
POSTURAL DISCOMFORT AMONG GOVERNMENT AND PRIVATE BANK WORKERS: A (COMPARATIVE STUDY)

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Abstract:

Postural discomfort is common in workers who work in Bank sector. A exploratory research design was conducted to assess the postural discomfort among bank workers. The study focused on Identification of postural discomfort among bank workers. The sample size of the study was 120 and sample was collected through random sampling through interview schedule along with standardized scale. It was observed that bank workers worked continuously in one posture. Consequently, they suffered from discomfort in different parts of their body, specifically in the shoulders, knees, back, lower back, and upper back, which mainly prevented them from continuing their work. This study also revealed that bank workers had work in congested work areas with many difficulties.

Keywords: Bank workers; Body Mapping scale; Postural discomfort; Posture; working hours; gender

1. Introduction

Bank an establishment authorized by a government to accept deposits, pay interest, clear checks, make loans, act as an intermediary in financial transaction and provide other financial services to its customers.

A bank is financial institution licensed as a receiver of deposits. There are two types of banks: commercial/retail banks and investment banks. In most countries, banks are regulated by the national government. Typical careers within a financial institution may include bank teller, bank manager, credit, mortgage, or loan officer, and bank officer. Within each of those careers, depending on the size of the bank and the size of the department, are many levels of authority and responsibility and, therefore, many opportunities for advancement Banking Sector in India. According to the survey, 100% employees say

that they have stress on eyes due to their area of work. As Bank employee they have to be connected with the desktop. As said being a tech banking, the employees work on the accounts of the customer or the services needed by them.

Posture is the way your muscles and skeleton hold your body erect. We are told to stand up straight and while many of us are used to slouching and hunching over our desks, computers and tasks – the difference posture makes in how our bodies adapt to breathe, move and align it is important and affected by how we use bodies day in and day out (Sanford health).

The word 'posture' in most common usage almost exclusively refers to the way a person sit or stands, and is generally termed 'good posture'.

Good posture is generally understood as standing with the head balanced effortlessly above the spine which is straight and vertical

except for the slight natural curves in the lower back and neck. i.e. it has a slight S – shape. Such a posture is widely recognised as being associated with good appearance, good health, strength, athleticism, and stamina.

The term bad posture is most commonly used to describe the human position in which the head and shoulders are placed forward of the spine with the spine curved into an excessive S – shape, or C – shape, and it is widely referred to as a slouched, or hunchback posture. Bad posture is commonly regarded as a poor appearance, and is associated with backaches of all types, poor health, poor breathing, tiredness, and ready fatigability.

Postural syndrome refers to the pain that occurs from the mechanical stress when a person maintains a faulty posture for a long period. This occurs most commonly when poor sitting or standing postures are adopted. There were no abnormalities in the muscles strength and flexibility, but if faulty posture continues, strength and flexibility imbalance will eventually develop. Here no pathology, no movement loss, no objective signs in this syndrome (Mckenzie, 1995). A study (Charoenchai,2006) examined the relationship between low back disorder & bending, twisting & awkward postures & found that flexion or lateral bending of the spine & bending or rotation of the spine are considered potential risk factors for LBP. The length of the daily working hours is risk factors for developing musculoskeletal disorders (LBP). Static work posture include position where very little movement occurs, along with cramped or inactive postures that cause static loading on the muscles.

“**Postural Discomfort**” includes a wide of inflammatory and degenerative condition affecting the muscles, tendons, ligaments, joints,

peripheral nerves, and supporting blood vessels. These include clinical syndrome such as tendon inflammations and related conditions (tenosynovitis, epicondylitis, bursitis), nerve compression disorders (carpal tunnel syndrome, sciatica), and osteoarthritis, as well as standardized condition such as my algia, low back pain and other regional pain syndrome not attributable to known pathology. Body regions most commonly involved are the low back, neck, shoulder, forearm, and hand, although recently the lower extremity has received more attention.

2. Objective

1. To identify types of postural discomfort among bank employees working in government and private banks.

3. Hypothesis

H01: There exists no significant difference between the postural discomfort faced by bank employees and types of bank.

4. Material & Methods

Data was collected from 120 bank workers who belonged to 25-40 years. Random sampling method was used to collect the data for the study. The research design for the study was exploratory research design. In this study data collection tool used was interview schedule along with standardized Body Mapping Scale. For analysis of data frequency, percentage, mean, S.D and F-test was calculated.

5. Results

Postural discomforts among government and private bank workers were analyzed by standardized Body Mapping Scale Table no. 1- discusses pain in body parts. Results revealed that most of the respondents (66.7% male and 60% female) in government bank were never

suffering from upper arm pain and more than fifty percent of the respondents (56.7%) male and female in private bank were never suffering from upper arm pain. More than fifty percent respondents (56.7% female) in government bank were sometime suffering from neck pain and (53.3% male and female) in private bank were suffering from neck pain. Most of the respondents (70% male and 63.3% female) in government bank were sometime suffering from shoulder pain and (56.7% male and 66.7% female) in private bank were sometime suffering from shoulder pain. Majority of the respondents (66.7% male and 66.7% female) in government bank were sometime suffering from back pain and (63.3% male and 60% female) in private bank were suffering from back pain. Results

showed that less than fifty percent respondents (43.3% male and 46.7% female) in government bank were sometime suffering from hip pain and less than forty percent (36.7% male) where as more than fifty percent (63.3% female) in private bank were sometime suffering from hip pain. Most of the respondents (73.3% male and 66.7% female) in government bank were never suffering from thigh pain and (80% male) and (43.3% female) in private bank were never suffering from thigh pain. Most of the respondents (60% male and 73.3% female) in government bank were never suffering from lower arm pain and (66.7% male) and where as less than forty percent (36.7% female) in private bank were never suffering from lower arm pain.

Table 1: Distribution of respondents on the basis of postural discomfort experienced.

S. N O		Government Bank						Private bank					
		Male			Female			Male			Female		
	Types of postural discomfort	Always	Sometime	Never	Always	Sometime	Never	Always	Sometime	Never	Always	Sometime	Never
1	Upper arm pain	-	10(33.3)	20(66.7)	-	12(40.0)	18(60.0)	4(13.3)	9(30.0)	17(56.7)	-	13(43.3)	17(56.7)
2	Neck pain	-	12(40.0)	18(60.0)	3(10.0)	17(56.7)	10(33.3)	4(13.3)	16(53.3)	10(33.3)	4(13.3)	16(53.3)	10(33.3)
3	Shoulder pain	3(10.0)	21(70.0)	3(10.0)	4(13.3)	19(63.3)	7(23.3)	7(23.3)	17(56.7)	6(20.0)	3(10.0)	20(66.7)	7(23.3)
4	Back pain	-	20(66.7)	10(33.3)	1(3.3)	20(66.7)	9(30.0)	2(6.7)	19(63.3)	9(30.0)	4(13.3)	18(60.0)	8(26.7)
5	Hip pain	-	13(43.3)	17(56.7)	2(6.7)	14(46.7)	14(46.7)	3(10.0)	11(36.7)	16(53.3)	3(10.0)	19(63.3)	8(26.7)
6	Thigh pain	-	8(26.7)	22(73.3)	-	10(33.3)	20(66.7)	-	6(20.0)	24(80.0)	-	17(56.7)	13(43.3)
7	Lower arm pain	-	12(40.0)	18(60.0)	-	8(26.7)	22(73.3)	-	10(33.3)	20(66.7)	-	19(63.3)	11(36.7)

(Figures in parentheses indicates percentage)

Testing of Hypothesis

H₀1: There exists no significant difference between the postural discomfort faced by bank employees and types of bank across gender.

Table 2: F- test value between postural discomforts faced by government and private bank employees.

S. N O		Government Bank				Private bank			
		Male	Female	F value	P value	Male	Female	F value	P value
	Types of postural discomfort								
1	Upper arm pain	1.33±.479	1.40±.498	2.150	.148	1.57±.728	1.43±.504	0.66	.798
2	Neck pain	1.40±.498	1.77±.626	6.960	.011	1.60±.664	1.80±.664	0.40	.842
3	Shoulder pain	1.90±.548	1.90±.607	.714	.402	2.03±.669	1.87±.571	0.48	.827
4	Back pain	1.67±.479	1.73±.521	.543	.464	1.77±.568	1.87±.629	.800	.375
5	Hip pain	1.43±.504	1.60±.621	.746	.391	1.57±.679	1.83±.592	2.217	.142
6	Thigh pain	1.27±.450	1.33±.479	.362	.549	1.20±.407	1.57±.504	3.375	.071
7	Lower arm pain	1.40±.498	1.27±.450	.279	.599	1.33±.479	1.63±.1.490	9.114	0.004

Result showed that Table no-2- No significant difference in the postural discomfort faced by respondents of government and private bank except no component which was lower arm pain. Which was complained by women working in private bank compared to male working in private banks.

Table -3: Distribution of respondents on the basis of postural discomfort experienced.

S.N O		Government Bank						Private Bank					
		Male			Female			Male			Female		
	Types of postural	Alwa ys	Som etime	Never	Alwa ys	Someti me	Never	Alwa ys	Som etime	Never	Always	Someti me	Never

	discomfort												
1	Elbow pain	-	6(20.0)	24(80.0)	-	7(23.3)	23(76.7)	-	10(33.3)	20(66.7)	-	9(30.0)	21(70.0)
2	Wrist pain	-	17(56.7)	13(43.3)	2(6.7)	12(40.0)	16(53.3)	1(3.3)	12(40.0)	17(56.7)	5(16.7)	14(46.7)	11(36.7)
3	Ankle pain	-	2(6.7)	28(93.3)	-	11(36.6)	19(63.3)	-	9(30.0)	21(70.0)	-	10(33.3)	20(66.7)
4	Headache	3(10.0)	24(80.0)	3(10.0)	3(10.0)	22(73.3)	5(16.7)	3(10.0)	23(76.7)	4(13.3)	3(10.0)	20(66.7)	7(23.3)
5	Redness of eyes	1(3.3)	18(60.0)	11(36.6)	3(10.0)	17(56.7)	10(33.3)	5(16.7)	17(56.7)	8(26.7)	3(10.0)	14(46.7)	13(43.3)
6	Finger pain	-	11(36.6)	19(63.3)	-	15(50.0)	15(50.0)	-	8(26.7)	22(73.3)	2(6.7)	16(53.3)	12(40.0)
7	Burning eyes	-	13(43.3)	17(56.7)	1(3.3)	17(56.7)	12(40.0)	3(10.0)	17(56.7)	10(33.3)	1(3.3)	17(56.7)	12(40.0)
8-	Numbness in finger	-	2(6.7)	28(93.3)	-	6(20.0)	24(80.0)	-	6(20.0)	24(80.0)	-	11(36.7)	19(63.3)
9-	Swelling in toes	-	2(6.7)	28(93.3)	-	10(33.3)	20(66.7)	-	10(33.3)	20(66.7)	-	8(26.7)	22(73.3)
10-	Swelling in ankle	-	5(16.7)	25(83.3)	-	7(23.3)	23(76.7)	-	8(26.7)	22(73.3)	-	11(36.6)	19(63.3)
11-	Vision blurt	-	11(36.6)	19(63.3)	-	14(46.7)	16(53.3)	-	7(23.3)	23(76.7)	-	12(40.0)	18(60.0)
12-	Numbness in legs	-	9(30.0)	21(70.0)	-	20(66.7)	10(33.3)	-	12(40.0)	18(60.0)	-	13(43.3)	17(56.7)

Data in table no 3 – Discuss the types of postural discomfort among bank employees Result depicted that most of 80 percent male respondents were between never suffering from elbow pain and 76.7 percent female respondent were between never suffering from elbow pain. While less than 60 percent of male respondents were between sometime suffering from wrist pain and less than 50 percent (46.7%) female respondents were between sometime suffering from wrist pain. While most of the respondents 93.3 percent male respondents were between never suffering from ankle pain and 66.7 percent female respondents were between never suffering from ankle pain. While most of the 80 percent male respondents were between sometime suffering from headache and majority of 73.3 percent female respondents were between some time suffering from headache. While less than 70 percent (60%) of male respondents in both sector were sometime suffering from redness of eyes and less than 60 percent (56.7%) of female respondents in both sector were sometime suffering from

redness of eyes. While most of the 60 percent 73.3 percent male respondents in both sector were never suffering from finger pain and less than 60 percent 53.3 percent female respondents in both sector were sometime suffering from finger pain. While less than 60 percent 56.7 percent male respondents in both sector were sometime suffering from burning eyes and less than 60 percent 56.7 percent female respondents in both sector were sometime suffering from burning eyes. While majority of 93.3 percent male respondents in both sector were never suffering from numbness in finger and most of 80 percent female respondents in both sector were never suffering from numbness in finger. While most of 93.3 percent male respondents in both sector were never suffering from swelling in toes and less than 80 percent 73.3 percent female respondents in both sector were never suffering from swelling in toes. While majority of male respondents 83.3 percent in both sector were never suffering from swelling in ankle and less than 80 percent of female respondents 76.7 percent in both sector were never suffering from swelling in ankle. While most of the male respondents 76.7 percents in both sector were never suffering from vision blurt and 60 percent female respondents in both sector were never suffering from vision blurt.

Testing of Hypothesis

Ho2: There exists no significant difference between the muscle skeleton disorders faced by government and private bank employees across gender.

Table 4: F- test value between muscle- skeleton disorders faced by government and private bank employees.

S.N O		Government Bank				Private Bank			
		Male	Female	F value	P value	Male	Femal e	F value	P value
	Types of postural discomfort								
1	Elbow pain	1.20 ±.407	1.23 ± .430	1.349	.250	1.33 ± .479	1.30 ± .466	.331	.567
2	Wrist pain	1.57 ±.504		.517	.475	1.47 ± .571	1.80 ± .714	2.355	1.30
3	Ankle pain	1.07 ±.254	1.37 ± .490	5.800	.019	1.30 ± .466	1.33 ± .479	.071	.791
4	Headache	2.00 ± .455	1.93 ± .521	.075	.786	1.97 ± .490	1.87 ± .571	.223	.638
5	Redness of eyes	1.67 ± .547	1.77 ± .626	2.217	.142	1.90 ± .662	1.67 ± .661	.362	.550
6	Finger pain	1.35 ± .490	1.50 ± .509	.678	.414	1.27 ± .450	1.67 ± .606	1.330	.253

7	Burning eyes	1.43 ± .504	1.63 ± .556	5.160	.027	1.77 ± .626	1.63 ± .556	.000	1.000	
8-	Numbness in finger	1.07 ± .254	1.20 ± .407	2.320	.133	1.20 ± .407	1.37 ± .490	2.054	.157	
9-	Swelling in toes	1.07 ± .254	1.33 ± .499	7.250	.009	1.33 ± .479	1.27 ± .450	.309	.581	
10-	Swelling in ankle	1.17 ± .379	1.23 ± .430	.867	.356	1.27 ± .450	1.37 ± .490	1.254	.2671	
11-	Vision blurt	1.37 ± .490	1.47 ± .507	1.254	.267	1.23 ± .430	1.40 ± .498	.264	.610	
12-	Numbness in legs	1.30 ± .466	1.67 ± .479	5.800	.019	1.60 ± .498	1.57 ± .504	.620	.434	

Results in table No. 4- Showed that significant difference among male and female was seen only in to parameters like burning eyes and swelling in toes. Therefore the null hypothesis was partially accepted. It was seen the female working in government banks reported of swelling in toes more compared to males. Female respondents also reported of knee and ankle pain in private bank, males complained of burning of eyes more than female workers.

6. Conclusion

The results indicated that the prevalence of postural discomfort among bank workers was considerably high. The study suggests that postural discomfort was high in males in comparison to females. The reasons may be they work for long time in one posture and they were not taking rest. So the findings of the study were showed that males were having more postural discomfort as compared to females . The study conclude that most of the respondents mainly affected by mid back pain, shoulders pain and neck pain respectively and mainly male respondents were affected by back pain,

shoulders pain and neck pain and female respondents were affected by shoulders pain, back pain, and neck pain.

7. Acknowledgement

The findings of the research will help other researchers in designing the workstation which will reduce the postural discomfort of the workers.

References

- [1.] Charoenchai L, Chaikoolvatana A, and Chaiyakul P, 2006, the relationship between health behaviour and pain scale in patients with low back pain in Thailand, Department of Pharmacological science, Ubon Ratchathani University, Ubon Ratchathani, Thailand, 37(5): 1040
- [2.] McKenzie RA, 1995, The lumbar spine mechanical diagnosis & therapy, 1st edition, spinal publication, Wright & Carman limited, Newzealand.
- [3.] [www.businessdictionary.com / definition / bank.html](http://www.businessdictionary.com/definition/bank.html)
- [4.] [www.investopedia.com / terms / b / bank.asp](http://www.investopedia.com/terms/b/bank.asp).
- [5.] [www.sanfordhealth.org/ stories / View](http://www.sanfordhealth.org/stories/View)