

A Study on Occupational Stress Among Loco Pilots in North Central Railway (NCR)

Dharmendra Singh^{1*} and Ujjwal Kumar Pathak²

¹Assistant Professor, Mittal School of Business, Lovely Professional University, Punjab, India.

Email: dharmendra.17675@lpu.co.in

²Assistant Professor, Mittal School of Business, Lovely Professional University, Punjab, India.

Email: ukpathak.mba@gmail.com

*Corresponding Author

Abstract: Stress has become a common phenomenon prevalent in all industrial establishments. There are certain jobs where the level of stress is extremely high due to the nature and importance of work. Job of a Loco Pilot in Indian Railways is one among those extremely challenging and stressful professions. These research papers focus on understanding the factors responsible for high level of occupational stress among the Indian Railways Loco Pilots and identify measures to manage their workplace stress. This study is based on primary research in the form of survey, interview and observation but also relies on secondary sources.

Keywords: Indian Railways, Loco pilots, Occupational stress.

I. INTRODUCTION

Occupational stress is any discomfort which is felt and perceived at a personal level and triggered by instances, events or situations that are too intense and frequent in nature so as to exceed a person's coping capabilities and resources to handle them adequately (Malta, 2004). Occupational stress can be viewed as a process in which stressors are associated not only with the content and circumstances of work but also to the individual characteristics, resources, and social environment (Baba, 1998). Occupational stress can be defined as the physiological and emotional responses that occur when workers perceive an imbalance between their work demands and their capability and / or resources to meet these demands (Benedicta, A. S. 2013). Indian Railways is among one of the largest organizations in India comprising of seventeen railway zones. The North Central Railway (NCR) is one of the most important zones of Indian Railways which has its headquarters at Allahabad. The North Central Railway (NCR) came into existence on 1st April 2003 when Northern Railway (NR), a broad Zone of Indian Railways, was further divided into various zones. Today, North Central Railway (NCR) comprises three divisions: Allahabad division, Jhansi division

and Agra division. North Central Railway (NCR) extends from Ghaziabad in the north to Mughalsarai in the east on New Delhi Howrah train route and from Palwal to Bina on New Delhi Mumbai / Chennai corridor. North Central Railway span parts of UP, Haryana, Rajasthan and Madhya Pradesh with about 3062 route km of Broad Gauge comprising predominately double line - electrified sections defining the sides and diagonals of the Golden Quadrilateral network of railway lines. NCR consists of 202 main line stations & 221 branch line stations. This zone forms a corridor for trains of multiple directions. Job of a Loco Pilot is listed under the category of group C posts of Indian Railways and salient features of this job profile are as follows:

A. Job Specification of Loco Pilot

1. Age Limit:

- Minimum age of the aspiring candidate should be 18 years and maximum age limit is 30 years.

2. Educational Qualifications:

- Candidate must complete the minimum 10th standard.
- Candidate needs to complete ITI (approved by NCVT/ SCVT) in any specific trade to apply for this post.
- Candidates who completed the Diploma in Engineering are also eligible.

3. LOCO Pilot Need to Possess Following Skills:

- Good knowledge of mechanical operations.
- Good co-ordination of hands and eyes.
- Ability to concentrate for a longer period of time.
- Good Physical endurance.
- Sharp memory.
- Awareness of health and standard safety regulations and emergency procedures.
- Positive attitude.

- Quick judgmental and decision-making skills.

4. Medical Standards:

Candidate must have high level medical standard which is no other category required so far. Loco running men / railway drivers must have the highest standard of medical fitness in medical "A" (As it meant for Airplane Pilots). This medical standard has to maintain from the period of joining and up to the end of carrier as Railway driver.

- Each eye vision must be perfect.
- Each ear must be clear for hearing.
- X-ray for chest is clear.
- ECG for heart etc. functioning normal.
- Blood & Urine tests for sugar Nil.
- Physical fitness of the body must be perfect.

- Ishihara test free from color blind free.
- Blood pressure must be normal.

The same medical checkup, Loco Pilots must have to pass after every periodical gap of 4 years up to the age of 45 years. From 45 years age to 55 years age, Periodical Medical Examination (PME) in the same above manner is conducted once in 2 years. And from 55 years age up to 60 years age PME is conducted once in year. And after every PME certificate the Railway drivers can continue as loco running staff. In addition to this, the Railway driver working on high speed train must have to pass super-Psycho test at RDSO LUCKNOW. As well as loco running staff may also be sent for special medical examination and called anytime to the divisional office for Psycho test (Singh Ravi Kant, 2008).

B. Pay Scale for a Loco Pilot

S. No	Post	Present Scale(₹)	Revised Pay Band & Grade Pay			Remarks
			Remarks			
			Pay Band Name	Pay Bands (₹)	Grade Pay (₹)	
RUNNING STAFF						
Loco Running						
(i)	<u>Loco Pilot (Mail) : Running Staff</u>	6000-9800	PB-2	9300-34800	4200 (i) Additional Allowance ₹ 1000/-	
(ii)	<u>Loco Pilot (Passenger) Grade I</u>	6000-9800	PB-2	9300-34800	4200	(i) Merged (ii) Additional Allowance ₹ 500/-
(iii)	<u>Senior Motorman : Running Staff</u>	6000-9800				
(iv)	<u>Loco Pilot (Passenger) Grade II</u>	5500-9000				
(v)	<u>Motorman : Running Staff</u>	5500-9000				
(vi)	<u>Loco Pilot (Goods) Grade I : Running Staff</u>	5500-9000	PB-2	9300-34800	4200	i) Merged
(vii)	<u>Loco Pilot (Goods) Grade II : Running Staff</u>	5000-8000	PB-2	9300-34800	4200	
(viii)	<u>Loco Pilot (Shunting) Grade I : Running Staff</u>	5000-8000	PB-2	9300-34800	4200	

*(Source: 7th Pay Commission Report)

C. Job Description of Loco Pilot

1. Objectives of the Job:

Loco-Pilots are the most crucial employees of Indian Railways who execute the critical task of successfully transporting nearly 25 Million passengers and more than 2.8 Million Tons of freight on a daily basis with the help of 2,29,381 wagons, 59,713 coaches and more than 9,213 locomotive engines of different kinds. To successfully transport such a large number of passengers and huge quantity of freight and that too with taking care of both the traveller's comfort and safety is not an easy task for the Loco Pilot on whose sincerity the journey of a train depends.

2. Work Performed by Loco Pilot:

Loco Pilot is primarily responsible to drive a train safely and timely at its scheduled destination. Loco Pilots are playing a significant role in Indian Railway's safe & punctual running of trains with security and productivity.

3. Roles and Responsibilities:

The job of a Loco Pilot demands hard work and presence of mind along with courage to handle extremely challenging working conditions. To fulfil these challenging demands, a Loco pilot must exhibit discipline, patience, responsibility, punctuality, commitment, courage and above all self-confidence. This job requires lot of hard work, stamina, alertness of mind, adaptability to follow difficult time schedules too. But the highly appreciable role of a Loco Pilot is to work with full honesty in 24/7 work environment and extreme weather conditions.

4. Typical Tasks Undertaken by Loco Pilot:

- Read safety circulars, safety bulletin, technical circulars, driver instruction and divisional circulars before starting the train / locomotive.
- Read the caution order carefully to know in which section, track work is under progress with temporary speed restrictions before starting the train / locomotive.
- Before starting the train / locomotive, verify the repair log book of that locomotive to read any remarks made by Locomotive shed in-charge about the locomotive malfunctioning & maintenance history.
- Before starting the train / locomotive, verify the oil levels (diesel, lube oil, compressor oil in case of diesel locomotive and transformer oil, GR oil, compressor oil, exhaust oil in case of electric locomotive) and ensure to verify the oil levels frequently during normal run (Once in 100 kilometers run).
- After coupling a locomotive with the train, verify the brake pipe pressure continuity test with guard of the train.

- After getting departure signal, loco pilot is required to start the train and run it as per the aspect of station signals.
- A Loco Pilot must have very sharp eye. While running a train, he must observe all permanent & temporary speed restrictions.
- Also, a Loco Pilot must be always ready to notice:-
 - ✓ Any track defect through jerk or lurch.
 - ✓ Any unusual noise from own train or other passing by trains.
- A Loco Pilot should always be mentally prepared for precautionary remedies as per the general & subsidiary rules and accident manual directives which itself is sufficient to increase mental stress of Loco Pilots.
- Maintaining an awareness of track and weather conditions.
- Following signals (On an average, there is one signal at every 1.5 Kilometer distance).
- Following safety regulations.
- Keeping the train under control and run it as per the prescribed speed limits.
- Maintaining an awareness of emergency procedures.
- Bringing the train to a halt at the appropriate stops as per the train's schedule.
- Maintaining proper records of problems faced during the trip.
- Maintaining proper coordination with other Railway staff such as ASMs, Guards, Traffic Controllers, Gate Man, RPF & GRP Personnel's escorting the train, Train and Track Maintenance team, Loco Inspectors and Co Pilot of the train (Singh Ravi Kant, 2008).

5. Working Conditions:

For Railway drivers, operating on long distance routes, overnight stay in various locations is necessary. Furthermore, his job can be more stressful due to delays and hazards on the track. Cab of a Locomotive is also uncomfortable as it can be quite cold, hot and noisy with no comfortable seats. There are no washroom facilities in the Locomotives and thus Loco Pilots have to control the natural calls for longer hours and are able to relieve themselves only at the station of halt. There is no proper timing to eat their food and many times Loco Pilots have to eat their food while running the train under the unhygienic conditions of the cab (with dirty hands, eating food and running the train simultaneously).

6. Staying Arrangements:

After signing off their duty at a place apart from their home station, Loco Pilots go to Running Room where their staying arrangement is made. The Conditions of a Running Room is also not relaxing for them. In one single room, 3-4 beds are arranged with fans, lights, coolers, bed roll etc.

Reporting time for duties are different for these Loco Pilots staying in the same room which does not allow a sound sleep to a Loco Pilot. Food quality which is cooked in these Running Rooms is very bad which affects the health of Loco Pilots and many times they fall sick.

D. Promotional Avenues for Loco Pilot

A Loco Pilot gets hired by Indian Railways at the profile of an “Assistant Loco Pilot” and throughout his tenure, majority of these Loco Pilot’s job revolves around the similar activities. Career progression of an Assistant Loco Pilot can be shown as:

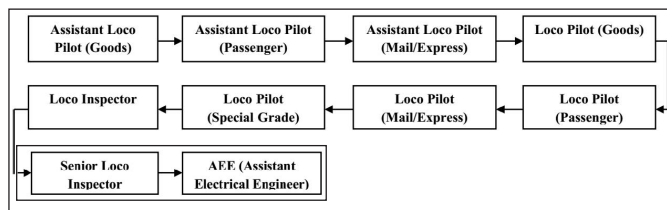


Fig. 1: Promotional Avenues for Loco Pilot

As mentioned in the above diagram, career progression of a Loco Pilot largely stretches from Assistant Loco Pilot (Goods) to Loco Pilot (Special Grade). Very few Loco Pilots are promoted to supervisor jobs such as Loco Inspector / Senior Loco Inspector and rarely any Loco Pilot reaches to the level of AEE (Assistant Electrical Engineer).

II. OCCUPATIONAL STRESS MANAGEMENT REMEDIES FOR A LOCO PILOT

- As most of the time of a Loco Pilot is spent in Locomotive cabs therefore physical setup of cabs should be designed flexible and most comfortable. Washroom facilities should also be provided in the locomotives.
- In case of longer running hours due to any unforeseen circumstances, relieving staff should be arranged so that the Loco Pilots don't feel too much fatigue.
- During a Loco Pilot's stay at Running Room, one single noise proof room should be allotted to an individual Loco Pilot with all the basic amenities so that the sleep disturbances can be minimized.
- Well programs / Recreational / Outdoor group activities should be organized on frequent basis. Yoga / Meditation rooms should also be provided in the Running Rooms to enhance mental peace of Loco Pilots.
- Training programs should be designed and delivered to the Loco Pilots to help them learn how to manage their

health routines. Importance of nutrition though food, physical and mental exercises, managing temperament, taking rest & socialization should also be taught to the Loco Pilots so that they are at ease during their job.

- Growth opportunities should be designed in such a way so that many Loco Pilots reach to the level of Supervisory / Managerial profiles. As per today's situation, very few of the Loco Pilots reach up to the level of Loco Inspector / Senior Loco Inspector and rarely any Loco Pilot reaches to the level of an Assistant Electrical Engineer.

III. CONCLUSION

Analysis of aforementioned facts presents a very clear picture of occupational stress and factors related thereto of a Loco Pilot. Throughout the employment period that ranges from 30 to 35 years, the Loco Pilot suffers from stressful work situation that inter alia affects his / her physical and mental health. Although it is not possible to do away with the stress entirely but it can be reduced to minimum level with the active support of colleagues, superiors and other functionaries.

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