

ERGONOMICS AND EMPLOYEE SATISFACTION - A CASE STUDY OF SELECTED BANKS IN CHIKKAMANGALORE CITY OF KARNATAKA

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Abstract:

Development in Technology has made frequent developments in service sectors. Especially banking sector is providing services to its customers very they are delighted. They are enjoying the facilities like online shopping, credit and debit card facilities, handling their money without holding that with their hands. In other words it is mandatory that the employees working at the various responsibilities in banks need to develop some skills and they are facing some occupational hazards also. Hence in front of the bank management it is very big challenge to maintain physical and mental health of their employees in improving the productivity. Therefore they have adopted some Ergonomic practices to their workers to manage their mental and physical health. Consequently present study is an attempt to study and analyse the occupational hazards, measures taken by the banks and satisfaction of the employees regarding the same

Key Words: Ergonomics, Physical and Mental Health, Occupational Hazards, Banking Sector

1. Introduction:

In the service sectors like banking sector, workforce are facing major challenges like overwork load, stress, repetitive nature of work etc. further the employees working in these industry are experiencing physical and psychological health issues. Due to this the industry is facing problems of employee turnover, hence to retain and motivate the employees the management needs to implement strategies to overcome from the above mentioned problems. In view of this most of the services industries are reconfigure the space of their offices in new ways and models & new techniques adopted to maintain psychological health too. Therefore Ergonomics is the science of fitting job to the people. Ergonomic practices also can also be identified as the designing and arranging things in an organization which the employees use and it maintains the well-being of employees in other words. Today the nature of the work t banking sector have made the concept most effective and necessary

1.1 Meaning and Definition:

The term ergonomics is derived from the Greek word ergos meaning "work" and nomos meaning "natural laws of" or "study of."

Ergonomics refers to science of work that is systematic arrangement of the tasks, products, environment at the workplace which leads to perfect match between people and the job. Further it is a body of knowledge about human capabilities, limitations and characteristics that are related to the job design. Ergonomic design is an application of this professional body of knowledge to design the working environment that includes tools, machines, systems and jobs for comfortable use of human

2. Review of Earlier Work:

Prof. Prajakta. Y. Pawar, Dr. E. BKhedkar (2016), in their study discussed that working environment is a very important support given by both IT and Banking Sector to manage risk at the job. It is believed that the same will help to the job accurateness and increased productivity which is proven by many researches. The authors examined the awareness level of employees in both IT and banking sector about ergonomics, further they have made comparison between IT and Banking sector employees. Finally the study concluded that IT sector employees are more aware of Ergonomic practices when compare to banking sector. Moreover the study perceived that the IT sector have more Ergonomic practices to make their workforce healthy where the banking sector have less practices.

Elizabeth Chacko, Dr. Ipshita Bansal (2015), in their empirical study on the concept, discussed that LPG made the employees of organizations to not only satisfied with the salary, in addition to that they are aware of health and safety issues at workplace. The study also portrays the Ergonomic culture and practices adopted by the banks in the study area. Finally the study concluded that the organizations are in need to have Ergonomized office to motivate the employees and their productivity.

Mrunal. S. Baxi, Dr. Deepali N. Hande (2017), in their one of the study depicts that the bank workers need to work more than 8 hours per day, by using technology they have to work with same posture and perform

same nature of work. The study conducted with 30 bankers who are working with various banks in the study area. Further the study critically assessed the risk factors in banking sector which leads to neck pain and pain in upper limb. Finally the study concluded that the task performed by the bankers possess moderate risk of occurrence of musculoskeletal injury. But when it comes to the Ergonomic practices the banks at rural area neglects due to the shortage of workforce.

M. Mohana, T. S. Mukesh, S. VetriInduja (2019), in their study mainly focussed on the risk control measures through Ergonomics in construction industry, the study also discussed that in the construction industry more ergonomic risk control measures must be adopted, because this industry is most hazardous industry. Based on the review of earlier works in the same field, the study suggested that better communication affiliation and risk control measures can avoid the problems of Ergonomic hazards.

3. Research Design:

3.1 Research Gap:

From the analysis of earlier works on the concepts it is vibrant that many researchers have undertaken studies on the concept of Ergonomics in banking, It and construction fields. Further the studies also concentrated on the various concepts and scope. At the same time the studies also concentrated on the ergonomics and its effect on the physical health, productivity of the organization and satisfaction of the employees on the ergonomic practices adopted by the organizations. But the concepts like factors influencing the Ergonomic issues in banking sector in Chikkamangalore city is not addressed as well. Therefore the present study is an attempt to fill this gap.

3.2 Objectives of the Study:

- To study the concept of Ergonomics and its effects on the banking sector
- To critically examine the need for Ergonomic practices in banking sector
- To analyse the employee satisfaction towards the Ergonomic initiatives taken by the selected banks in Chikkamangalore city
- To analyse the factors influencing satisfaction of the employees towards Ergonomic initiatives taken by the banks.

3.3 Research Methodology:

The study is descriptive in nature. And The scope of the present study is covered the employee of selected Banks like SBI, Canara Bank, Vijaya Bank, Syndicate Bank, Punjab National Bank in Chikkamangalore city. In order to reach the objectives set forth for the study the prime data is collected through Questionnaire and observation methods. Secondary data is collected through published sources like Journals, Books and e-sources. Further to select the sample size simple random sampling was is used and the sample size of the study is limited to 30 employees (5 from each bank) who are working at various levels like managerial and clerical etc. for the descriptive analysis of the data weighted average technique has been used and to test the set hypothesis co-relation technique is used.

3.4 Hypothesis Tested:

- H₀: There exists a positive co-relation between the Socio-Economic profile of the employees and satisfaction towards Ergonomic Office (Physical) facilitated by the Banks
- H₀: There exists a positive co-relation between the Socio-Economic profile of the employees and satisfaction towards Ergonomic Office (Psychological) facilitated by the Banks

3.5 Scope for Further Research:

Respondents considered for the present study is limited to 30employees and also the study is only covered the geographical area of Chikkamangalore city. Further study can be done for various metro and Cosmo cities in India by applying various models available in the concept of Ergonomics.

4. Results and Discussions:

Primary data is collected from the sample employees selected for the study. Information has been collected by asking close ended liker type questions. Variables are set based on the literature and concepts of the topic. The data is analysed by using suitable statistical tools and presented in the tables below. Moreover in the below tables Socio-economic profile, issues related to nature of the work, outcomes of Hazards at work place, and systematic arrangements of Physical and Psychological aspects provided by the banks in the study area are analysed.

Tuble 1.1. Boold Economic Fromes								
Gender	Frequency	Percent						
Male	23	76.7						
Female	7	23.3						
Total	30	100						
Age	Frequency	Percent						
Below 25	1	3.3						
25-30	6	20.0						

Table 4.1: Socio-Economic Profiles

30-35	10	33.3
35-40	7	23.3
Above 40	6	20.0
Total	30	100.0
Marital Status	Frequency	Percent
Married	26	86.7
Unmarried	4	13.3
Total	30	100.0
Nature of the Family	Frequency	Percent
Joint Family	6	20.0
Nuclear Family	24	80.0
Total	30	100.0
Education Qualification	Frequency	Percent
Graduation	15	50.0
Post- Graduation	12	40.0
Professional Courses	3	10.0
Total	30	100.0
Designation	Frequency	Percent
Managerial	7	23.3
Managerial Clerical	7 23	23.3 76.7
Clerical Total	•	
Clerical	23	76.7
Clerical Total	23 30	76.7 100.0
Clerical Total Experience	23 30 Frequency	76.7 100.0 Percent
Clerical Total Experience Below 1 year	23 30 Frequency 2	76.7 100.0 Percent 6.7
Clerical Total Experience Below 1 year 1 to 5 years	23 30 Frequency 2 14	76.7 100.0 Percent 6.7 46.7
Clerical Total Experience Below 1 year 1 to 5 years 5to 10 years	23 30 Frequency 2 14 10	76.7 100.0 Percent 6.7 46.7 33.3
Clerical Total Experience Below 1 year 1 to 5 years 5to 10 years 10 to 15 years	23 30 Frequency 2 14 10 4	76.7 100.0 Percent 6.7 46.7 33.3 13.3
Clerical Total Experience Below 1 year 1 to 5 years 5to 10 years 10 to 15 years Total	23 30 Frequency 2 14 10 4 30 Frequency	76.7 100.0 Percent 6.7 46.7 33.3 13.3 100.0 Percent 3.3
Clerical Total Experience Below 1 year 1 to 5 years 5 to 10 years 10 to 15 years Total Monthly Income	23 30 Frequency 2 14 10 4 30 Frequency	76.7 100.0 Percent 6.7 46.7 33.3 13.3 100.0 Percent
Clerical Total Experience Below 1 year 1 to 5 years 5 to 10 years 10 to 15 years Total Monthly Income Below 20000	23 30 Frequency 2 14 10 4 30 Frequency	76.7 100.0 Percent 6.7 46.7 33.3 13.3 100.0 Percent 3.3
Clerical Total Experience Below 1 year 1 to 5 years 5to 10 years 10 to 15 years Total Monthly Income Below 20000 20000-30000	23 30 Frequency 2 14 10 4 30 Frequency	76.7 100.0 Percent 6.7 46.7 33.3 13.3 100.0 Percent 3.3 13.3
Clerical Total Experience Below 1 year 1 to 5 years 5to 10 years 10 to 15 years Total Monthly Income Below 20000 20000-30000 30000-40000	23 30 Frequency 2 14 10 4 30 Frequency 1 4	76.7 100.0 Percent 6.7 46.7 33.3 13.3 100.0 Percent 3.3 13.3 33.3

Source: Primary Data Analysis and Discussion:

Above table clearly portrays the socio-economic profile of the respondents, by analysing the same fallowing can be identified,

- In the study area out of 30 respondents majority 76.7% are male and 23.3% are female.
- Out of 30 respondents 33.3% belongs to 30-35 age group, 23.3% respondents belongs to the age group of 35-40.
- 86.7% respondents are married, 13.3% are unmarried.80.0% respondents belong to nuclear family and 20% respondents belong to joint family.
- Out of 30 respondents 50.0% are graduates, 40.0% are post-graduates and 10% have their professional courses.
- Out of 30 employees 76.7% Clerical cadre, 23.3% employees belongs to Managerial
- 46.7% respondents associated with the bank from five years, 33.3% employees associated for five to ten years, 13.3% respondents associated from ten to fifteen years and 6.7% associated below 1 year.
- When it comes to income of the employees, 43.3% are getting 40000-50000, 33.3% are getting 30000-40000. In view of this below table explains the issues related to nature of the work of bank employees.

Table 4.2: Issues Related to Nature of the Work

Issues Related to Nature of the Work	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Averages
It needs frequent stand up from the work chair	22	8	0	0	0	2.7
Job needs frequently carry heavy objects	21	9	0	0	0	2.7
Job needs me to stand/ Sit for long periods	24	6	0	0	0	2.8
It needs repetitive movements for long periods of time	18	12	0	0	0	2.6
Job needs repetitive tasks and frequently use of my arms, 1	20	10	0	0	0	2.6
hands and fingers	16	14	0	0	0	2.5
The job makes physically exhausted at the end of the day	18	12	0	0	0	2.6

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I have stressful days	19	11	0	0	0	2.6
I have sleeplessness due to overstress	22	8	0	0	0	2.7
I fell tensed sometimes	25	5	0	0	0	2.8
I have trouble and body pain due to heavy workload	27	3	0	0	0	2.9
I have an unsatisfactory health level	28	2	0	0	0	2.9

Source: SPSS Output N=30 Multiple Responses Allowed

Analysis and Discussion:

Above table clearly explains the issues related to nature of the work of the employees at the selected banks in the study area, based on the maximum weights that is from 2.5 to 2.9, it is clear that the bank employees are facing the issues like recitative work, and sitting/standing in a same posture for long period of time, over work load leads to body pain, stressful days and sleeplessness and unsatisfactory health level. Further the following table exhibits the opinion of the employees about outcomes of Hazards at workplace in detail.

Table 4.3: Outcomes of Hazards at workplace

Outcomes of Hazards at Workplace	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Averages
I get tired	27	3	0	0	0	2.9
I always be in a stressful situation	23	7	0	0	0	2.7
I face abdominal discomfort	12	3	5	4	6	1.0
I face health issues like Blood Pressure, Diabetes, Back pain, etc	14	2	6	5	3	1.3
I am depressed due to heavy work stress	15	3	4	3	5	1.4
My Jobs are repetitive and boring	22	6	2	0	0	2.6
Sometimes I intent to quit	5	6	15	3	1	1.2

Source: SPSS Output N=30 Multiple Responses Allowed

Analysis and Discussion:

Table above denotes the outcomes of the hazards at work place, here an attempt is made to analyse the perception of the respondents by using weighted average technique, weights more than 2.5 to 3.00 denotes that the employees are tired, they always be in stress full situation, and they feel that their job is recitative and boarding. Weights between 1.00 to 1.5 shows that, sometimes they feel abdominal discomfort, some other health issues, heavy work stress and they intent to quit. In order to overcome from the above mentioned problem the management of banks have taken some measures and provided some facilities, hence forth the satisfaction of the employees regarding the Ergonomic facilities provided by the bank is studied and analysed in the below table.

Table 4.4: Satisfaction of the Employees regarding Ergonomic Office (Physical)

Ergonomic Office (Physical)	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Weighted Averages
Working Chair is adjustable for various positions	28	2	0	0	0	2.9
My work station provides me with a comfortable working area	22	3	5	0	0	2.5
Work areas environment is acceptable	17	13	0	0	0	2.5
Lighting at the work place is satisfactory	29	1	0	0	0	2.9
Bright light provided at workplace increase my job performance	26	4	0	0	0	2.8
Adequate lighting is supplied when I do the task	24	3	2	1	0	2.6
I feel satisfied with the working hours	0	0	0	25	5	-1.1
Sufficient rests periods given in working days	9	5	6	10	0	1.1
Working hours helps me to balance my work life	6	2	1	21	0	0.06
Enacting a preventive maintenance program for mechanical and power tools and equipment	21	5	4	0	0	2.5

Source: SPSS Output N=30 Multiple Responses Allowed

Analysis and Discussion:

Above table scrutinizes the satisfaction of the employees regarding the physical arrangement of the office in order to overcome from the challenges faced by the employees. Weights from 2.5 to 3.00 show that, the employees are satisfied with some of the facilities provided by the bank to manage their responsibilities. It also proved that employees are satisfied with the facilities like chair, working area, bright light etc. at the same time it is identified that the employees are not satisfied with the working hours, sufficient rest period, and work life balance, which is proved by the weights between 1.1 to -1.1. However the banks are also taken measures to maintain mental health of the employees, in view of this satisfaction of the employees concerning facilities are studied and analysed in the below table.

Table 4.5: Satisfaction of the Employees regarding Ergonomic Office (Psychological)

Ergonomic Office (Psychological)	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Weighted Averages
Effective Communication of benefits provided	19	6	5	0	0	2.4
Timely increments in the Salary	24	6	0	0	0	2.8
Promotions are provided based on the performance	9	3	18	0	0	1.7
Relationship with the higher authorities	15	5	4	6	0	1.7
Relationship with the co-worker	14	3	8	5	0	1.7

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Non-financial benefits provided	24	6	0	0	0	2.8
Proper training is provided to handle hazards at work place	10	2	18	0	0	1.7
Counselling is done based on the requirement	12	6	12	0	0	2
opportunities to Exhibit the talent	16	4	10	0	0	2.2
Enlarging job responsibilities such that the same task is not repeatedly performed	2	4	10	14	0	0.3
Assigning a second worker to assist in performing select tasks	12	4	10	4	0	1.6

Source: SPSS Output N=30 Multiple Responses Allowed

Analysis and Discussion:

Table above depicts that the maximum weights is between 2.5 to 3.00, hence it is proved that the employees are satisfied with the facilities like communication, increments in the salary, non-financial benefits, , talent consideration and Counselling provided by the banks to manage their well-being, which could also be helpful to maintain health issues. At the same time it is also proved that the employees are not satisfied with some of the facilities like enlargement of responsibilities, and training. They are neutral about the promotions based on the performance, relationship with the higher authorities and relationship with the co-workers, which displayed with the weights above 0.3 and below 2. Further to identify the factors that lead to dissatisfaction of the employees below hypothesis are formulated and tested by using co-relation technique.

Hypothesis 1:

H₀: There exists a positive co-relation between the Socio-Economic profile of the employees and satisfaction towards Ergonomic Office (Physical) facilitated by the Banks

Table 4.6: Co-relation between satisfaction of the employees regarding Ergonomic Office (Physical) and their Socio-Economic Profile

Symmetric Measures								
Ergonomic Office (Physical) a	and Socio-Economic Profile	Value	Asymp. Std. Error	Approx. Tb	Approx. Sig.			
Interval by Interval	Pearson's R	.640	.105	4.406	.000			
Ordinal by Ordinal	Spearman Correlation	.718	.113	5.463	.000			
N of Valid	1 Cases	30						

Source: SPSS Output **Analysis and Discussion:**

Above table shows the calculated co-relation value to explore the relationship between socio-economic profile and Ergonomic office (Physical) provided by the banks. Here the co-relation value is more than 0.5 and p<0.05, hence it is proved that the null hypothesis is rejected and alternative hypothesis is accepted therefore it is concluded that there is a positive co-relation between satisfaction of the employees regarding ergonomic office and their socio-economic profile. Further it is proved that whatever may be the facilities provided by the bank to manage hazards at workplace, the satisfaction of the employees are also depended on their age group, qualification, income, family size and also gender. Because different socio-economic profile will be having different limitations. In view of this below hypothesis is an attempt to identify the relationship between the socio-economic profile and satisfaction of the employees regarding Ergonomic office (psychological).

Hypothesis 2:

 H_0 : There exists a positive co-relation between the Socio-Economic profile of the employees and satisfaction towards Ergonomic Office (Psychological) facilitated by the Banks

Table 4.7: Co-relation between Ergonomic Office (Psychological) and Socio-Economic Profile

Symmetric Measures								
Ergonomic Office (Psycholo	gical) Socio-Economic Profile	Value	Asymp. Std. Error	Approx. Tb	Approx. Sig.			
Interval by Interval	Pearson's R	.669	.084	4.764	.000			
Ordinal by Ordinal	Spearman Correlation	.734	.109	5.720	.000			
N of Valid Cases		30						

Source: SPSS Output

Analysis and Discussion:

Table above shows the relationship between satisfaction of the employees towards the ergonomic office (Psychological) and their socio-economic profile. The calculated co-relation value is more than 0.5 and p<0.05, hence it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore it is concluded that there is a positive co-relation between satisfactions of the employees regarding ergonomic office (psychological) and socio-economic profile of the employees. Here also it is identified that in the study area banks have provided various facilities to the employees to maintain their mental health, it is also depended on their age, experience, family background, income and gender too.

5. Conclusion:

In the present research the researcher proved that the employees at banking sector are facing various occupation hazards and its outcomes on family, physical and mental health. For the same, banks are facilitating systematic office both physical and psychological. But it is proved that the employees are not satisfied with many facilities, further it is identified that the satisfaction is also depended on socio-economic profile of the

employees. The study recognized that in most of the banks which located at the rural area and shortage of resources are not up to the mark in providing Ergonomic office to the employees, sometimes neglected too. Finally the study suggested that employees need to develop some habits like listening to music, Yoga, Walking and Exercises etc, to manage their physical and mental health, as the nature of the job at banking sector cannot changed. Banks also develop some practices like training to leaders who manages the employees and facilities should be provided based on the requirement. And it is perceived that will definitely contribute to the productivity of banks and employees too.

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