsters and enthusiastic savvy.

3. Objectives of Study:

By considering nature of the study, the researcher has laid down following objectives of the study.

- i) To study the concepts and importance of work life balance among women faculty in higher education in the sample area.
- ii) To study various factors affecting on work life balance.
- iii) To study the work life balance among different levels of women faculty in higher education.

3.1 Research Methodology :

The researcher has adopted Field Survey Method and Observation Method to understand the concept of work life balance and the various aspects that are involved in the successful development of work life balance. The above study "A Study of Work Life Balance for an Women Faculty in Higher Education" is mainly conducted in different universities and colleges approved by UGC/AICTE like Engineering, Medical, Management, Pharmacy, Arts, Commerce and Science, Environmental Science and fine arts. For the field research, a questionnaire is prepared including both open ended and close ended questions. The researcher met women faculty from different colleges personally and interviewed them. Also secondary data was collected. Literature review was done from different journals and internet and considered for research purpose. Based on the literature review, the conceptual model was given. Two possible variables for the identification of the work life balance are number of colleges and number of women faculty. Therefore first colleges under university were identified and then women faculty was selected for the study purpose.

3.2 Sources of data collection:

- i. **Primary data**-Primary data constitutes of information gathered through formal and informal discussions, structured and unstructured interviews and administration of questionnaire.

Following tools were used to collect primary data :

- **Questionnaire** - Primary data is collected through a well-structured direct questionnaire by taking direct interviews of women teachers. A Pilot test is conducted for some of sample respondents and then a final questionnaire is administered through respondents.
- **Formal and Informal Interviews** – Using open-ended and close ended questionnaires, the data was collected. Certain information required to fulfill few objectives can be elicited with the help of formal and informal interviews of women teachers.
- **First-hand Information** - It is collected through observation method and used as data collection.

ii) **Secondary data** : Following tools were used to collect secondary data.

- **Visit to libraries**- For the study purpose, the required secondary data is collected by using various published sources, research journals, conference proceedings and different websites. Also manuscripts from various libraries is collected.
- **Websites** : Secondary data is also collected by referring to websites. The original research works carried out by different researchers in work life balance have been reviewed thoroughly for concluding the significance of work life balance.

4. Women in Teaching Profession in Higher Education

Women is considered traditionally to accept role of a caretaker or a mother figure and naturally gifted with talents of empathy and patience, women are considered to be suitable for teaching. Because of the convenient timings, and respectable position, working in higher education seems to be the perfect career option for women. But, is the picture really as rosy as it seems? Teaching is a profession that one could spend virtually hours upon hours working at every day, all day long – 365 days a year and still never be truly finished

off. Teachers soon realize that there is always something that needs to be done. Students need enrichment, others need remedial assistance, and students have to be prepared for various competitions. In addition to this, teachers in higher education has to keep update themselves in their field. They have to attend conference, faculty development programmes, seminars and workshop in their respective area. Also teachers need to publish research papers in national and international journal. Also teachers has to perform load of non-academic responsibilities. Along with this teachers find it difficult to deal with youth of today. In the words of Doug, McAvoy, General Secretary of National Union of Teachers, 'Excessive teacher workload has stolen teacher's time and sapped creativity'. By considering above, it is difficult for women faculty in higher education to balance with their work and home. Opportunity, flexibility and family support are the keys to retaining the best women and eliminating the extra cost of employing them.

- Opportunity means judging and promoting ambitious women on the same terms as men.
- Flexibility means allowing women to share jobs, work part-time, work from home.
- Family support means principally support of family members for child care.

Work life balance for women faculty in higher education has become one of the greatest challenges in today's world. Their work load not only demand their time in the institution but also extend to their home so as to get prepared for the following day. Women faculty in higher education need to spend extra hours every day to be effective and productive in their profession so that they could reach higher levels and face the challenging atmosphere. Moreover, they not only look forward towards teaching, but need to also focus on soft skills and life skills so that they can produce good professionals and develop good citizen. In present times, young teaching professionals are increasingly confronted with a problem of conflict

between work role and an equally demanding role at home. Hence work life balance for women faculty in higher education has become one of the greatest challenges in today's world.

5. Analysis of Factors

The present study is based on descriptive type of study, so certain factors have been found out which would provide a base for conduction of various analysis & interpreting results. The following are the factors extracted from the survey done through questionnaires:

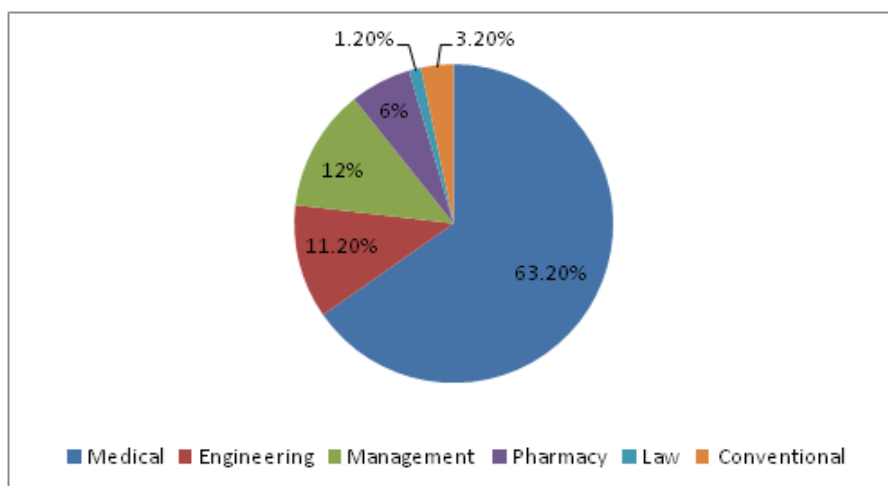
5.1 Type of Faculty :

The basic objective of the study is to identify the work-life balance of women faculties belonging to different discipline like engineering, medical, management, pharmacy, law, conventional and others out of total sample size of 250 faculties.

Table No.1 : Details of Women Faculty selected from different discipline

Type of Faculty	Number	Percentage
Medical	158	63.2%
Engineering	28	11.2%
Management	30	12%
Pharmacy	15	6%
Law	03	1.2%
Conventional	08	3.2%
Others	08	3.2%
Total	250	100%

Table No.1 shows the details of women faculty selected from different discipline like medical, engineering, management, pharmacy, law, conventional and others



Graph no. 1 : Details of women faculty

5.2 Present Designation of Women Faculty :

To study the work life balance, present designation of women faculty like assistant professor, associate professor, professor and principal/director in different discipline is collected and the details are shown in Table No. 2 .

Table No. 2 : Present Designation of Women Faculty

Designation	Number	Percentage
Asst. Professor	216	86.4%
Asso. Professor	20	8%
Professor	10	4%
Principal/Director	04	1.6%
Total	250	100%

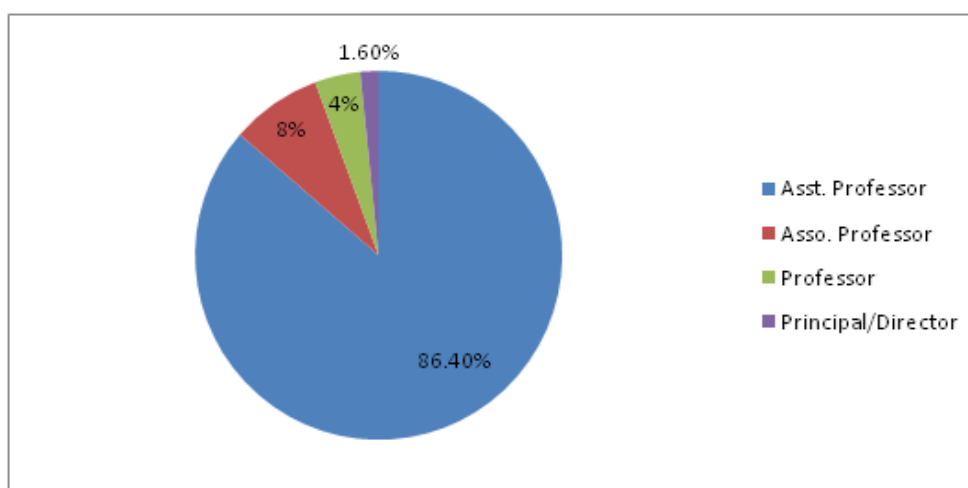


Fig. no. 1.2 : Sample distribution of present designation of women faculty

5.3 Details of Children Caring :

About children caring of women faculty members, 43 agree that their parents take care of their children, 81 agree that their parents-in-law take care of their children , while 74 faculty says that they are dependent on maid for the caring of their children and 11 faculty agrees that they are using day care centre for their children as shown in Table no. 3.

Table No. 3 : Details of Children Caring

Career Stage	Number	Percentage
Spouse	0	0%
Parents	43	17.2%
Parents-in-law	81	32.4%
Maid	74	29.6%
Day care centre	11	4.4%
Not Applicable	41	16.4%
Total	250	100%

5.4. Number of Hours in College :

Table no.4 shows that out of 250 faculty members, 24 agreed that they spend 5-6 hours in the college, 226 agreed that they spend 6-7 hours in the college and nobody agreed that they spend more than 7 hours in the college.

Table No. 4 : Number of Hours in College

Hours Spend	Number	Percentage
5-6 Hours	24	9.6%
6-7 Hours	226	90.4%
More than 7 Hours	0	0%
Total	250	100%

5.5 Stress Related Disease :

Regarding details of the stress related disease as shown in table no.5, it is observed that 174 women faculty are suffering from eye sight problem, 33 are suffering from obesity, 41 are suffering from diabetes, 46 are suffering from frequent headaches and 56 are suffering from body pain. Also it is observed that some women faculty are suffering from more than one stress related disease.

Table No. 5 : Women Faculty Suffering from Stress related Disease

Stress Related Disease	Number	Percentage
Eye sight problem	174	69.6%
Obesity	33	13.2%
Diabetes	41	16.4%
frequent headaches	46	18.4%
body pain	56	22.4%
any other	0	0%

5.6. Level of Difficulty to maintain Work Life Balance :

Regarding level of difficulty to maintain work life balance, table no. 6 shows that 38 women faculty agrees that it is easy, 161 faculty agrees that it is moderate and 51 faculty agrees that it is high.

Table No.6 : Level of difficulty to Maintain Work Life Balance

Level of Difficulty	Number	Percentage
Easy	38	15.2%
Moderate	161	64.4%
High	51	20.4%
Total	250	100%

6. Findings :

- i. It is observed that highest number of women faculties (63.2%) are working in medical profession, 11.2% from engineering, 12% from management, 6% from pharmacy, 1.2% from law and 3.2% from conventional and others.
- ii. Maximum number (86.4%) of women faculties are working as assistant professor, and only 8% , 4%, 1.6% women faculties are working as associate professor, Professor and principal/director respectively.
- iii. Regarding children caring, it is observed that 32.4% parents-in law and 17.2% parents take care of the children of working women where as 29.6% maid take care of the children and only 4.4% are kept in day care centre.
- iv. Regarding number of hours in college, it is observed that 90.4% faculty members spend 6-7 hours in the college and only 9.6% faculty members spend 5-6 hours in the college.
- v. It is observed that 69.65% faculty members are suffering from eye sight problem, 22.4% are suffering from body pain problem and 18.4%, 16.4% are suffering from frequent headaches and diabetes.
- vi. About level of difficulty to maintain work life balance, 15.2% women faculty agrees

that it is easy, 64.4% faculty agrees that it is moderate and 20.4% faculty agrees that it is high to maintain work life balance.

7. Suggestions:

- i. Educational institutions need to consider the problems faced by women faculty like problems related to health, socio personal aspect, problem of child care and problem of elderly person in the family.
- ii. To maintain proper work life balance, educational institutions should introduce certain family friendly measures such as extended maternity leave, child care facilities, elder-care assistance, flexible duty hours and job sharing, special leave, pick and drop facilities, and residential facility for women faculty members.
- iii. Now a days since health care is very expensive, there is a need that organization should provide free health checkups, health insurance, nutrition counseling & exercise facilities to the women faculties. These not only act as work life initiative but also acts as good retention tool to the women faculties.
- iv. Management should take care to maintain healthy work environment, increase employee morale and managing proper employer employee relationship, co-worker support, employee friendly policies and head support leading to managing work life balance for women faculty in higher education.

8. Conclusion:

To maintain proper work life balance for women faculty working in higher education, proper work environment, employer-employee relationship and contribution towards family welfare is important .Women faculty are facing several types of problem not only at the work place but also at their home. Impact of home on work and work on home need to be balanced properly. They are suppose to manage both the ends with full of efficiency and accuracy. They are playing double role in their life, but up to what extent they will be able to handle

and manage their double responsibilities become important. Juggling between the burden, obligations and responsibilities of work and multiple family roles, balancing becomes an uphill and an ongoing task for teaching professionals.

Hence there is a big challenge for the women faculty to make an equilibrium between the professional life and the personal life. It can be concluded that women employees are mentally occupied about the college work devoting more time in college which affects their domestic responsibilities and their temperament. Even though they are handling both the responsibilities, but they are not getting required expected support from family members to manage their official and domestic problems. Due to that, their domestic problems affect their professional work and vice-versa. Hence there is a need that management and family members should cooperate women faculty members working in higher education.

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