



PROACTIVE ERGONOMICS CONTRIBUTING TO THE JOB SATISFACTION – EMPIRICAL STUDY ON OFFICE ERGONOMICS SEDENTARY JOBS – WITH REFERENCE TO BANKING SECTOR

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Abstract

The aim of this study is to study the job satisfaction among the employees when Ergonomic communication is studied and implemented. As satisfaction in the job mainly comes to salary point, but the other areas are always left unlearned. The change and satisfaction level is more in demand because of globalization, privatization and liberalization which has not left any area untouched. The more of globalization has made the employer's to have ear to the employees plead or grievances occurred due to working environment. The better workplace also contributes to the satisfaction level of the employee. The space, working condition, comfort and designing. The empirical research is used for this paper taking into account the study of banking service industry. The objective is to enhance the awareness of Ergonomics and relating the concept with job satisfaction. The main aim is to study the sedentary style job in banking employees. The research tool included the observation and questionnaire filling by the bank employees. The analysis technique was percentage technique. The research will be beneficial for every individual as knowledge on ergonomics can be helpful for one and all. The research conducted in banking sector will benefit the financial sector. This can be used for the human resource department to study the job satisfaction level with ergonomic design in the organization.

Keywords: *Sit Stand Ergonomics, Job Satisfaction, Awareness, Comfort and Design, Corporate Health, Injury Prevention, Productivity And Performance, Sedentary Style.*

Introduction to the Service Sector

The service sector, likewise called tertiary part, is the third of the three monetary divisions. The other two are the essential area, which covers regions, for example, cultivating, mining and fishing; and the optional segment which covers assembling and making things. Progressively benefit part organizations concentrate on what is currently being known as the " knowledge economy ". They have to keep in front of different organizations by comprehension what it is their clients need and be in a position to offer it to them rapidly and requiring little to no effort.

One great example of this are banks which experienced huge changes in the late 20th century. Utilizing data and correspondence innovation, banks have immeasurably decreased the quantity of individuals they have to utilize, and brought down the expense of giving bank administration. For instance, a robotized teller machine has the capacity give essential keeping money benefits 24 hours a day, 7 days a week, in various spots. Prior to this, managing account administrations were just accessible from the bank when it was open. Numerous banks and building social orders have joined together to shape much lower expense organizations that can profit from a more extensive client base. The way to this procedure is picking up data about their clients and continually concocting new services for them.

Banking Sector – A way forward

The money related arrangement of our nation consists of organized and unorganized sector. The sorted out area speaks to the structure nationalized banks, co-operative banks, and development banks; this includes the private sector also. The Reserve Bank of India controls this division. Business Banks assume a prevailing part during the time spent budgetary intermediation which credit and financial approaches are transmitted to the economy, with the privatization, liberalization and globalization procedures have been presented in our nation in the mid 90's the keeping money segment has experienced an exceptional change. India moved from a shut budgetary framework to open monetary framework. These progressions attempted to enhance the productivity of the saving money division. New standards were recommended to handle the inside inadequacies and outer environment of the saving money segment. Anyhow, these progressions are making a few difficulties.

Banks have been around since the first monetary standards were printed, maybe even before that, in some structure or another. Coin, especially the utilization of coins, developed out of tariff. In the beginning of old domains, an expense of on solid pig every year may be sensible, yet as realms extended, this sort of installment turned out to be less alluring.



Furthermore, realms started to need an approach to pay for outside products and administrations, with something that could be traded all the more effectively. Coins of changing sizes and metals served in the spot of delicate, impermanent paper bills. Banks have made some amazing progress from the sanctuaries of the old world, however their essential business practices have not changed. Banks issue credit to individuals who need it, however request enthusiasm on top of the reimbursement of the advance. In spite of the fact that history has changed the fine purposes of the plan of action, a bank's motivation is to make advances and ensure contributors' cash. Regardless of the possibility that the future takes banks totally off your road corner and onto the web, or makes them shop for credits over the globe, the banks will in any case exist to perform this essential function.

Ergo – Tech Banking

The current phase of the banking cycle appears to be driven by the downturn in economic activity rather than financial distress. Significantly, the largest financial institutions are among those affected by credit concerns. Worldwide financial systems have undergone structural changes. The global factors driving these changes have been advancements in technology and computing external financial liberalization and organizational changes in corporate world. Globalization and banking operations and expansion of financial activities as a result of technology advancements, in an increasingly market-driven environment have redefined the business models and changed the way the banks used to do the banking business. The International Banking scene has undergone drastic changes, with the introduction of computer and tele-communication technology, which have led to geographical and financial integration of international financial market in recent years. Banks are coming out with more and more features to add value to retail banking products and services. As the Indian Banks have adopted the Techy style of working system and services more bend on online services. It's not only the services provided by the bank had a tremendous change but also the organization structure too. If just gone back to olden days, the banks were just having one focus to debit or credit a customer's account or services like Demand Draft or Locker systems. But as the time changes the change is a need for the banking sector too.

Job Satisfaction With Concern to Ergonomized Culture

In every organisation the HR department is trying to sustain the employees by hiking their packages, motivational talks, recognition and awards. But looking upon the organizational structure is least from their end. The moment we look into Organisation structure the expense on renovation starts, that is one reason, deciding on organisation far from assessment. It can be said as non financial part of job satisfaction as the package doesn't increase but a better working condition is provided by just providing space, comfort move and improved office furniture's. As at the end the employee will not be affected with poor working conditions which may force him to leave the job.

According to Dr.Anitha (2011) Job satisfaction is the gathering of undertakings and obligations routinely relegated to one individual, while an occupation is a gathering of positions, which includes basically the same obligations, obligation, expertise and learning". Job satisfaction has some connection with the psychological well-being of the individuals. It spreads the goodwill of the association. Job satisfaction lessens truancy, work turnover and mishaps. Job satisfaction builds representative's assurance, profitability, and so forth. Job satisfaction makes imaginative thoughts among the representatives. People may turn out to be more steadfast towards the association Employees will be more fulfilled on the off chance that they get what they expected, Job satisfaction identifies with inward emotions of laborers. Actually it is the fulfilled laborer who demonstrates the greatest adequacy and productivity in his work.

Ergonomics – Bridging Satisfaction and Sustainability

Ergonomics literally means the "science of work". Because of the inadequate designs of hand tools have long been at the root-cause of lost efficiency, poor quality of products, and permanent injuries that have caused excessive malingering in the work force. Ergonomics comes into everything which involves people. Work systems, sports and leisure, health and safety should all symbolize ergonomics principles if well designed. Ergonomics (say "er-guh-NOM-iks") is the study of the kind of work you do, the environment you work in, and the tools you use to do your job. The goal of office ergonomics is to set up your office work space so that it fits you and the job you are doing. Ergonomics is the science of designing and arranging your workplace, home or office, to be comfortable, safe and efficient for working. An ergonomic workplace can save your time and money and can help you stay healthy and fit. It is concerned with the "fit" between people and their technological tools and environments. It takes account of the user's capabilities and limitations in seeking to ensure that tasks, equipment, information and the environment suit each user. When sitting, the main part of the body weight is transferred to the seat. Some weight is also transferred to the floor, back rest, and armrests. Where the weight is transferred is the key to a good seat design. When the proper areas are not supported, sitting in a seat all day can put unwanted pressure on the back causing pain.



To make sure that the body is not compromised at all in the work place. Ensure your body position and posture is conducive to comfort and that you have minimal distraction from physical discomfort. **This correct use of the body in the workplace is simply called 'correct ergonomics'.**

Objective of the Study

The objective of the study is as follows:

- To study the satisfaction level of employees in Banking Industry
- To study the proactive Ergonomics contribution in job satisfaction

Limitations of the study

- The survey is subjected to the bias and prejudices from the banking employees. Hence 100% accuracy can't be assured.
- The analysis is based only on the employees point of view
- The employer based survey was not conducted

Methodology

An empirical research design with survey method is applied in the study. The researcher has used both the primary and the secondary data for the purpose of this study. Secondary data were collected from available books, publications, research studies, articles and websites. For the primary data the questionnaire were filled by the banking employees.

Literature Review

According to **Jay L. Brand (2008)** in his study on Scientific research on office workspaces. The significance of instruction and preparing, consider the numerous ergonomic assignment seats at present accessible. Without satisfactory direction on the significance of ergonomics standards and seat conformity methods to fit specific anthropometries, stances, and undertaking exercises, clients are unrealistic to acquire the sought lessening in uneasiness or upgrade in execution of the errand given. A few architects have propelled the composed objective of supposed latent ergonomics to speak to items or different ergonomics intercessions that consequently conform to fit critical client measurements or attributes without immediate, purposeful client info. Scientific assessments of seats or different items outlined have been distributed. In any case, it appears to be sensible that clients may benefit from these uninvolved alterations, in light of the fact that completely 80% of the time, office employees just don't alter their PC workstations. According to N Mahmud, D T Kenny (2011) and team in their research regarding Awareness and Prevalence of Musculoskeletal Symptoms among Office Workers. Time pressure was the only risk factor related to overall Musculoskeletal symptoms among all office employees. Awareness on Office ergonomics was low among respondents and there was a high prevalence of musculoskeletal symptoms especially in the neck, shoulder and back region. Knowledge of office ergonomics was not protective against musculoskeletal symptoms in office workers. Poorer general health was related to the report of higher MSDs in females, so preventive medicine may be better directed towards encouraging an overall healthy lifestyle than a narrow focus on office ergonomics.

Portable computing can also add comfort to the worker as the faulty placing of the system can give discomfort to neck, shoulder and eyes. According to **Tom Albin (2008)**, from Ergotron, the portability of system can give space to ease in working. According to him the individual must know about their bodies various elements involved in their task relate to each other like table, chair, desktop, keyboard, mouse, other accessories like lighting in the room, etc. He also mentioned that the working on laptops will any how create various health issues and now a days manufacturer for computers are preferring the sale of desktop. Desktop also portable computers a enhanced way of computer making us more efficient and productive. Tom has also studied the relation between the eye height where the monitor is placed and elbow height where the keyboard is placed by having five categories like the 5% females, Average Females, Average persons, Average males and 95% of males. According to his study the height of the person matters a lot while adjusting the monitor spacing and the keyboard height. The research was based on American workers where the sitting job is 70%. According to his study there three steps called as ergonomic equation which the three steps of the ergonomic equation which show the way to a balanced body and a comfy computing experience. Three steps are Neutral Posture, Voluntary Motion and Restorative Time . In his research it was quoted that its not the human who have to mould themselves to machine but machine must be adapt the human.

According to **Jean, Vale'rie Gouin and Samuel Gomes (2003)** in their paper on Ergonomics in product design of driving cabin of high speed trains in the current generation. In this paper the author has taken keen interest on the product design can also be termed as pre ergonomics. They have mentioned that the ergonomics starts the moment we plan for the product. As



the scenario changes the manufacturers are more customer centric, which require each and every angle to be viewed with its pros and cons. The focus being the safety of individual being the priority.

Arun Narayanan et. al (2013) The problems of ergonomics giving negative affect to workers which leads to non productivity and low morale in the textile industry was studied by Arun and team. The study was done in production department of the textile industry. The study was divided into 4 categories like working environment, work time, machinery and industrial safety. They have studied the cause and effect of the machinery on the basis of ergonomics. The working environment as per the studies interpreted that the company has to improve the working style by using the disposable mask for employees, sound proof machines which can give better health to employees and as an output the higher productivity at the end job satisfaction. **Hendrick (2008)** also argues that much of ergonomics research literature is in a format that is not useful to engineers and designers, and that scientific literature must be translated into practical 'how to' guidelines for engineering and design use. "As a science, ergonomics is concerned with developing knowledge about human capabilities, limitations and other characteristics as they relate to the design of the interfaces between humans and other system components (...) As a practice, ergonomists around the world apply [human-system interface technology] to the designer modification of systems to enhance safety, health, comfort, and performance, including productivity and quality."(Hendrick, 2008 p. 419)

Theberge and Neumann's (2010) narrate as how ergonomists can be engage in making enhanced "organizational work". It was explored that ergonomist can make a difference in the working culture and positive vibes in the organization. Broberg and Hermund's (2004) in their finding on occupational health and safety that consultants need to act as "political reflective navigators" in order to further an ergonomics agenda.

Ergonomics in production has been linked to health and sick-leave absence as many scholars had their study in the production department of various companies (Parenmark et al. 1988; Kuoppala et al., 2008; Morag, 2007; Westgaard and Winkel, 1997; Moreau, 2003).

Fredriksson (et al.,2001) Psychosocial aspects is one area which cannot be left untouched, as that too has link with the performance and productivity. The discomfort or the pain first knocks the mind from where it is signaled that it's pain and then the individual finds the reason for that discomfort. According to his study mind also plays a role in office ergonomics.

LaDou J.(2003), emphasized on proper ergonomic design which are to be made mandatory in organization to prevent repetitive strain, injuries and other musculoskeletal disorders, which can build up over a time and can lead to long-term disability or health issues. As per the findings Ergonomics improves quality and operators productivity.

Nirjhar Dutta , Gabriel A. Koepf (April, 2012) and team of government official and scholars from Ergotron Inc conducted a study on sedentary office workers in Minnesota. Studying on the working hours a week employees has sit – stand tasks. They had conducted the intervention study on 29 employees out of 35 randomly selected from sedentary workers. They were given sit stand desk where they used to stand half a day to complete the task and sit accordingly, which gave rise to high morale among employees towards their work. The conclusion by the team was the sit-stand desk appears promising for longer fitness of body and at the end qualitative outcome from the employee. It was strongly advised by the team to the organisation.

Winkle and Oxenburgh (1990) outlined the benefits of alternating between sitting and standing postures for the sedentary workers. Their research determined the benefits of providing active breaks (standing / moving) versus passive rest breaks (sitting) from the point of view of maintaining the health of muscles and the spinal disc. They argued that alternating between sitting and standing positions is the most effective way to maintain productive workflow.

Ciccotelli, (1997) came out with new forms of industrial organisation known as "concurrent, simultaneous or integrated engineering" where designing of the product was taken into consideration and rigorous efforts were made only to reduce design costs and deadlines, by focusing on the tools used by the employees to be standardized and not hazardous to health to improve the quality, the value safety of products .

Ingelgard, (1998) studied on the larger aspect of ergonomics known as macro ergonomics, where he came with conclusion that change must be acceptable by the generations for effective use of technology by minimizing the negative potentials and giving path to safer and healthier organization.



Karsh (et al 2001) conducted a literature review of published ergonomics interventions used to control musculoskeletal disorders in workplaces. The workplaces that were studied were in a variety of non- agricultural industries including office workplaces. They found that 84 % of the studies that met the selection criteria found some positive results, with most having mixed results. The most effective were multiple component interventions where 97 % led to at least some improvement in outcomes.

Viljanen (et al 2003) randomly assigned a group of office workers with chronic non-specific neck pain into intervention groups of dynamic muscle training, relaxation training and ordinary activity (as a control group). As minor outcome measures they asked the sample about work ability and if work was limited by pain and they also examined sick leave rates due to neck pain. No significant differences were found between the groups at follow up of three, six and twelve months.

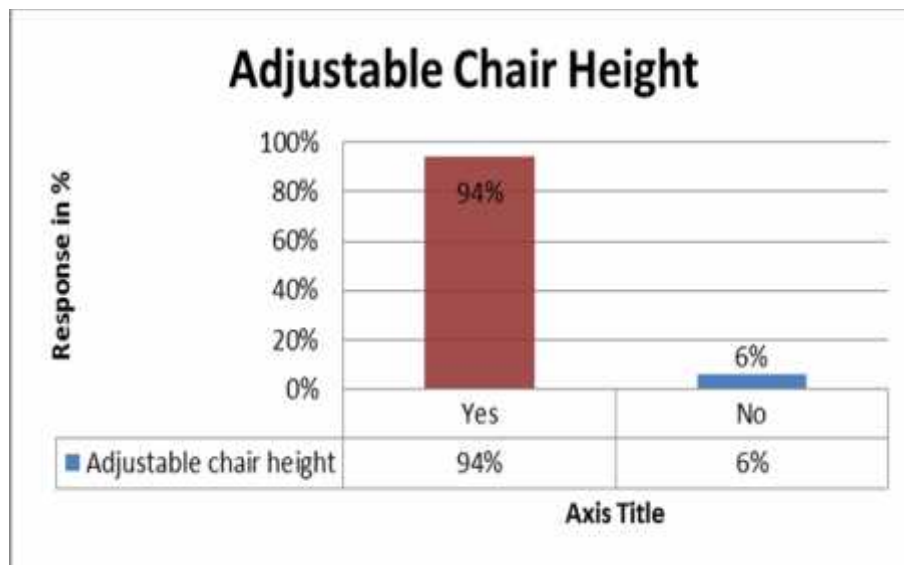
Susan Tingley (2005), as per her study the training programmes were benefitted to the office worker's. The study was on the perception, attitude , awareness and knowledge of the employees. With the help of various way of interview and questionnaire pattern and the training session provided. It was concluded that the awareness if provided to the employees and once knowledge is enhanced it will have change in the employee perceptions. For some extent the musculoskeletal disorders was still existing.

Abigail Katz, (2014), did the study on the sit – stand working hours. Prolonged sitting duration has been acknowledged as a risk factor for various health issues like chronic conditions, metabolic syndrome and obesity. The study conducted on school students age between 14-21, it was noted that extended sitting came out with negative outcomes. So they also did the study of breaks between the periods, which was doing positively impact on physical health but mental health was also improved by having motivation or mood towards the class sessions.

Analysis and Interpretation

As indicated by the review on Chair Height Adjustable, the beneath Graph No.1 demonstrates that 94% workers said they have seat with tallness movability, which thus mirrors that the business is concerned with the stature of the representatives, as it is felt that if the same seat is utilized by all representatives, there can be physical issues brought about by the seat, as when the seat is too low the worker needs to twist a ton, which offers damage to back and neck.

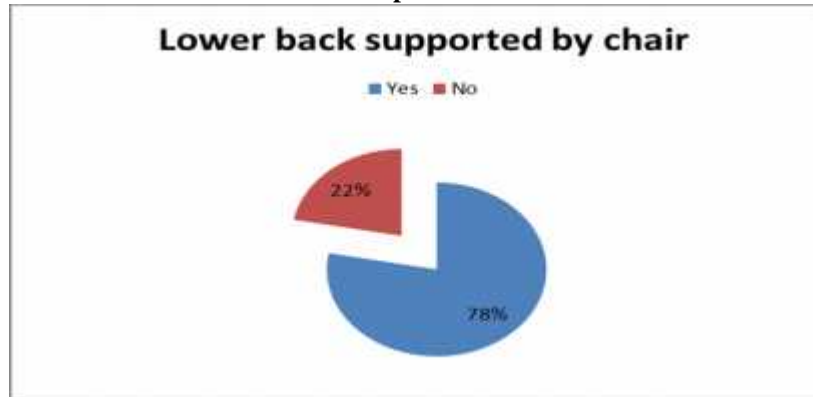
Graph No.1



As indicated by the overview with respect to the seat supporting the lower back the reaction was again positive as demonstrated in the beneath Graph No.2 that 78% of the representatives do have fitting back backing from the seat. Which again accentuation that fulfillment from the non monetary end is likewise taken care by the boss and ease level is given to perform well.

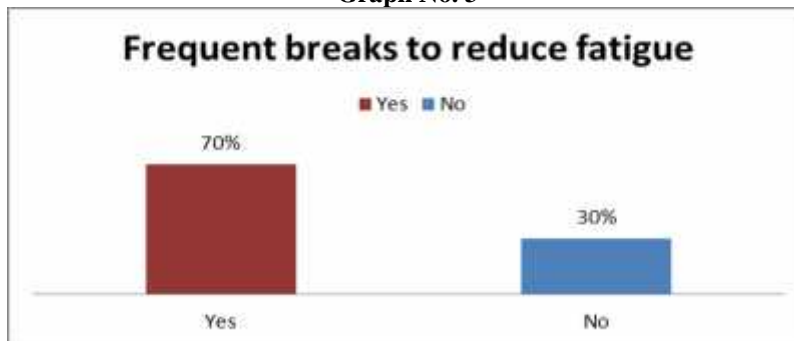


Graph No. 2



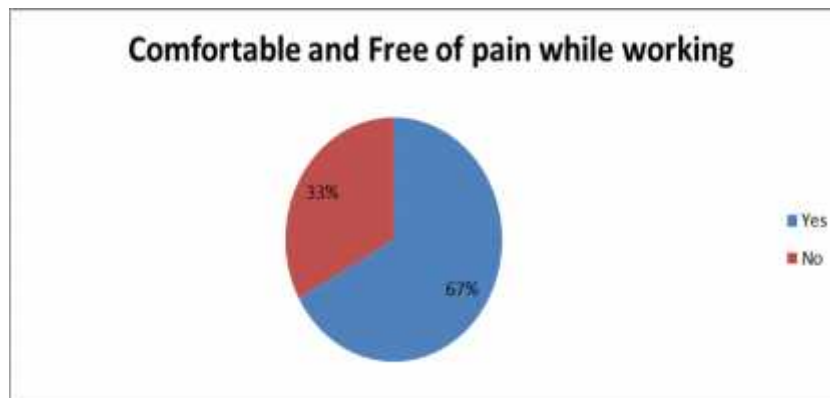
As indicated by review it was noticed that representatives taking breaks amid the entire day work had the capacity focus on work more than the individuals who don't take breaks. The reviving and positive vibes were there for respondents taking regular breaks, as, it decreases the weakness or feeling depleted. According to the Graph No.3 it can be seen that 70% of the workers take continuous breaks amid the day to keep themselves solid and dynamic.

Graph No. 3



At the point when asked respondents that do they feel great while working and free of agony the reaction was as demonstrated in Graph No.4 as 67% were agreeable while working just 33% of the respondents felt distress and torment while working. Ease amid work can be achieved just if the working environment is ergonomized and positive environment inside of the workplace. The representative will feel less excess when the his/her work space is extensive and straightforwardness making them not so much tedious but rather more of vitality to give their best execution.

Graph No.4





There were many more ergonomic factors like Lighting, Humidity, Monitor, Accessories, Body postures while working were asked for which respondent response was varied as when asked regarding the head back support the response was creating a differences among the employees as the higher designated employees have the head support chair.

There were many questions on the work habits made by employees themselves. Only 30 -40% respondents were like who will not take any breaks during day, no vision breaks, no moving of the body posture, rest 70% were aware of health issues and kept themselves fit by taking break or going for a walk. The Sit to stand style work was applied by many employees which made them moving, keeping them away from sedentary injuries to bone and spine.

It was also seen that the furniture or table and chairs were polished and having smooth edges avoiding injury and accidents, giving employee a better place to work so that the employee can give their best to the organization.

Conclusion

Hence office is the need of mindfulness as well as usage of the ergonomized office. The need to make individuals know, how they can be themselves healthy and fit at work place. Job satisfaction is not just identified with money related perspectives like pay, monetary advantages additionally the non financial advantages given by the association to the employee's. The proactive ergonomics must be started by the association for the workers to stay away from truancy, wiped out leaves, employment switch and unfortunate environment among the representatives. The inactive employments must have legitimate working environment to evade torment and harm amid work, as, it will permit the representative to manage for a long go. The factors of Ergonomics must be known to the organization and needful steps must be taken to avoid loss of employee asset. The change must be actualized in every perspective as office structure and deck is changed similarly the screen and quality keyboard and mouse must be given.

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