



RESEARCH ARTICLE

**RISK FACTORS CAUSING POSTURAL DISCOMFORT AMONG GOVERNMENT
AND PRIVATE BANK WORKERS**

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ABSTRACT

Postural discomfort is common in workers who work in Bank sector. A exploratory research design was used to assess the postural discomfort among bank workers. The aim of the study was to identify risk factors among bank employers causing postural discomfort. 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 the risk factors causing postural discomfort reported by government bank respondents was high in comparison to private bank respondents. Most of the government and private bank both workers were affected by prolonged sitting.

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INTRODUCTION

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. 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). 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 Low back pain. The length of the daily working hours is another risk factor for developing musculoskeletal disorders. Static work posture

include position where very little movement occurs, along with cramped or inactive postures that cause static loading on the muscles.

Risk Factors for WMSD'S

Repetition – performing the same or similar motions repeatedly can result in trauma to the joints and surrounding tissues. Without time for rest and recovery, repetition can lead to injury. Study generally address repetition as cyclical work activities that involved either:

Repetitive neck movements (e.g. the frequency of different head position during a cycle), or repeated arm or shoulder motions that generate loads to the neck/ shoulder area (e.g. trapezius muscle).

Static Loading or Sustained Exertions - Where the muscles hold the body in a single position for a long time off period. This lack of movement reduces circulation and causes muscle tension, which can contribute to or aggravate an injury. Sustained exertions are a type of static loading where force is applied continuously for long periods of time factors (Bernard, 1997 and Washington State Department of Labor and Industries, 2002).

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Awkward Posture - Posture is the position of the body while performing work activities. Awkward posture is associated with an increased risk for injury. It is generally considered that the more a joint deviates from the neutral (natural)

Mechanical Contact Stress - No study of neck MSDs met the four criteria to address strength of association between vibration and neck MSDs. Machine operators exposed to static work and whole-body vibration were compared to carpenters exposed to dynamic physical work and presumably no vibration to see whether occupational status was related to neck MSDs (Bernard, 1997).

Additional Risk Factors - While the risk factors described previously are typically found in the office environment, there are other risk factors that are more

common in industrial jobs or work at home which your employees should be aware of. These include position, the greater the risk of injury (Washington State Department of Labor and Industries, 2002).

Objective

1. To determine the risk factors among bank employees causing postural discomfort.

Hypothesis

Ho1: There exists no significant difference between Risk factor of postural discomfort faced by bank employees and types of bank.

Table 1. Distribution of respondents on the basis of Risk factors of postural discomfort among bank employees

S.No.	Risk Factors	Government Bank						Private Bank						A	T
		Male			Female			Male			Female				
		Agree	Partially agree	Disagree	Agree	Partially agree	Disagree	Agree	Partially agree	Disagree	Agree	Partially agree	Disagree		
1-	Prolong sitting	22(73.3)	7(23.3)	1(3.3)	22(73.3)	7(23.3)	1(3.3)	15(50.0)	13(43.3)	2(6.7)	15(50.0)	15(50.0)	-		
2-	Prolong standing	11(36.7)	12(40.0)	7(23.3)	8(26.7)	12(40.0)	10(33.3)	8(26.7)	13(43.3)	9(30.0)	4(13.3)	13(43.3)	13(43.3)		
3-	Prolong bending	18(60.0)	6(20.0)	6(20.0)	12(40.0)	10(33.3)	8(26.7)	10(33.3)	7(23.3)	13(43.3)	12(40.0)	14(46.7)	4(36.7)		
4-	Twisting movement	12(40.0)	9(30.0)	9(30.0)	5(16.7)	9(30.0)	16(53.3)	4(13.3)	11(36.7)	15(50.0)	4(13.3)	15(50.0)	11(36.7)		
5-	Long sitting hours	26(86.7)	4(13.3)	-	25(83.3)	5(16.7)	-	21(70.0)	7(23.3)	2(6.7)	21(70.0)	9(30.0)	-		
6-	Fatigue	6(20.0)	16(53.3)	8(26.7)	13(43.3)	13(43.3)	4(13.3)	11(36.7)	13(43.3)	6(20.0)	11(36.7)	18(60.0)	1(3.3)		
7-	Stress and depression	13(43.3)	12(40.0)	5(16.7)	6(20.0)	18(60.0)	6(20.0)	8(26.7)	13(43.3)	9(30.0)	10(33.3)	18(60.0)	2(6.7)		
8-	Excessive pressure on eyes	23(76.7)	5(16.7)	2(6.7)	17(56.7)	12(40.0)	1(3.3)	15(50.0)	12(40.0)	3(10.0)	20(66.7)	10(33.3)	-		
9-	Bending of knee	15(50.0)	10(33.3)	5(16.7)	15(50.0)	10(33.3)	5(16.7)	9(30.0)	15(50.0)	6(20.0)	15(50.0)	13(43.3)	2(6.7)		
9-	For long time	15(50.0)	10(33.3)	5(16.7)	15(50.0)	10(33.3)	5(16.7)								

Testing of Hypothesis, Ho1: There exists no significant difference between Risk factor of postural discomfort faced by bank employees and types of bank

Table 2. F- test value between risk factors of postural discomforts faced by government and private bank

S.No	Risk Factors (Personal)	Government Bank				Private bank			
		Male	Female	F value	P value	Male	Female	F value	P value
1-	Prolong sitting	2.70± .535	2.70± .535	3.146	.081	2.43 ±.626	2.50 ±.509	2.203	.143
2-	Prolong standing	2.13± .776	1.93±.785	.702	.406	1.97 ±.765	1.70 ±.702	1.473	.230
3-	Prolong bending	2.40± .814	2.13±.819	5.191	.026	1.90 ± .885	2.27 ±.691	.464	.498
4-	Twisting movement	2.10 ±.845	1.63±.765	5.312	0.25	1.63 ±.718	1.77 ± .679	.510	.478
5-	Long sitting hours	2.87±.346	2.83 ±.379	3.282	.075	2.63 ±.615	2.70 ±.466	1.478	.229
6-	Fatigue	1.93±.691	2.30 ±.702	1.577	.214	2.17 ± .747	2.33 ±.547	.042	.838
7-	Stress and Depression	2.27 ±.740	2.00 ±.643	2.385	.128	1.97 ±.765	2.27± .583	2.829	.098
8	Excessive pressure on the eyes	2.70± .596	2.53± .571	3.332	.073	2.40±.675	2.67± .479	.959	.332
9	Bending of knee for long time	2.33± .758	2.17 ± .699	1.510	.224	2.10± .712	2.43± .629	2.423	.125

MATERIALS AND METHODS

Data was collected from 120 bank workers who belonged to the age of 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. The tool used for data collection was interview schedule along with standardized Body Mapping Scale. For analysis of data frequency, percentage, mean, S.D and F-test was calculated.

RESULTS

Data in table no .1- indicates the risk factors of postural discomfort among bank employees. Result depicted that majority of (male 73.3% and female 73.3%) respondents in government bank were agree to prolong sitting and (male 50% and female 50%) respondents in private bank were agree to prolong sitting. Result showed that less than 50 percent (male 40% and female 40%) respondents in government bank were partially agree to prolong standing and 43.3% male and female respondents in private bank were partially agree to prolong standing. Less than 50 percent (male 20% and female 33.3%) respondents in government bank were partially agree to prolong bending and less than 50 percent (male 23,3% and female 46,7%) respondents in private bank were partially agree to prolong bending. Result showed that less than 60 percent (male 30% and female 53,3%) respondents in government bank were disagree to twisting movement and less than 60 percent (male 50% and female 36.7%) respondents in private bank were disagree to twisting movement. Majority of the respondents (male 86,7% and female 83.3%) in government bank were agree to long sitting hours and 70% male and female respondents in private bank were also agree to long sitting hours. Less than 60 percent (male 53.3% and female 43.3%) respondents in government bank were partially agree to fatigue and less than 50 percent, 43.3% male and less than 70 percent, 60% female respondents in private bank were partially agree to fatigue. Result showed that less than 50 percent (male 40%) and more than 50 percent (female 60%) respondents in government bank were partially agree to have stress and depression and less than 50 percent (male 43.3% and female 33.3) respondents in private bank were partially agree to have stress and depression. Less than 80 percent (male 76.7% and female 56.7%) respondents in government bank were agree to have excessive pressure on eyes and less than 70 percent (male 50% and female 66.7%) respondents in private bank were agree to have excessive pressure on eyes.

Result showed that more than 40 percent (male 50% and female 50%) respondents in government banks were agree with bending of knee for a long time. Less than 60 percent (male 30% and female 50%) respondents in private bank were to bending of knee for a long time. Result showed that Table no-2- No significant difference in the risk factors of postural discomfort faced by respondents of government and private bank calculated P value is more than 0.05 in all parameters. Thus the null hypothesis was accepted. Which means that risk factors were same for workers of bank irrespective of these types that is government and private.

Conclusion

Most of the government and private bank both male and female workers were affected by the Long sitting hours as well as had excessive pressure on their eyes. The researchers suggest small breaks from work and small stretching during the working hours to reduce risk factors related to postural discomfort.

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