

## INDUSTRIAL RELATIONS IN SINGARENI COLLERIES COMPANY LIMITED – A STUDY

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### Abstract

An industrial relations system consists of the whole gamut of relationships between employees and employees and between employees and employers which are managed by means of conflict and cooperation. In this paper, an attempt has been made to know reasons/causes which lead employees/workers to go for strikes, to be absented, and to meet accidents at workplace in SCCL. A sample of 100 workers/employees was taken by using random convenience sampling method and data is collected from the sample respondents by using a structured questionnaire. The collected data is tabulated by using cross tabulation, and Chi-Square test. It also comes to know the reasons/causes for strikes, absenteeism, and accidents which affect the industrial relations of SCCL as whole.

**Keywords:** Strikes, Absenteeism, Accidents, IR.

### INTRODUCTION

Industrial relations are the relationship between management and employees or among employees and their organization. Industrial relation deal with either the relationships between the state and the employers and the workers organization or the relation between the occupational organizations themselves. IR plays a significant role in SCCL's working scenario where the harmonious relationship between the employers and employees is needed to have an uninterrupted production.

There are two parties in the employment relationship – labor and management. Both parties need to work in a spirit of cooperation, adjustment and accommodation. In their own mutual interest certain rules for co-existence are formed and adhered to. Industrial relations cover all aspects of the employment relationship, including human resource management, employee relations, and union-management (or labor) relations. Now its meaning has become more specific and restricted. Accordingly, industrial relations pertain to the study and practice of collective bargaining, trade unionism, and labor-management relations, the personnel practices and policies of employers etc.

### REVIEW OF LITERATURE

A numbers of research work have been done by eminent persons in the coal Industry and industrial relations.

1. **Leelavathi (2000)** has stated in her article that the industrial relations are mainly the human relations that existed in the production system and it has a definite impact on the efficiency and productivity of the organization. It involved a complex web of

relationships between the employer the employees and the government.

2. **J.S. Sodhi and David H.Plowman (2002)** Analyzed the origins of the subject of IR the developments since the ultimate century and mainly during the last 5 decades, and the factors which may help the subject in gaining greater acceptance. While pluralistic industrialism become the order of the day in the past, the factors of convergence on a large wide variety of issues in future might mould the possibilities and contours of industrial relations.
3. **Ram Reddy (2006)** studied that to analyze the government's industrial relations policy and processes. The researcher confirms the effectiveness of the various preventive measures put in place in Singareni for the development and failure of harmonious labour relations. The study concluded the root causes of Singareni strikes and proposed successful measures to reduce industrial strife.
4. **Balasundaram, Nimalathasan and Taher (2012)** found that IR is a combination of various social sciences that incorporate industries and culture. Sound IR can only be focused on human relationships, and good relations between people require human beings to be treated humanely, including respect for human dignity, equal sealing and sensitivity to the physical and social needs of people. The author also suggested that, this paper help practitioners, scientists, planners, policy makers and scholars involved in the area concerned.
5. **Sequeira, A.H. and Dhriti, Apoorva (2015)** said that labour relations practices in the company have a significant influence on the performance of workers in the company. Extremely satisfied employees are actually more productive and reluctant to change the current entities in their established activities. The study also showed that improving the employee relationship of the organization improves the results and thus the overall efficiency of the company.
6. **Dwivedi Preeti (2015)** Found that These relations have great bearing on the economic, social and political spheres of our society. If in an organizations relation between labour and management are cordial, there will be industrial peace and interests of both the parties will be automatically safeguarded. However, organizations where industrial relations are strained, the organizations have to face lot of problems. The atmosphere of such organizations is always surcharged with industrial unrest leading either to strikes or lockouts.
7. **G.C.Rath , D.V.Giri and S.C.Parida (2019)** So far no positive measures have been taken to revitalize the state Industrial Relations Machinery so as to ensure speedy disposal of cases and promotion of harmonius industrial relations in the state. Furthermore, it may be noted that in recent years, the government of Orrisa has been exhibiting lack of consistency in formulating a definite labour policy and pursuing the same. Cumulatively, such lapses on the part of government tend to affect the industrial relations climate in the state.

### SCOPE OF THE STUDY

The current study is limited to one of the demographic elements called the category of work of the respondents in Bhadradri Kotthagudem in Telangana State and it is confined to select aspects of IR such as strikes, absenteeism, and accidents in SCCL.

### NEED OF THE STUDY

Maintenance of harmonious industrial relations is of vital importance for the survival and growth of the SCCL. Good industrial relations result in increased efficiency and hence prosperity, reduced turnover and other tangible benefits to the organization. Industrial relations has become one of the most delicate and complex problems of modern industrial society. Industrial progress is impossible without cooperation of labor and harmonious relationships. Therefore, it is in the interest of all to create and maintain good relations between employees (labor) and employers (management). This study helps in understanding the reasons/causes which affect the overall performance and manpower of SCCL, Bhadradi Kothagudem, Telangana state. Hence, there is a need to study the IR in SCCL.

### OBJECTIVES OF THE STUDY

1. To give an overview of performance of SCCL.
2. To know the manpower, strikes, absenteeism and accidents in SCCL.
3. To evaluate the perception of employees on strikes, absenteeism and accidents in SCCL.
4. To draw conclusions from the study.

### RESEARCH METHODOLOGY

Primary data as well as secondary data is used for the study. Primary data was collected from 100 respondents, who were working in SCCL, Bhadradi Kothagudem, Telangana state. A random convenience sampling method was used to collect the data. These 100 employees were consisting of different age groups, gender, education, family size, category of work, length of service marital status. To analyze the collected data and to write interpretation Cross Tabulation and techniques like Chi-Square were applied with the help of SPSS 19 Version. Secondary data was collected from various books, journals, reports and website of SCCL. This study mainly focusses opinions respondents on the reasons for strikes, absenteeism, and accidents which affect the overall performance and manpower of SCCL.

### LIMITATIONS OF THE STUDY

1. The current study is restricted to Category of work-wise analysis
2. The current study is confined to the aspects of industrial relations such as strikes, absenteeism, and accidents.

### PERFORMANCE OF SCCL

Effective performance is essential to SCCL. through both formal and informal processes, it helps them align their employees, resources, and systems to meet their strategic objectives. Overall performance of SCCL is analyzed for five years of period from 2016-17 to 2020-21. During the year 2016-17 total coal production was 61.34 million tonnes, in the year 2017-18 coal production was risen up to 62.01 million tonnes, for the year 2018-19 coal production was risen up to 64.40 million tonnes, in the year 2019 – 20 there was 64.02 million tonnes of coal production with little fall down, and the present year 2020-21 coal production is 65.01 million tonnes with little raise as compare to last four years.

### MANPOWER OF SCCL

Manpower affects everything in a business from production to industrial relations. Without adequate and supportive manpower, a business will never be successful. Manpower of SCCL is

evaluated for the period of five years from 2016-17-2020-21. In the year 2016-17 manpower was 56,282, for the year 2017-18 manpower was 54,043, for the year 2018-19 manpower was 48,942, during the year 2019-20 manpower was 46,021, and in the present year manpower is 43,895. It is understood that manpower is decreasing from the year 2016-17 to the current year 2020-21.

### STRIKES IN SCCL

In order to examine the trends in strikes during 2016-2021, the details of number of strikes, production lost, and man days lost in SCCL are presented in Table-1.

**Table 1: Strikes and bandhs details of SCCL**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
No. of Strikes	1	1	-	-	-
Man days lost	40,785	2,06,200	-	-	-
Production lost	88,554	2,15,570	-	-	-

Source: [www.scclmines.com](http://www.scclmines.com)

Table-1 reveals that the number of strikes, man days lost, and production lost in SCCL. It is collective refusal by employees to work under the conditions required by employers. Strikes arise for a number of reasons, though principally in response to economic conditions or labour practices. Strikes in SCCL is analyzed for the period of five years from 2016-17 to 2020-21. During the year 2016 -17 there was 1 strike, for the year 2017-18 there was 1 strike again, in the year 2018-19 was no strikes, for the year 2019-20 no strikes was there, and the current year 2020-21 there no strikes again in SCCL. It is found that there is decrease of strikes from 2016-17 to 2020-21.

Total working days lost to-date or within a period (usually one year) due to reasons such as accidents, lockouts, or strikes. This figure is computed by multiplying the number of days with the number of affected employees. Man days lost is analyzed for the period of five years from 2016-17 to 2020-21. In the year 2016-17 there was 40,554 man days lost, for the 2017-18 there was 2,06,200 man days were lost, the period from 2018-2021 for these three years there is no man days lost. It is observed that in the year 2017-18 there was 2,06200 man days lost due to strikes and bandhs and also there is no man days lost for three years from 2018-2021.

Production losses can impact SCCL, and they usually result from unexpected problems that arise during what should be a routine manufacturing process. Production lost is analyzed for the period of five years from 2016-17-2021. During the year 2016-17 there was 88,554 tonnes, for the year 2017-18 there was again 2,15,570 tonnes production lost, the period from 2018-2021 these three years there is no production lost in SCCL. As whole, it is said that in the year 2017-18 there was higher rate of man days lost 2,06200 and production lost of 2,15,570 tonnes. For the three years from 2018 to 2021 the current year there are no strike taken place in SCCL.

### PERCEPTIONS ON STRIKES

I. Delay in payment of salaries, ii. Higher Bonus, iii. Improvement of welfare facilities.

### NULL HYPOTHESIS

(i) **Ho1.** There is no significant relationship between delay in payment of salaries and

category of work with regard to strikes.

**Table - 2: Reasons for strikes - Delay in payment of salaries**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	3 (3.0)	1 (1.0)	0	13 (13.0)	3 (3.0)	20 (20.0)
Surface	2 (2.0)	1 (1.0)	2 (2.0)	31 (31.0)	8 (8.0)	44 (44.0)
Opencast	2 (2.0)	4 (4.0)	0	22 (22.0)	8 (8.0)	36 (36.0)
	7 (7.0)	6 (6.0)	2 (2.0)	66 (66.0)	19 (19.)	100 (100.0)

Source: Compiled data using SPSS

**Table - 2** discloses the delay in payment of salaries based on their category of work. In underground, out of 20 respondents 16 respondents have agreed that delay in payment is the one of the reasons for strikes. In Surface, out of 44 respondents 39 respondents have agreed that delay in payment is also one of the main reasons for strikes. And in opencast, out of 36 respondents 30 respondents have agreed that delay in payment is one of the reasons for strikes. Finally, it is said that the majority of respondents from three categories say that delay in payment of salaries is one of the main reasons for strikes in SCCL.

**Testing of Hypothesis -1**

There is no significant relationship between delay in payment of salaries and category of work with regard to strikes.

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.126 <sup>a</sup>	8	.045
Likelihood Ratio	8.478	8	.388
Linear-by-Linear Association	.365	1	.546
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between delay in payment of salaries and category of work. The chi-square test is applied, it is found that the chi-square value 0.045 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between delay in payment of salaries and category of work with regard to strikes. So, delay in payment of salaries is the reason for the strikes.

**NULL HYPOTHESIS**

**(ii) Ho2.** There is no significant relationship between higher bonus and category of work with regard to strikes.

**Table – 3: Reasons for strikes - Higher Bonus**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	0	1 (1.0)	0	13 (13.0)	6 (6.0)	20 (20.0)
Surface	2 (2.0)	3 (3.0)	3 (3.0)	16 (16.0)	20 (20.0)	44 (44.0)
Opencast	2 (2.0)	3 (3.0)	1 (1.0)	19 (19.0)	11 (11.0)	36 (36.0)
Total	4 (4.0)	7 (7.0)	4 (4.0)	48 (48.0)	37 (37.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 3** explains the category of work wise analysis of reasons for strikes. In underground, out of 20 respondents 19 respondents have agreed that higher bonus is the one of the reasons for strikes. In Surface, out of 44 respondents 36 respondents have strongly agreed that higher bonus is also one of the main reasons for strikes. And also in opencast, out of 36 respondents 30 respondents have agreed that higher bonus is one of the reasons for strikes. Finally, it is found that the majority of respondents from three categories say that higher bonus is one of the main reasons for strikes in SCCL.

### Testing of Hypothesis -2

There is no significant relationship between higher bonus and category of work with regard to strikes.

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.202 <sup>a</sup>	8	.049
Likelihood Ratio	8.621	8	.375
Linear-by-Linear Association	.899	1	.343
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between higher bonus and category of work. The chi-square test is applied, it is found that the chi-square value 0.049 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between higher bonus and category of work with regard to strikes.

### NULL HYPOTHESIS

(iii) **Ho3.** There is no significant relationship between improvement of welfare facilities and category of work with regard to strikes.

**Table – 4: Reasons for strikes - Improvement of welfare facilities**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	1 (1.0)	2 (2.0)	0	6 (6.0)	11 (11.0)	20 (20.0)
Surface	3 (3.0)	2 (2.0)	2 (2.0)	17 (17.0)	20 (20.0)	44 (44.0)
Opencast	2 (2.0)	5 (5.0)	2 (2.0)	11 (11.0)	16 (16.0)	36 (36.0)
Total	6 (6.0)	9 (9.0)	4 (4.0)	34 (34.0)	47 (47.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 4** Describes the category of work wise analysis of reasons for strikes. In underground, out of 20 respondents 17 respondents have strongly agreed that improvement of welfare facilities is the one of the reasons for strikes. In Surface, out of 44 respondents 37 respondents have strongly agreed that improvement of welfare facilities is also one of the main reasons for strikes. And also in opencast, out of 36 respondents 27 respondents have strongly agreed that improvement of welfare facilities is one of the reasons for strikes. Finally, it is found that the majority of respondents from three categories feel that improvement of welfare facilities is one of the main reasons for strikes in SCCL.

### Testing of Hypothesis -3

There is no significant relationship between improvement of welfare facilities and category of work with regard to strikes.

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.936 <sup>a</sup>	8	.045
Likelihood Ratio	4.774	8	.781
Linear-by-Linear Association	.668	1	.414
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between improvement of welfare facilities and category of work. The chi-square test is applied, it is found that the chi-square value 0.045 is greater than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between improvement of welfare facilities and category of work with regard to strikes.

### XI ABSENTEEISM IN SCCL

Employee absenteeism is a frequent lack of attendance at work without valid cause. It affects the performance of SCCL. Absenteeism is evaluated for the period of five years from 2016-17 to 2020-2021. In the year 2016-17 there was 54.15% of absenteeism, for the year 2017-18 there was 58.81% of absenteeism, for the year 2018-19 there was 56.99% of absenteeism, in the year 2019-20 there was 58.85% of absenteeism, and also in the current year there is 61.41% in SCCL. It is said that there is an increasement in absenteeism from 2016-17 to 2020-21.

### REASONS FOR ABSENTEEISM

I. Polluted environment, ii. Attitude of management, iii. Sickness.

### NULL HYPOTHESIS

- (i) **Ho4.** There is no significant relationship between polluted environment and category of work with regard to absenteeism.

**Table – 5: Reasons for absenteeism - Polluted environment**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	0	1 (1.0)	3 (3.0)	9 (9.0)	7 (7.0)	20 (20.0)
Surface	1 (1.0)	3 (3.0)	1 (1.0)	31 (31.0)	8 (8.0)	44 (44.0)
Opencast	1 (1.0)	0	0	21 (21.0)	14 (14)	36 (36)
Total	2 (2.0)	4 (4.0)	4 (4.0)	61 (61.0)	29 (29.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 5** Describes the category of work wise analysis of reasons for absenteeism. In underground, out of 20 respondents 16 respondents have agreed that polluted environment is the one of the reasons for absenteeism. In Surface, out of 44 respondents 39 respondents have agreed that polluted environment is also one of the main reasons for absenteeism. And also in opencast, out of 36 respondents 35 respondents have agreed that polluted environment is one of the reasons for absenteeism. Finally, it is found that the majority of respondents from three categories say that polluted environment is one of the main reasons for absenteeism in SCCL.

#### Testing of Hypothesis -4

There is no significant relationship between polluted environment and category of work with regard to absenteeism.

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.471 <sup>a</sup>	8	.048
Likelihood Ratio	16.318	8	.038
Linear-by-Linear Association	1.476	1	.224
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between polluted environment and category of work. The chi-square test is applied, it is found that the chi-square value 0.48 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is no significant relationship between polluted environment and category of work with regard to absenteeism. So, polluted environment is one of the reasons for the absenteeism in SCCL.

#### NULL HYPOTHESIS

(ii) **Ho5.** There is no significant relationship between attitude of management and category of work with regard to absenteeism.



**Table – 6: Reasons for absenteeism - Attitude of management**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	0	5 (5.0)	0	14 (14.0)	1 (1.0)	20 (20.0)
Surface	3 (3.0)	5 (5.0)	3 (3.0)	26 (26.0)	7 (7.0)	44 (44.0)
Opencast	1 (1.0)	6 (6.0)	2 (2.0)	23 (23.0)	4 (4.0)	36 (36.0)
Total	4 (4.0)	16 (16.0)	5 (5.0)	63 (63.0)	12 (12.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 6** Discloses the category of work wise analysis of reasons for absenteeism. In underground, out of 20 respondents 15 respondents have agreed that attitude of management is the one of the reasons for absenteeism. In Surface, out of 44 respondents 33 respondents have agreed that attitude of management is also one of the main reasons for absenteeism. And also in opencast, out of 36 respondents 27 respondents have agreed that attitude of management is one of the reasons for absenteeism. Finally, it is said that the majority of respondents from three categories say that attitude of management is one of the main reasons for absenteeism in SCCL.

#### Testing of Hypothesis -5

There is no significant relationship between attitude of management and category of work with regard to absenteeism.

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.402 <sup>a</sup>	8	.047
Likelihood Ratio	8.129	8	.421
Linear-by-Linear Association	.066	1	.797
N of Valid Cases	100		

The Chi-Square test is used to test, there exists any significant relationship between attitude of management and category of work. The chi-square test is applied, it is found that the chi-square value 0.047 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between attitude of management and category of work with regard to absenteeism. So, attitude of management is the reason for absenteeism in SCCL.

#### NULL HYPOTHESIS

(iii) **Ho6.** There is no significant relationship between sickness and category of work.

**Table – 7: Reasons for absenteeism - Sickness**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	0	2 (2.0)	0	11 (11.0)	7 (7.0)	20 (20.0)
Surface	2 (2.0)	1 (1.0)	1 (1.0)	27 (27.0)	13 (13.0)	44 (44.0)
Opencast	0	3 (3.0)	2 (2.0)	23 (23.0)	8 (8.0)	36 (36.0)
Total	2 (2.0)	6 (6.0)	3 (3.0)	61 (61.0)	28 (28.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 7** Clears the category of work wise analysis of reasons for absenteeism. In underground, out of 20 respondents 18 respondents have agreed that sickness is the one of the reasons for absenteeism. In Surface, out of 44 respondents 40 respondents have agreed that sickness is also one of the main reasons for absenteeism. And also in opencast, out of 36 respondents 31 respondents have agreed that sickness is one of the reasons for absenteeism. Finally, it is said that the majority of respondents from three categories say that sickness is one of the main reasons for absenteeism in SCCL.

### Testing of Hypothesis - 6

There is no significant relationship between sickness and category of work.

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.871 <sup>a</sup>	8	.046
Likelihood Ratio	8.261	8	.408
Linear-by-Linear Association	.434	1	.510
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between sickness and category of work. The chi-square test is applied, it is found that the chi-square value 0.046 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is no significant relationship between sickness and category of work with regard to absenteeism. So, sickness is the reason for absenteeism in SCCL.

### ACCIDENTS IN SCCL

Industrial accident is a sudden and unexpected occurrence in the SCCL which interrupts the orderly progress of the work. Accidents is evaluated for the period of five years from 2016-17 to 2020-21. During the year 2016-17 there were 220 accidents, in the year 2017 to 18 there were 210 accidents, for the year 2018 to 19 there were 186 accidents, for the year 2019-20 there were 210, and also in the present year there are 221 accidents in SCCL. It is found that there is an increasement in occurring of accidents at workplace from 2016-17 to 2020-21.

**REASONS FOR ACCIDENTS**

i. Mental distractions, ii. Negligence of required safety equipment, iii. Poor working conditions.

**NULL HYPOTHESIS**

(i) **Ho7.** There is no significant relationship between mental distractions and category of work with regard to accidents.

**Table - 8**  
**Reasons for accidents - Mental distractions**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	0	1 (1.0)	0	6 (6.0)	13 (13.0)	20 (20.0)
Surface	2 (2.0)	2 (2.0)	2 (2.0)	16 (16.0)	22 (22.0)	44 (44.0)
Opencast	3 (3.0)	1 (1.0)	0	14 (14.0)	18 (18.0)	36 (36.0)
Total	5 (5.0)	4 (4.0)	2 (2.0)	36 (36.0)	53 (53.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 8** explains the category of work wise analysis of reasons for accidents. In underground, out of 20 respondents 19 respondents have agreed that mental distraction is the one of the reasons for accidents. In Surface, out of 44 respondents 38 respondents have strongly agreed that mental distraction is also one of the main reasons for accidents. And also in opencast, out of 36 respondents 32 respondents have strongly agreed that metal distraction is one of the reasons for accidents. Finally, it is said that the majority of respondents from three categories say that mental distraction is one of the main reasons for accidents in SCCL.

**Testing of Hypothesis -7**

There is no significant relationship between mental distractions and category of work with regard to accidents.

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.545 <sup>a</sup>	8	.048
Likelihood Ratio	7.136	8	.522
Linear-by-Linear Association	1.232	1	.267
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between mental distractions and category of work. The chi-square test is applied, it is found that the chi-square value 0.48 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between mental distractions and category of

work with regard to accidents. So, mental distractions are the reason for accidents in SCCL.

### NULL HYPOTHESIS

(ii) **Ho8.** There is no significant relationship between negligence of required safety equipment and category of work with regard to accidents.

**Table – 9: Reasons for accidents - Negligence of required safety equipment**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	0	1 (1.0)	0	13 (13.0)	6 (6.0)	20 (20.0)
Surface	2	0	2 (2.0)	36 (36.0)	4 (4.0)	44 (44.0)
Opencast	1 (1.0)	4 (4.0)	0	23 (23.0)	8 (8.0)	36 (36.0)
Total	3 (3.0)	5 (5.0)	2 (2.0)	72 (72.0)	18 (18.0)	100 (100.0)

Source: Compiled data using SPSS

**Table - 9** describes the category of work wise analysis of reasons for accidents. In underground, out of 20 respondents 19 respondents have agreed that negligence of required safety equipment is the one of the reasons for accidents. In Surface, out of 44 respondents 40 respondents have agreed that negligence of required safety equipment is also one of the main reasons for accidents. And also in opencast, out of 36 respondents 31 respondents have agreed that negligence of required safety equipment is one of the reasons for accidents. Finally, it is said that the majority of respondents from three categories say that negligence of required safety equipment is one of the main reasons for accidents in SCCL.

### Testing of Hypothesis -8

There is no significant relationship between negligence of required safety equipment and category of work with regard to accidents.

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.341 <sup>a</sup>	8	.029
Likelihood Ratio	16.264	8	.039
Linear-by-Linear Association	1.177	1	.278
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship between negligence of required safety equipment and category of work. The chi-square test is applied, it is found that the chi-square value 0.029 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between negligence of required safety equipment and category of work with regard to accidents. So, negligence of required safety equipment is the reason for accidents in SCCL.

**NULL HYPOTHESIS**

(iii) Ho9. There is no significant relationship between poor working conditions and category of work with regard to accidents.

**Table – 10: Reasons for accidents - Poor working Conditions**

Category of work	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Underground	1 (1.0)	0	0	7 (7.0)	12 (12.0)	20 (20.0)
Surface	1 (1.0)	1 (1.0)	0	18 (18.0)	24 (24.0)	44 (44.0)
Opencast	1 (1.0)	3 (3.0)	1 (1.0)	16 (16.0)	15 (15.0)	36 (36.0)
Total	3 (3.0)	4 (4.0)	1 (1.0)	41 (41.0)	51 (51.0)	100 (100.0)

Source: Compiled data using SPSS

**Table – 10** explains the category of work wise analysis of reasons for accidents. In underground, out of 20 respondents 19 respondents have strongly agreed that poor working conditions is the one of the reasons for accidents. In Surface, out of 44 respondents 42 respondents have strongly agreed that poor working conditions is also one of the main reasons for accidents. And also in opencast, out of 36 respondents 31 respondents have agreed that poor working conditions is one of the reasons for accidents. Finally, it is said that the majority of respondents from three categories say that poor working conditions is one of the main reasons for accidents in SCCL.

**Testing of Hypothesis -9**

There is no significant relationship between poor working conditions and category of work with regard to accidents.

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.267 <sup>a</sup>	8	.049
Likelihood Ratio	6.978	8	.539
Linear-by-Linear Association	1.897	1	.168
N of Valid Cases	100		

Source: Compiled data using SPSS

The Chi-Square test is used to test, there exists any significant relationship poor working conditions and category of work. The chi-square test is applied, it is found that the chi-square value 0.049 is less than the significance value 0.05. Hence the null hypothesis is rejected that there is a significant relationship between poor working conditions and category of work with regard to accidents. So, working conditions is the reason for accidents in SCCL.

**CONCLUSION**

It can be concluded that the majority of respondents from underground, surface, opencast said

that delay in payment of salaries is one of the main reasons for strikes, and there is a significant relationship between higher bonus and category of work with regard to strikes is concerned. There is a significant relationship between improvement of welfare facilities and category of work with regard to strikes is concerned. Polluted environment is one of the major reasons for absenteeism, and there is a significant relationship between attitude of management and category of work with regard to absenteeism is concerned. There is a significant relationship between Sickness and category of work with regard to absenteeism is concerned. And also, mental distractions are one of the main reasons for accidents, as well as there is a significant relationship between negligence of required safety equipment and category of work with regard to accidents is concerned. There is a significant relationship between poor working conditions and category of work with regard to accidents is concerned. It can be found that the two-year period from 2016-17 to 2017-18 there was only 1 strike each year respectively, during the year 2017-18 there were large number of man days lost, and same time there was huge production lost. But the three-year period from 2018-19 to 2020-21 there was no strikes, no man days lost, and no production lost. The number of strikes and man days lost is generally associated with production lost in SCCL.

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