CHAPTER – V

SUMMARY & CONCLUSION

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Chapter-V

SUMMARY & CONCLUSION

For any research to be conducted scientifically, certain procedural steps are followed. First of all is the introductory part. Then come problems and hypotheses of the research followed by methodology and analysis & interpretation in that order. In the present research endeavour the above steps have already been discussed. Now this is time to sum up and conclude.

5.1 Summary:-

The present research is on the study of occupational stress in relation to certain psychodemographic and situational variables. Occupational stress refers to the stress or tension experienced by the employees while they play their role in their
occupation. Put in commonsense terms, the basic proposition of the whole field of occupational stress might be expressed thus: some aspects of many kinds of work have bad effects on most employees under certain circumstances. By a process, sometimes, called a response definition of the stimulus, the field of occupational stress then becomes the study of those aspects of work that either have or threaten to have bad effects. Occupational or job stress may also be defined as a "mechanism whereby the human body attempts to adapt to the environment". The body has a normal mechanism for dealing with stressful situations which is known as the "fight or flight" response. From the literature it is observed that outstanding efforts have been made to study the occupational stress, job satisfaction and mental health among senior civil servants (Bogg and Cooper, 1995); job satisfaction among primary health care center doctors (Al-Shammari, Khoja and Al-Subaie, 1996); police stress and well being that integrate personality, coping and daily work
experiences (Hart, wearing and Headey, 1995); stress in a social service day center (Gardener and Rose, 1994) etc. In the present research occupational stress is the only dependent variable. There are six independent variables; two demographic variables namely age and level of education, two situational variables namely job status and length of service & two psychological variables namely social intelligence and ego state.

There are mainly three problems in the present research; (i) Does occupational stress depend on the demo-graphic variables such as age and level of education? (ii) Do the organizational or situational factors such as job status and length of service affect occupational stress? (iii) Does occupational stress vary significantly with psychological variables such as social intelligence and ego state?
Age plays a vital role in the day-to-day activities of a human being. With increase in age, a person becomes more and more matured. Level of education refers to the academic qualifications of an individual. Job status refers to the post or position held by an individual in an organization. Length of service refers to the tenure of service. It makes a person more experienced and more attached to the organization. Social intelligence refers to the adjustment or adaptation of the individual to his total environment or to the limited aspects of it. Ego state refers to the state of mind. Eric Berne (1964) made complex interpersonal transactions understandable when he recognized that the human personality is made up of three "ego states", namely Child Ego State, Parent Ego State & Adult Ego State. Each of these is an entire system of thought, feeling and behaviour from which we interact with each other. When we are in the Child Ego State we act like the child we once were. The Parent Ego State is like a tape recorder. It is a collection of pre-recorded, pre-
judged, prejudiced parent-model codes for living. When in the Adult Ego State the person functions as a human computer. It operates on data. It collects and stores or uses these data to make decisions according to a logic based programme.

Following hypotheses have been put to verifications in the present piece of study:

(a) **Co-rrelational Hypotheses :-**

(a.1) The age of the industrial employees may show negative co-relation with their occupational stress. i.e. higher the chronological age of the industrial employees, less may be the degree of occupational stress felt by them.

(a.2) Level of education and the degree of occupational stress may show negative relationship i.e. higher the level of education, lower may be the magnitude of the occupational stress in the case of industrial employees.
(a.3) Higher the slab of the job status, more may be the degree of occupational stress in the case of industrial employees.

(a.4) Industrial employees' length of service may show negative relationship with their level of occupational stress i.e. more the length of service, less may be the magnitude of occupational stress.

(a.5) The relationship between the degree of social intelligence and the magnitude of occupational stress among the industrial employees may be negative.

[a.6(i)] The degree of parent ego may show its positive relationship with occupational stress of the industrial workers.

[a.6(ii)] Higher the magnitude of adult ego, lower may be the degree of occupational stress in the case of industrial workers.

[a.6(iii)] More the degree of child ego, higher may be the level of occupational stress in the case of industrial workers.
(b) Differential Hypotheses :-

(b.1) Occupational stress of the industrial workers of advanced age may be less than occupational stress of the industrial workers of less advanced age.

(b.2) Occupational stress of the industrial workers with higher level of education may be less than occupational stress of the industrial workers with lower level of education.

(b.3) Occupational stress of the industrial employees of higher cadre may be more than the occupational stress of the industrial employees of lower cadre.

(b.4) Occupational stress of the industrial employees with longer length of service may be less than the occupational stress of the industrial employees with shorter length of service.

(b.5) Occupational stress of the industrial employees with high social intelligence may be less than the occupational stress of the industrial employees with low social intelligence.
[b.6(i)] Occupational stress of the industrial employees with higher degree of parent ego may be greater than the occupational stress of the industrial employees with lower magnitude of parent ego.

[b.6(ii)] Occupational stress of the industrial employees with higher degree of adult ego may be less than the occupational stress of the industrial employees with lower degree of adult ego.

[b.6(iii)] Occupational stress of the industrial employees with higher degree of child-ego may be greater than the occupational stress of the industrial employees with lower degree of child ego.

(C) Exploratory Hypotheses :-

(c.1) On the basis of survey of literature related to occupational stress it can be hypothesized that out of the six suspected independent variables, the maximum association with Occupational stress may be exhibited by social intelligence, followed by the job status, the ego state, the length of service, the level of education and the age in that order.
On the strength of the significant association of social intelligence and job status with occupational stress, it is suspected that these two independent variables may jointly influence the occupational stress and hence a joint-action hypothesis that employees of low social intelligence but high job status may exhibit more Occupational Stress than the employees with high social intelligence and low job status.

In the present study, the employees working in Bhilai Steel Plant, Bhilai, SAIL constitute the universe. The selected universe can be considered as the representative of the entire industrial setup of India in general and Chattisgarh in particular. From the universe a sample of 500 employees has been taken through stratified-random-cum-incidental sampling technique. These employees belong to different cadres (i.e. different job status), are having different lengths of service and different levels of education. The subjects also belong to different age groups (between 20-60 years). The sample consists
of both executives and non-executives. In Bhilai Steel Plant the grades of non-executives range from L1 to L10 and that of executives range from E-0 to E-9. In the present study the sample ranges from L-3 to E-7 grade. The educational qualifications of the sample ranges from matriculation to M.Tech. level and the lengths of service of the sample range up to 40 years.

In the present study three different types of tools are used. These are:

i) Occupational Stress Index (OSI):— It was developed by Srivastava and Singh (1984). It is in Hindi. But in the present study its bilingual form is used which was developed by Goregaonkar and Helode (1992). The occupational stress index purports to measure the extent of stress which the employees perceive arising from various constituents and conditions of their job.
The scale consists of 46 items, each to be rated on the 5 point scale ranging from “Strongly disagree” through “Undecided” to “Strongly agree”. Out of the 46 items, 28 are true-keyed and the rest 18 are false-keyed. The items relate to almost all relevant components of the job life which cause stress in some way or the other, such as role over load, role ambiguity, role conflict, group and political pressures, responsibility for persons, under-participation, powerlessness, poor peer relations, intrinsic impoverishment, low status, strenuous working conditions and unprofitability.

(ii) Social Intelligence Scale (SIS):- It was developed by Chadha and Ganesan (1986). The scale is in English language. Its Hindi version was prepared by the researcher with the help of her supervisor. There are 8 dimensions in this scale. They are patience, co-operativeness, confidence level, sensitivity, recognition of social environment, tactfulness, sense of humor & memory. In the
“tactfulness” dimension, responses were elicited in terms of “Yes” or ‘No”. In the “Memory” dimension a set of 30 pictures was presented for recognition. Other six dimensions were constructed using the multiple choice technique.

(iii) Ego-Gram measure (EGM):- The “ego-gram measure” of Reddy (1985) adapted in Hindi by Helode (1998) is used. This adaptation is the bilingual adaptation (English and Hindi) with a high degree of reliability and validity. The original ego-gram measure of Reddy covers, nurturing parent, critical parent, adult, natural child, adapted child and little professor aspects of the ego states; whereas the adaptation measures only three main states, namely Parent-ego, Adult-ego and Child-ego. This Ego-gram measure is a 5-point scale consisting of 18 items, 6 for tapping each ego state (namely parent ego, adult ego and child ego). Thus it yields 3 different scores namely parent ego score, adult ego score and child ego score for each individual. This
scale ranges from "Never" through "Sometimes" to "Always".

At a time a group of 10 to 12 employees was taken and all the Ss were given the test of occupational stress, followed by the test of social intelligence and ego gram measure in an individual setting. Each session required about one and half hours and in total, it took nearly 3 months for completing data collection. In OSI out of 46 items, 28 are true keyed and 18 are false keyed. First of all serial nos. of these two categories of items were marked and as per the responses scores were allotted as given in the OSI manual. SIS consisted of 66 items of 8 different dimensions. As per the response alternatives marked by the Ss in the answer sheet, scoring was done as per the guidelines of the SIS manual. The EGM tool consisted of 18 items, 6 items for each of the three ego states i.e. parent, child and adult ego state and
as per the responses scoring was done as per guidelines mentioned in the description of EGM tool.

In the present research, out of the six independent variables and one dependent variable under study, it is presumed that four variables namely age, level of education, job status and length of service which fall under discrete series, after being assigned numerical weightages acquired the status of continuous variables. After warranting that distribution of continuously measured demographic, situational & psychological variables are almost normal; parametric statistical treatment was given to the data.

Then to verify the co-relational hypotheses, correlation coefficients of pearson’s family (r) are calculated. To verify the differential hypotheses critical ratios (CR) are calculated. To verify the exploratory hypotheses (i.e. to verify the relative contribution of independent variables on occupational
stress) the coefficients of determination are calculated. To verify the interactional hypotheses between the two most influencing factors i.e. Social intelligence and Job status, two-factors (2x2) ANOVA with unequal cell frequencies was performed. To verify the joint-action hypotheses between the two most suspected influencing variables, the two extreme groups i.e. low social intelligence with high job status and high social intelligence with low job status were considered and the differences were tested by applying 't' test.

The statistical analyses of the data and their interpretation led to the following inferences and conclusions.
5.2 **Conclusions** :-

(a) **Relation – oriented conclusions** :-

1. It has been observed that age has shown its insignificant relationship with occupational stress in case of employees of Bhilai Steel plant. It means that occupational stress is not dependent on age. Age is not influencing occupational stress, thus the hypothesis (a.1) is not established.

2. Level of education has shown its significant relationship with occupational stress. It means that occupational stress is positively correlated with education. This is contradictory to the hypothesis (a.2). The data revealed that the higher the education, the more the occupational stress.

3. Job status has shown its positive association with occupational stress to the significant extent. It means occupational stress is dependent on job status. Here the hypothesis (a.3) is established.
4. The length of service has also shown its insignificant relationship with occupational stress. It means that occupational stress is not dependent on length of service. Both are independent of each other. Hence the hypothesis (a.4) is not supported.

5. Social intelligence has shown its negative association with occupational stress to the significant extent. So, it is confirmed that with increasing social intelligence occupational stress will decrease in case of employees of Bhilai Steel Plant. Here also the hypothesis (a.5) is empirically confirmed.

6. Parent ego has shown its significant relationship with occupational stress. Positive relationship between the two has been confirmed. Hence the hypothesis (a.6-i) is established.

7. Adult ego has shown its negative association with occupational stress to the significant extent. It means that with increasing adult ego, occupational stress will decrease. Here the hypothesis (a.6-ii) is confirmed by the data.
8. Child ego has shown its positive and significant relationship with occupational stress. It means that with increasing child ego, occupational stress will increase. Hence the hypothesis (a.6-iii) is supported by data.

(b) Difference – Oriented Conclusions: –

9. From the result it has been observed that employees with less advanced age have shown insignificantly more occupational stress than employees with more advanced age. Here hypothesis (b.1) is rejected.

10. It has been noticed that employees with higher level of education have shown more occupational stress than employees with lower level of education. Here also hypothesis (b.2) is rejected.

11. Employees of higher cadre have shown more occupational stress than the employees with lower cadre. Here hypothesis (b.3) received complete confirmation.

12. Employees with shorter length of service have shown more occupational stress than employees
with longer length of service. Hypothesis (b.4) is rejected.

13. Occupational stress of the industrial employees with high social intelligence is less than the occupational stress of the employees with low social intelligence. This hypothesis (b.5) received complete confirmation.

14. Occupational stress of the industrial employees with higher degree of parent ego is more than the occupational stress of the industrial employees with lower magnitude of parent ego. Hypothesis (b.6-i) received complete confirmation.

15. Employees with higher degree of adult ego has shown less occupational stress than the employees with lower degree of adult ego. Thus hypothesis (b.6-ii) is accepted.

16. Employees with higher degree of child ego have shown more occupational stress than the employees with lower degree of child ego. This trend is confirmed & thus hypothesis (b.6-iii) received partial confirmation.
(c) **Specific Conclusion:**

17. It is observed that maximum association with occupational stress is exhibited by social intelligence. The next position is occupied by adult ego state. The third most contributing factor is the job status followed by the parent ego state. The next two contributing factors are the child ego state and level of education. The last two positions are held by age and length of service. Thus it can be concluded that hypothesis(c.1) received partial confirmation.

    The co-relational and differential approaches employed in the analysis of numerical data of the present investigation led to the following possibilities:-

18. It is observed that the significant main effect of social intelligence and job status upon occupational stress is noticed but there is no significant interaction effect of these two factors upon occupational stress. Thus hypothesis(c.2) received empirical rejection.
19. These six factors i.e. age, level of education, job status, length of service, social intelligence and ego state seem capable of influencing occupational stress. As such, demographic-situational-cum-psychological model of occupational stress is developed to explain the occupational stress “variance” thus a fruitful theoretical base can be utilized for understanding, controlling & predicting the occupational stress phenomenon.

5.3 **Delimitations**:

The sample of the present study has been delimited to the industrial employees giving representation to certain demographic variables like age, level of education, job status, length of service, social intelligence and ego state. As such the findings of the present investigation are
applicable only to the variety of population represented by the sample.

The present study was aimed at studying occupational stress in relation to certain psychodemographic and situational variables. Hence the inferences drawn on the strength of the present study are applicable only to the population of industrial employees and that too with respect to the six different variables, namely age, level of education, job status, length of service, social intelligence and ego state only.

The study has been restricted to investigating the influence of six factors namely age, level of education, job status, length of service, social intelligence and ego state upon occupational stress. As such if somebody attempts to infer on the basis of this study regarding the role of other factors in influencing the occupational stress; it will be an erroneous attempt amounting to the fallacy of over generalization.
5.4 Limitations:

Due to limited number of women industrial employees no representation has been received in present investigation to the women population of industrial employees. As such, the inferences drawn in the present study regarding the occupational stress are not to be applied to the female industrial workers.

Due to limited number of cases of the industrial employees studied in the present investigation the interaction effects of all the variables in combination could not be investigated with the help of factorial design.
5.5 **Suggestions** :-

Two categories of suggestions are given on the strength of this piece of research. These are :-

(ii) Suggestions for further research.

(iii) Suggestions for social significance.

**Suggestions for further research** :-

(1) A further study can be carried out to know more about the occupational stress of the female industrial employees by selecting a large sample and making it more stratified.

(2) The tribal and non-tribal employees can also be compared with respect to their occupational stress.

(3) A study to investigate the interaction effects of all the variables upon the occupational stress can be carried out, while holding the demographic variables constant.
(4) A study to see the interaction effects of demographic variables upon the occupational stress among industrial employees can be carried out to enhance the knowledge in this respect.

**Social significance suggestions** :-

(1) Keeping in view the nature of relationship between Occupational stress & Social intelligence, it is suggested to the industrial counselors that during "Stress Management" training programme, emphasis must be given for improving "social intelligence" of the industrial workers, so that they can keep their occupational stress under control.

(2) Keeping in mind the established negative relation between Adult ego & Occupational stress, it is suggested to the industrial counselors that through "TA" (Transactional Analysis) technique, industrial employees can be trained to handle their own occupational stress successfully.