HYPOTHESES

On the basis of the literatures available the following hypotheses were constructed:

1. Individual sports coaches score higher on Neuroticism than team sports coaches.

2. Team sports coaches score higher on Extroversion than individual sports coaches.

3. District level coaches score higher on Psychoticism than state level coaches.

4. District level coaches score higher on Lie (social desirability) scale than state level coaches.

5. The need for achievement contributes for coaching effectiveness of individual sports coaches.

6. The need for affiliation contributes for coaching effectiveness of team sports coaches.

7. The need for affiliation contributes for the effectiveness of district level coaches.

8. The need for approval contributes for the effectiveness of district level coaches.

9. The need for power contributes for the effectiveness of State level coaches.

10. The economic benefits contributes for the coaching effectiveness of individual sports coaches.
11. Union management relations contributes for the coaching effectiveness of the State level coaches.

12. Supervisory relations contributes for the coaching effectiveness of the team sports coaches.

13. Organizational climate contributes for the coaching effectiveness of the state level coaches.

14. Team sports coaches score higher on occupational stress than the individual sports coaches.

15. State level coaches score higher on occupational stress than the district level coaches.

16. Individual sports coaches have better general health status than team sports coaches.

17. Empathy contributes for the coaching effectiveness of the team sports coaches.

18. Individual sports coaches score higher on emotional exhaustion than team sports coaches.

19. Team sports coaches score higher on self rated coaching effectiveness than individual sports coaches.

20. Individual sports coaches score higher on athlete rated coaching effectiveness.
METHOD
DESIGN

The main aim of the present investigation was to study the effectiveness of coaches of different sports and effectiveness in coaches of different levels in relation to personality, motives, quality of working life, occupational stress, burnout and general health status. Another aim was to study the effects of types of coaching (viz., individual sports vs team sports) and levels of coaching (viz., district level and state level) on Eysenckian dimensions of personality, motives, quality of working life, occupational stress, general (physical) health, impulsiveness, empathy, venturesomeness, burnout, self rated effectiveness and athlete rated effectiveness.

For this purpose relationship of coaching effectiveness was studied with Eysenckian dimensions of personality, motives, quality of working life, occupational stress, general (physical) health, burnout, impulsiveness, empathy and venturesomeness. Coaching effectiveness was measured with the help of Coaching Effectiveness Scale (CES) constructed on the basis of the pilot study conducted at the early stages of this investigation. To measure Eysenckian personality dimensions viz, Extroversion, Neuroticism, Psychoticism and Lie (Social Desirability) Scale, the revised version of the Eysenck Personality Questionnaire (EPQ-R) developed by Eysenck, Eysenck and Barrett (1985) was used. The four motives, viz. need for Achievement, need for Affiliation, need for Power and need for Approval were measured by Questionnaire measures constructed by Misra and Tripathy (1980). The Quality of Working Life (QWL) inventory developed by Sinha and Sayeed (1980) was used to measure the different dimensions of quality of working life. Occupational stress index developed by Srivastva and Singh (1984), General
(Physical) Health Questionnaire developed by Marshall and Cooper (1978), I'VE Questionnaire developed by Eysenck and Eysenck (1978), Maslach Burnout Inventory developed by Maslach and Jackson (1981) and Coaching Effectiveness Scale developed by Mohan, Sehgal and Fortgalland (1990) were also used.

**SAMPLE**

The sample comprised of 120 professionally trained coaches who passed out from the Netaji Subhas National Institute of Sports, Patiala and its various sub centres at Bangalore, Calcutta and Gandhinagar. They all have taken sports coaching as a career and training athletes at various levels. Coaches were selected both from individual sports and team sports. They were further distinguished in to 2 groups, those who coached district level athletes and those who coached state level athletes.

The mean age of all the coaches was 34.61 and the mean experience of all the coaches was 9.61 years. The educational qualifications of coaches ranged from undergraduates to Ph.D. in Arts, Commerce and Science.

**TOOLS EMPLOYED**

2. Eysenck Personality Questionnaire (Revised) (EPQ-R) (Eysenck, Eysenck and Barrett, 1985).
4. Quality of Working Life Inventory (Sinha and Sayeed, 1980).
5. Occupational Stress Index (Srivastva and Singh, 1984).
7. IVE Questionnaire (Eysenck and Eysenck, 1978).
1. Coaching Effectiveness Scale (CES)

A tool was developed to assess coaching effectiveness. For this purpose, a sample of 45 experienced coaches from the Netaji Subhas National Institute of Sports, Patiala were asked to list 10 characteristics each of effective coaches. Out of these, 10 top ranking traits were identified. Then a test of Activity Vector Analysis (AVA) check list (Peter Merenda and Clarke and Associates, NY, 1965) was also given to the same coaches. They were requested to tick traits which they thought were applicable to ideal coaches. Out of this again a list of 10 traits identifying most effective coaches and 10 traits identifying least effective coaches were identified. In this way the traits identified by coaches themselves were merged with the list prepared by the International Amateur Athletic Federation (IAAF) for the purpose of self-assessment of coaches. Finally 58 items were comprised the measure and the subjects were expected to rate these items on a 3-point scale considering the importance of each skill/quality for the coach by tick mark on any of the number given against each item out of 1, 2 and 3.

Out of 58 items, 18 items were negatively scored. The total score reflects the effectiveness of coaching (sports). The list then was given to 38 coaches selected randomly from the Sports Authority of India as well as to the athletes they coached. The coaches were asked to rate themselves on the Coaching Effectiveness Scale and the athletes were asked to rate their coaches on the Coaching Effectiveness Scale. The correlation between self rated effectiveness and athlete rated effectiveness was .55 which was significant at .01 level. This scale has been successfully used in India by Mohan, Sehgal and Fortgalland (1991, 1993, 1996).
2. **Eysenck Personality Questionnaire - Revised (EPQ-R):**

EPQ-R has been developed by Eysenck et al. (1985). The Eysenck Personality Questionnaire was originally constructed by Eysenck and Eysenck (1975) to measure Extroversion (E), Neuroticism (N), and Psychoticism (P). It also consists of a Lie (Social Desirability) Scale. Regarding the scores on Lie (Social Desirability) Scale a number of interpretation have been offered by different persons. It is variously described as "desire to conform to social norms" (Edwards, 1959 and Edwards and Heathers, 1962), "ideal self" (Michaelis and Eysenck, 1971), "nice personality" (Skinner et al., 1970), "motivational distortion" (Cattell, 1965). It is also called "faking good" response set. The subject has a motivation to give a false picture of self, rather a better picture of self than he really is. This tendency has been viewed as more or less an error to be avoided or response bias to be overcome, counter balanced or suitably corrected. Lately there has been a tendency amongst various investigators to consider it as a separate independent and powerful personal factor, to be measured in its own right (Edwards, 1964; Michaelis and Eysenck, 1971 and Verma, 1977). The present study did not attempt to exclude cases on the basis of Lie (Social Desirability) Scale, instead it has been used as an important dimension of personality, to be measured in its own right.

The scale was revised by Eysenck et al. (1985) to improve the psychometric weakness of the Psychoticism Scale. The revised version of the scale consists of hundred dichotomously responded items, twenty three items for the Extra Version Scale, twenty four for the Neuroticism scale, thirty two for the Psychoticism Scale and twenty-one for the Lie (Social Desirability) Scale.
The alpha reliabilities for the revised scale have been found to be as follows:

<table>
<thead>
<tr>
<th></th>
<th>E</th>
<th>N</th>
<th>P</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>.90</td>
<td>.88</td>
<td>.78</td>
<td>.82</td>
</tr>
<tr>
<td>Females</td>
<td>.85</td>
<td>.85</td>
<td>.76</td>
<td>.77</td>
</tr>
</tbody>
</table>

The EPQ-R has been extensively used in India by Verma and Wig (1972), Hundal and Upmanyu (1981), Upmanyu, Gill and Singh (1982), Sehgal (1984), Upmanyu and Singh (1984), Gahalawt (1986), Mohan (1986), Bandari and Sarup (1987), Mohan et al. (1987, 1989), Mohan and Virdi (1987), Tayal (1987), Arora (1990), Gujral (1990) and Poonam (1991) and was found to show appropriate psychometric characteristics.


Four questionnaire measures developed by Misra and Tripathi (1980) were used to measure, need for Achievement, need for Affiliation, need for Power and need for Approval.

The measure for need for Achievement consisted of twelve items. The measure for need for Affiliation consisted of eleven items, the measure for need for Power consisted of nine items and the measure for need for Approval consisted of twelve items.

The response of subjects with regard to items were given scores from 1 to 5, according to the intensity of the concerned motive. The five response alternatives were:

- To a very great extent 5
- To a great extent 4
- To some extent 3
- To a smaller extent 2
- Almost no extent 1
The score of subjects was total score obtained by him on all scale items. The items were constructed in such a way that in about fifty per cent of the items positive responses indicated the presence of high motive. As reported by authors test-retest reliability coefficients are:

<table>
<thead>
<tr>
<th>Motive Scales</th>
<th>N</th>
<th>Co-efficient of reliability</th>
<th>Index of reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>n for Achievement</td>
<td>42</td>
<td>.59</td>
<td>.76</td>
</tr>
<tr>
<td>n for Affiliation</td>
<td>42</td>
<td>.62</td>
<td>.78</td>
</tr>
<tr>
<td>n for Power</td>
<td>42</td>
<td>.61</td>
<td>.78</td>
</tr>
<tr>
<td>n for Approval</td>
<td>42</td>
<td>.73</td>
<td>.85</td>
</tr>
</tbody>
</table>

The odd-even split half reliability of the scale of various motive scales as reported by the authors is as follows:

<table>
<thead>
<tr>
<th>Motive Scales</th>
<th>N</th>
<th>Co-efficient of reliability</th>
<th>Index of reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>n for Achievement</td>
<td>135</td>
<td>.37</td>
<td>.60</td>
</tr>
<tr>
<td>n for Affiliation</td>
<td>135</td>
<td>.42</td>
<td>.63</td>
</tr>
<tr>
<td>n for Power</td>
<td>135</td>
<td>.49</td>
<td>.70</td>
</tr>
<tr>
<td>n for Approval</td>
<td>135</td>
<td>.67</td>
<td>.81</td>
</tr>
</tbody>
</table>

The motive scales have been successfully used in India by Sehgal and Bhandari (1987), Sehgal and Tayal (1990) and Gujral (1990) and found to be suitable.
4. **Quality of Working Life (QWL) Inventory:**

The quality of working life inventory was constructed by Sinha and Sayeed in 1980. The QWL Inventory is a scale having seventeen dimensions to measure various aspects of work life. In all there are 85 items in the inventory measuring seventeen dimensions of QWL and their operational definition's are as follows:

1. **Economic Benefits (EB):** Receiving adequate monetary income and financial rewards.

2. **Physical Working Conditions (PWC):** Conditions affecting physical comfort and convenience on and at a job.

3. **Mental State (MS):** Feeling good versus feeling of depression or being upset at work.

4. **Career Orientation (CO):** Progressing for career objectives and having opportunities for progress.

5. **Advancement on Merit (AM):** The extent to which rewards and punishments are based on merit.

6. **Effect on Personal Life (EPL):** Effect of job on personal life. The hangover effect on the individual which may be positive or negative.

7. **Union Management Relations (UMR):** The relationship between union and management consideration of each other's point of view.

8. **Self Respect (SR):** The feeling of being treated as an adult with respect and due dignity.

9. **Supervising Relationships (RS):** The relationship with the supervisor and mutual understanding.

10. **Intra Group Relations (IGR):** The way workers in a group interact.
11. Sense of Achievement Vs Apathy (A): The workers concern and ambition for work.
12. Confidence in Management (CM): Beliefs that the management or authority is aware of and concerned about workers problems and interests.
13. Meaningful Development (MD): Opportunity to learn more and apply skills and abilities meaningfully and in a challenging way.
14. Control, Influence and Participation (CIP): The extent to which workers are involved in decision making, their influence and control.
15. Employee Commitment (EC): Loyalty to company and concern for its future.
16. General Life Satisfaction (GLS): Fulfillment of life needs apart from the work situation, i.e. in family, in society and so on.
17. Organizational Climate (OC): The organizations outlook and approach in the interest of workers for the betterment of the industry.

The subjects task was to assess on a seven point scale for each item the extent to which a particular feature/characteristic was present in his job situation. The summation if the scores on all the items for a particular dimension is done in order to find the presence of that dimension of quality of working life in the respondents organization. A high score on each dimension of quality of working life indicates a positive perception of QWL.

The alpha reliability of inventory was found to be 0.97 (Sinha and Sayeed, 1980). The inventory has been successfully used by Shah (1978) Sayeed and Sinha (1981) Anantha Ramman and Rabindernath (1982), Rana (1989), Poonam (1991) and Sehgal and Rumeena (1997).
5. **Occupational Stress Index**

The Occupational Stress Index was developed by Srivastva and Singh (1984). It consists of forty six statements that employees sometimes feel or say about various components of their jobs. The subjects are required to use the following "five-point scale" to indicate the extent to which they agree with each statements to describe their own job and experiences or feelings about their job.

(a) Strongly disagree (1)
(b) Disagree (2)
(c) Undecided (3)
(d) Agree (4)
(e) Strongly disagree (5)

The total score was considered as occupational stress index.

6. **General (Physical) Health Questionnaire**

The General (Physical) Health Questionnaire was developed by Marshall and Cooper (1978). This General (Physical) Health Questionnaire contains twenty four questions. The first twenty two questions have to be ticked (✓) on a 4 point scale according to the intensity of the response they wish to give. The intensity of the responses were as follows:

(i) Never.
(ii) Occasionally
(iii) Quite often
(iv) A lot.

Another four questions have to be answered in terms of 'Yes' or 'No'.

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7. **IVE Questionnaire**

The IVE Questionnaire was developed and constructed by Eysenek and Eysenek (1978) to measure three dimensions of personality viz, Impulsiveness (I), Venturesomeness (V) and Empathy (E). The scale is highly reliable and valid with reliability coefficient ranging from 0.63 to 0.65 for both men and women.

This questionnaire consists of fifty-four questions which are to be answered by the respondents in terms of 'Yes' or 'No' which could be done by a tick sign (✓) or circled. This questionnaire measures in three dimension viz, Impulsiveness, Empathy and Venturesomeness. The dimension of Impulsiveness consists of nineteen items, Empathy consists of nineteen items and Venturesomeness consists of sixteen items.

8. **Maslach Burnout Inventory (MBI, 1981)**

Maslach Burnout Inventory (MBI, 1981) was used in the present investigation to assess burnout among coaches.

The Maslach Burnout Inventory (MBI) is designed to assess three aspects of the burnout syndrome: emotional exhaustion, depersonalization and lack of personal accomplishment. Each aspect is measured by a separate subscale. The emotional exhaustion subscale assesses feelings of being emotionally overextended and exhausted by one's work. The depersonalization subscale measures an unfeeling and impersonal response towards recipients of one's service, care, treatment or instruction. The personal accomplishment subscale assesses feelings of competence and successful achievement in one's work with people. The frequency that the respondent experiences related to each subscale is assessed using a six point fully anchored response format.
In total there are 22 items in the inventory 9 of which load on the first factor (Emotional-Exhaustion), 5 on the second factor (Depersonalization) and 8 on the third factor (Personal Accomplishment).

Burnout is conceptualized as a continuous variable, ranging from low to moderate to high degrees of experienced feelings. It is not viewed as a dichotomous variable, which is either present or absent. A high degree burnout is reflected in high scores on emotional exhaustion and depersonalization subscale and in low scores on the personal accomplishment subscale.

As regards reliability and Validity of MBI, the internal consistency coefficient for MBI ranged from .71 to .90. Test retest (2-4 weeks) reliability ranges from .53 to .82. The MBI is also valid because it correlates with behavioural ratings by observers, with the presence of certain job characteristics expected to contribute to burnout, and with measures of various out comes hypothesized to be related to burnout (Maslach and Jackson, 1981).

**PROCEDURE**

The subjects were selected randomly from a list of coaches employed with Sports Authority of India. They were contacted individually and requested to volunteer for the testing schedules. A rapport was established with each subject and they were assured that any information given by them would be kept strictly confidential. They were requested to give honest and truthful replies.

A set of eight questionnaire was given to each of them. All the tests were administered individually. In addition two athletes trained by each coach were selected at random and were requested to rate the coaching effectiveness of their coaches on the three point rating scale as per their frank opinion.
INSTRUCTIONS FOR THE QUESTIONNAIRES

Instructions for the Coaching Effectiveness Scale

Following is a list of skills and qualities of a coach. On the right side of each item you would find scale ranging from 1 to 3 which would describe your rating in numerical values considering the importance of each skill/quality for each coach. All you have to do is to rate on three point scale on a continuum from minimum (1) to maximum (3) on import the number (2) stands for average.

Instruction for the Eysenck Personality Questionnaire - Revised (EPQ-R)

The instruction for the EPQ-R were:

"Please answer each question by putting a circle around the 'yes' or 'No' following the question. There are no right or wrong answers and no trick questions. Work quickly and do not think too long about the exact meaning of the questions. Please check that you have answered all the questions".

Instructions for the Questionnaire of Motives:

Instruction for the questionnaire measures of need for Achievement, need for Affiliation, need for Power and need for Approval were: "Answer the following questions choosing any one of the given five alternatives indicating your degree of agreement with statements.

To a very great extent
To a great extent
To some extent
To a small extent
Almost no extent
There are no right or wrong answers. Please check that you have answered all the questions.

**Instruction for the Quality of Working Life Inventory:**

Instruction for the Quality of Working Life Inventory were: "Given ahead are some statements and questions about certain characteristics related to your work and working conditions. Please assign weightages to these in terms of how much of these are present in your employment. On the right side of each item/question/statement/quotations, you would find scale which would describe your views and feelings in terms of numerical values. The scale is from 1 to 7. All you have to do is to rate on seven point scale on a continuum from minimum (1) to maximum (7) the number (4) stands for average.

Thus in case of all items in this section, your agreement or disagreement, satisfaction or dissatisfaction and your feelings whether positive or negative have to be answered from a minimum (1) to maximum (7). So, give your judgements to each and every item as specified above. Remember again, we want your views, opinions and feelings, not others. So please do not consult any one.

So go ahead, read carefully the items/quotations/statements and give your frank answers.

**Instructions for Occupational Stress Index:**

This questionnaire is meant for psychological investigation. This questionnaire consists of a number of statements that employees sometimes feel or say about various components of their jobs. You are required to use the following five point scale to indicate
the extent to which you agree with each statements to describe your own job and experiences or feeling about your job:

(a) Strongly disagree (1)
(b) Disagree (2)
(c) Undecided (3)
(d) Agree (4)
(e) Strongly agree (5)

For example, if you strongly agree, with the following in context with your job, put '5' in the box given against it. "I have to do such works as ought to be done by others" (5). In case you strongly disagree with the above statement put (1) in place of (5) and so on. Give your responses frankly. Your responses will be kept strictly confidential. Kindly answer all the questions.

Instructions for General (physical) Health Questionnaire:

Below is a list of different troubles and complaints which people often have. For each one please tick the column which tells how often you have felt like this during last three months.

Instructions for IVE Questionnaire:

Please answer each question by putting a circle around the 'Yes' or 'No' following the questions. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question. Please remember to answer each question.
Instructions for Maslach Burnout Inventory:

Please answer these in 'Yes' or 'No'.

**SCORING**

All the afore-mentioned tests, viz. the Eysenck Personality Questionnaire - Revised, the Questionnaire measures of motives, viz. need for Achievement, need for Affiliation, need for Power, and need for Approval, the Quality of Working Life Inventory, Occupational Stress Index, General (physical) Health Questionnaire, IVE Questionnaire and Maslach Burnout Inventory were scored according to the procedure given in the respective manuals. The raw scores obtained were statistically analyzed.

**STATISTICS USED FOR DESCRIPTION OF DATA**

Descriptive statistics means and SDs were computed to study the nature of all the variables. t-ratios, intercorrelations, factor analysis and regression analysis were also done.