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## How Good is Employee Welfare in Indian PSUs? Some Empirical Evidence

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### A B S T R A C T

Best employee welfare practices help an organization achieve competitive advantage as they keep morale of the employees at a higher point and thereby ensure high degree of employee commitment towards its goals. The present study compared various welfare practices between the two selected PSUs i.e. RINL and BHEL and identified similarities as well as differences in their operations. For example, BHEL is significantly doing better than RINL with regard to welfare activities viz. staff benevolent fund, pension scheme, quality of canteen food, restrooms, medical benefits, cooperative credit society and ambulance and medical services. However, regarding recreation facilities, educational allowance, workplace safety, canteen subsidy, canteen hygiene, workplace hygiene, medical facilities, family welfare, housing facilities, etc. more or less similar conditions exist in both the organisations investigated. This study suggests benchmarking of welfare practices between Maharatna and Navaratna PSEs to achieve welfare excellence and to promote harmonious industrial relations in the industry.

### Introduction

International Labour Organization (ILO), defined labour welfare as a term which is understood to include such services, facilities and amenities as may be established in or in the vicinity of undertakings to enable the persons employed in them to perform their work in healthy, congenial surroundings and to provide them with amenities conducive to good health and high morale (ILO Report, 1950). Best employee welfare practices help any organization achieve competitive advantage as they keep morale of the employees at a higher point and thereby ensure a high level of employee commitment towards

organizational goals. For achieving uninterrupted production, manufacturing systems must ensure themselves good relations with the employees by means of implementing best employee benefit practices. Thus, employee welfare programmes are investment oriented, which not only offer employees social security and well-being but also numerous benefits to organisations. Royal Commission on Labour (1931) viewed that the schemes of labour welfare may be regarded as “a wise investment” which should and usually does bring a profitable return in the form of greater efficiency. These investments are needed to institute a change in employees’ attitudes, which may in turn be reflected in turnover and absenteeism. They are compensations, or a price to reduce the worker alienation from work (Goyal, 1969). If carried out effectively, welfare programmes tend to boost the loyalty and morale of employees, increase their efficiency as well as productivity (Saiyadain, 1983). They not only tend to ameliorate the quality of work life of employees, but also develop good human relations in the workplace. Usually, organisations employ a mix of both statutory and non-statutory welfare programmes. Statutory

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programmes are mandatory and non-statutory are voluntary in their nature. Predominantly, organisations have discretion in devising voluntary programmes as they are not legally binding but provide competitive advantage. All the same, statutory labour welfare facilities constitute a better predictor of employees' job satisfaction than the non-statutory labour welfare facilities (De Souza & Noronha, 2011). Further, when compared to the private sector, public sector undertakings (PSUs) implement welfare practices truthfully as the latter are owned and controlled by the government. Srivastava (2004) notes that the public sector is offering its workers with better welfare facilities. Nevertheless, most public sector companies being unionised struggle for their effective implementation due to the high level of collective bargaining capacity and pressure exerted by unions. In his study about cooperative unionism and employees' welfare, Michael (2005) observed that compared to non-union workplaces, those with unions are found to have practices which are consistent with 'mutual gains' outcomes. Besides, Madhumathi and Desai (2003) identify that the labour welfare expenditure increases year after year under pressure. In this context, research focusing on the current employee welfare trends would provide reliable insights into the dynamic nature of employee welfare and help the industry design and redesign welfare programmes accordingly, to achieve optimum efficiency and productivity of the human resources.

### Relevant Studies

A recent survey conducted in Dehradun found that in that location, there was a significant impact of labour welfare measures on job satisfaction. The study concluded that labour welfare is some kind of investment for the success and progress of the organization (Chaubey and Rawat, 2016). Reddy (2013) in his study conducted in BHPV viewed that a linkage between worker participation in management and effective implementation of labour laws promote harmonious industrial relations in the organization. Raju and Jena (2005) in their study concluded that the labour welfare practices adopted by ONGC contributed to its profitability by shaping workers into a productive, efficient and committed workforce. In their study of public and private sector sugar factories in Uttar Pradesh, Kumar and Yadav (2002) identified that workers' satisfaction towards various welfare schemes is at very low degree. However, regarding certain schemes, employees in private sector recorded high satisfaction scores than those in the public sector. The study conducted by Pandian and Navaneethkrishnan (2003) found that workers in textile mills were not satisfied mainly with the hygiene at the workplace, sanitation facilities and canteen services. In a study, Srivastava (2004) indicated that in both public and private sector enterprises, welfare activities affect the workers' attitudes towards management and their jobs. He found that public sector was providing its workers relatively with better facilities. In an earlier research, Saiyadain (1983) found that the public sector enterprises spend more on welfare activities as compared to the private sector. The study identified that while the public sector spends more on transportation and recreation, the private sector was found to be spending more on housing facility. In yet

another early research conducted by Misra (1974) in Uttar Pradesh, it was found that the working conditions in the sugar industry were not too satisfactory, particularly with regard to safety measures, cleanliness, sanitation, latrine facilities, drinking water, restrooms, etc. The study also concluded that the provisions for leaves and holidays, lighting, housing, medical, education were very disappointing. Deb (2010) through his empirical study commented that the legislation on working conditions of labour must be equitable, more responsive and inclusive which could make Indian firms more competitive.

### Objectives

The objectives of this study are stated below:

- i) To compare and contrast the employee welfare programmes prevailing in the two selected public sector manufacturing enterprises; and
- ii) To discuss the implications of the results for the industry.

### Methodology

**Sampling units and respondents:** With the support of a structured questionnaire, the surveys were conducted by the second and third authors of this study during 2014-2015 in the two public sector manufacturing enterprises, namely: RINL (Rashtriya Ispat Nigam Limited-Vizag Steel Plant) and BHEL (Bharat Heavy Electricals Limited, Hyderabad), respectively. The questionnaire was randomly distributed among the personnel of the two selected organisations. While, the BHEL sample ( $N_1=49$ ) comprises operators, machinists, artisans, general technicians, assistant engineers, engineers, etc. at different grades, the RINL ( $N_2=64$ ) sample includes record assistants, assistants, khalasi, foremen and managers at different levels.

**Reliability of the instrument:** The questionnaire (see appendix) responses were quantified on the Likert's 5-point scale ranging from 'Strongly Agree-5' to 'Strongly Disagree-1'. Cronbach alpha statistics (table 2) show the presence of a good degree of internal consistency between all statements as the alpha value attained is greater than 0.8 in all cases (Wessa, 2014). George and Mallery (2003, p231) provide a thumb rule for analysing Cronbach alpha, i.e. " $\geq 0.9$  – excellent,  $\geq 0.8$  – good,  $\geq 0.7$  – acceptable,  $\geq 0.6$  – questionable,  $\geq 0.5$  – poor, and  $\leq 0.5$  unacceptable".

**Hypotheses of the study:** In essence, the study formulates a null hypothesis ( $H_0$ ) which was in turn duplicated in respect of all the remaining 15 items for its multiple testing. For example, considering the primary welfare aspect analysed i.e. 'recreation facilities', the null hypothesis formulated was: "with respect to the performance of recreation activity the two selected organizations are identical".

**Techniques of data analysis:** At first, the study conducts Shapiro-Wilk test to explore whether the data obtained from the two populations are normally distributed or non-normally

distributed. Shapiro–Wilk has the best power for a given significance when compared with the Kolmogorov–Smirnov, Lilliefors, and Anderson–Darling tests (Razali & Wah, 2011). The null hypothesis for this test is that the data are normally distributed. In case of RINL data, the  $p$ -value  $0.022 < \alpha < 0.05$  the null hypothesis that the data are normally distributed is rejected. On the contrary, in respect of BHEL data high value of  $W$  indicates normality (table 1). Firstly, the study computes item-wise mean values and then their percentage scores using formula  $\{(Mean\ Value-1) \times 25\}$ . According to Rao (2008), scores above 75 percent indicate excellent performance, scores below 60 percent indicate scope for improvement, and scores below 50 percent indicate weak performance. Secondly, since the basic data collected from RINL were tested non-normal the study has preferred to conduct Mann-Whitney  $U$  (MWU) Test which is non-parametric in its nature. *Nonparametric tests are also called distribution-free tests* because they don't assume that the data follow a specific distribution (Daniel & Guili, 2017, p235). Thus, non-parametric tests are valid for both normally and non-normally distributed data. As the  $U$ -value approaches to a normal distribution due to  $N_1$  and  $N_2 > 20$  (www.transtutors.com, 2017), the null hypotheses are tested not only by the resulting  $p$ -value (probability) but also the  $Z$ -score to achieve a fairly good approximation. Therefore, a null hypothesis is rejected if  $p < 0.05$  and  $-1.96 \leq Z \leq 1.96$  ( $Z$  critical value is  $\pm 1.96$  @  $\alpha = 5\%$ ). Further, MWU tests are accompanied by the computation of effect size, i.e.  $r$ , to assess the magnitude of difference (Lenhard & Lenhard, 2016). Effect size is a way of quantifying the difference between two groups. Cohen (1988) interprets the magnitude of effect size  $r$ :  $\geq 0.1$  as small;  $\geq 0.3$  as intermediate;  $\geq 0.5$  as strong. Later, post-hoc power analysis (Faul, et al. 2007) was also carried out in respect of significant results to analyse the statistical power achieved by the study. Cohen (1988) concluded that studies should be planned in such a way that they have an 80% chance of finding an issue when there is an effect there to be found.

## Results and Discussion

### Similarities

Considering some of the welfare aspects studied, data in Table 3 explain that the extent of percentage scores recorded by both groups of respondents has been identified as indistinguishable by the MWU tests. Similarity between the two selected organisations has been found with respect to welfare measures viz. 'recreation' (BHEL=72.45, RINL=71.09), 'education allowance' (BHEL=57.14, RINL=57.81), safety (BHEL=66.33, RINL=68.16), canteen subsidy (BHEL=62.76, RINL=65.63), canteen hygiene (BHEL=60.71, RINL=50.78), workplace hygiene (BHEL=65.31, RINL=56.25), medical facilities (BHEL=75.00, RINL=68.75), family welfare (BHEL=69.39, RINL=68.75), and housing facilities (BHEL=58.16, RINL=61.33). Apparently, in both organisations, educational allowances, canteen hygiene and housing facilities need substantial improvement.

### Differences

Data in Table 3 show that BHEL personnel scored higher (72.54) than RINL personnel (55.47) on 'Staff Benevolent Fund' (SBF). The group difference is statistically significant (*Mann-Whitney*  $U=1191$ ,  $Z=-2.181$ ,  $p0.029 < 0.05$ ). The magnitude of difference is small ( $r=0.2049$ ). This implies that the conditions prevailing in RINL regarding SBF need substantial improvement as compared to those in BHEL.

Likewise, considering the 'pension scheme' BHEL staff scored higher (63.78) than RINL staff (35.94). The group difference is statistically highly significant (*Mann-Whitney*  $U=796.5$ ,  $Z=-4.467$ ,  $p0.000 < 0.05$ ). The magnitude of difference is medium ( $r=0.4207$ ). As the score recorded by the latter is below 50 per cent, it can be inferred that the pension scheme of RINL is absolutely weak in the eyes of its beneficiaries.

Also, regarding 'quality of canteen food' BHEL staff scored higher (65.31) than RINL staff (53.13). The group difference is statistically significant (*Mann-Whitney*  $U=1147$ ,  $Z=-2.436$ ,  $p0.015 < 0.05$ ). The magnitude of difference is modest ( $r=0.2302$ ). This result conveys that in RINL, quality of canteen food is comparatively average and requires substantial improvement.

Further, as regards the 'rest room' facility BHEL personnel scored higher (54.59) than RINL personnel (30.08). The group difference is statistically highly significant (*Mann-Whitney*  $U=847.5$ ,  $Z=-4.171$ ,  $p0.000 < 0.05$ ). The magnitude of difference is medium ( $r=0.3924$ ). This result gives scope to infer that the conditions prevailing in RINL with regard to the number of rest rooms as well as facilities inside them, may be rather depressing. Although, the scores of BHEL and RINL are statistically distinguishable, it is also true that even in BHEL rest room facilities need substantial augmentation.

Regarding availability of 'medical benefits', BHEL respondents scored higher (77.55) than RINL respondents (52.34). The group difference is statistically highly significant (*Mann-Whitney*  $U=951.5$ ,  $Z=-3.569$ ,  $p0.000 < 0.05$ ). The magnitude of difference is medium ( $r=0.3362$ ). This result suggests that BHEL staff gets excellent medical benefits as opposed to mediocre benefits provided to the personnel in RINL.

Also, regarding the functioning of 'co-operative credit society (CCS)', BHEL personnel scored extremely higher (79.59) than RINL staff (30.08). The group difference is statistically highly significant (*Mann-Whitney*  $U=264.5$ ,  $Z=-7.549$ ,  $p0.000 < 0.05$ ). The magnitude of difference is also large ( $r=0.7099$ ). From this it can be deduced that the performance of the CCS in BHEL is at very high degree, while the same is completely ineffective in RINL.

Similarly, regarding 'ambulance facility and medical attention', BHEL respondents scored higher (77.55) than RINL (58.98). The group difference is statistically significant (*Mann-Whitney*  $U=950.5$ ,  $Z=-3.575$ ,  $p0.000 < 0.05$ ). The magnitude of

difference is medium ( $r=0.3362$ ). This implies that in BHEL the ambulance and medical services are very efficient, while the same operate at moderate level in RINL. Statistical power (achieved in all the above instances of differences further confirm that the effects are truly present and valid.

**Conclusion**

Regarding implementation of various welfare programmes in the Indian PSUs, the present study identifies both similarities and dissimilarities between the two selected organisations. For instance, as regards welfare activities involving recreation, educational allowance, workplace safety, canteen subsidy, canteen hygiene, workplace hygiene, medical facilities, family welfare, housing facilities, etc. more or less similar conditions are existing in the two organisations surveyed. However, BHEL is outperforming RINL with regard to various welfare activities viz. staff benevolent fund, pension scheme, quality of canteen food, rest rooms, medical benefits, cooperative credit society and ambulance and medical services. Praveen Kumar, et al. (2015) also have similar finding. In their empirical work

conducted in BHEL concerning measurement of the maturity levels of HR subsystems, they identified ‘welfare management’ and ‘health management’ as the most efficient and effective systems. Possibly, due to this superior performance BHEL shined in the Top 25 “Best Companies to Work For” in India, as per the Business Today survey of 2016. A high percentage of this survey responses suggests that employee benefits matter a great deal. Given these divergences, RINL has to amend its public assistance schemes to encourage the team spirit of its employees. Benchmarking is the tool available for RINL through which it can evaluate its welfare practices by comparison with the practices being implemented in BHEL and endeavour to improve. This can be ensured in the industry to achieve welfare excellence by promoting mutually beneficial partnerships.

*“We make a living by what we get, but we make a life by what we give.” – Winston Churchill*

**Table-1: Shapiro-Wilk Normality Test Statistics**

Firm	N	Mean	SD	Variance	Kurtosis	W <sub>cal</sub>	p-value:	W <sub>crit</sub> ( $\alpha=0.05$ )	H <sub>0</sub>	Normality
BHEL	49	3.731	0.469	0.220	-0.730	0.983	0.708	0.953	Accepted	Yes
RINL	64	3.220	0.582	0.339	0.261	0.955	0.022	0.962	Rejected	No

**Table-2: Reliability Statistics**

Items	Cronbach Alpha	
	BHEL	RINL
All items	0.8356	0.8339
x1 excluded	0.8177	0.8274
x2 excluded	0.824	0.8348
x3 excluded	0.8303	0.8309
x4 excluded	0.8282	0.8404
x5 excluded	0.8191	0.8235
x6 excluded	0.8311	0.8224

x7 excluded	0.8207	0.8172
x8 excluded	0.8257	0.814
x9 excluded	0.8198	0.8321
x10 excluded	0.8398	0.818
x11 excluded	0.8316	0.8147
x12 excluded	0.8315	0.8096
x13 excluded	0.8119	0.8172
x14 excluded	0.8323	0.8299
x15 excluded	0.8266	0.841
x16 excluded	0.8307	0.8195

**Table-3: Comparative Statistics of Various Employee Welfare Aspects**

Item	Welfare Aspect	U-value	Z-Score	p-value	BHEL (N <sub>1</sub> =49) Mean ( $\sigma$ ) % score	RINL (N <sub>2</sub> =64) Mean ( $\sigma$ ) % score	H <sub>0</sub>
1	Recreation	1524	-0.252	0.803	3.90 (0.92) 72.45	3.84 (0.96) 71.09	No evidence
2	Education allowance	1327.5	1.390	0.165	3.29 (0.65) 57.14	3.31 (1.19) 57.81	No evidence
3	Staff benevolent fund	1191	-2.181	0.029*	3.90 (0.85) 72.45	3.22 (1.43) 55.47	Rejected
4	Pension scheme	796.5	-4.467	0.000*	3.55 (1.12) 63.78	2.44 (1.22) 35.94	Rejected
5	Safety	1529	-0.223	0.826	3.65 (1.13)	3.73 (0.79)	No evidence

					66.33	68.16	
6	Canteen subsidy	1483.5	0.487	0.624	3.51 (1.04) 62.76	3.63 (0.92) 65.63	No evidence
7	Quality of canteen Food	1147	-2.436	0.015*	3.61 (0.73) 65.31	3.13 (1.00) 53.13	Rejected
		r = 0.2302**; Power=75%					
8	Neatness in canteen	1241	-1.892	0.059	3.43 (1.02) 60.71	3.03 (1.05) 50.78	No evidence
9	Rest rooms	847.5	-4.171	0.000*	3.18 (0.93) 54.59	2.20 (1.17) 30.08	Rejected
		r = 0.3924**; Power=99%					
10	Sanitation	1286	-1.631	0.103	3.61 (0.79) 65.31	3.25 (1.17) 56.25	No evidence
11	Medical facilities	1367	-1.161	0.246	4.00 (0.71) 75.00	3.75 (1.01) 68.75	No evidence
12	Family welfare	1477	0.524	0.603	3.78 (0.71) 69.39	3.75 (1.01) 68.75	No evidence
13	Housing facilities	1380.5	1.083	0.280	3.33 (0.77) 58.16	3.45 (1.02) 61.33	No evidence
14	Medical benefits	951.5	-3.569	0.000*	4.10 (0.94) 77.55	3.09 (1.48) 52.34	Rejected
		r = 0.3362**; Power=97%					
15	Co-operative credit society	264.5	-7.549	0.000*	4.18 (0.57) 79.59	2.20 (1.23) 30.08	Rejected
		r = 0.7099**; Power=100%					
16	Ambulance & medical attention	950.5	-3.575	0.000*	4.10 (0.90) 77.55	3.36 (1.13) 58.98	Rejected
		r = 0.3362**; Power=94%					
Overall Mean					3.70 (0.31) 67.38	3.21 (0.53) 55.29	***

\*Significant @  $\alpha=0.05$ ; \*\*Effect is present (Cohen, 1988);  $\sigma$ =Standard Deviation

### Appendix Questionnaire

Sl. No.	Welfare Aspect	Measurement Scale*				
		5	4	3	2	1
1	Recreation facilities (Clubs, parks, sports & games, cultural activities, library, etc.)					
2	Educational allowances to employees and their children					
3	Staff benevolent fund					
4	Pension scheme					
5	First aid facilities and safety provisions					
6	Canteen subsidy (price of food)					
7	Quality of food available in canteen					
8	Canteen hygiene (neatness, role of canteen committee)					
9	Rest room facility (waiting halls, rest-pause periods, etc.)					
10	Sanitation facilities (hygienic conditions at work place)					
11	Medical facilities (health schemes for working and retired)					
12	Family welfare (crèche facility, etc.)					
13	Housing facilities					
14	Medical/Health insurance					
15	Cooperative credit society (loan facility for construction of house, purchase of cars and two-wheelers, etc.)					
16	Ambulance facility and medical attention					

\*5=Highly Satisfied, 4=Satisfied, 3=Merely satisfied, 2=Dissatisfied, 1=Highly dissatisfied

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#### Biography of the first author

Srinivas Lakkoju is currently an associate professor of human resources in School of Management Studies, Lakireddy Balireddy College of Engineering (Autonomous), Andhra Pradesh. He received his PhD from Acharya Nagarjuna University, Guntur, in 2009 and has about a decade of academic experience. He has published few papers in refereed journals, including Decision, IJIR, Journal of IPE, IJC, Management Today, PMR, etc. He has also presented papers in a few national and international conferences and has been the life member of NIPM, ICA and NHRDN. Besides, he has a UGC minor research project on hand. His research interests include HRM/HRD, Service Quality, WLB and Work Stress.

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Ms. Vani Thamma and Mrs. Nirmala Deepika, K.B. were alumni of School of Management Studies, Lakireddy

Balireddy College of Engineering (Autonomous) pursued their MBA with the major emphasis on human resources specialisation. They used to show genuine interest in HR research and were responsible for the collection of data in

both the surveyed organisations i.e. RINL and BHEL respectively.