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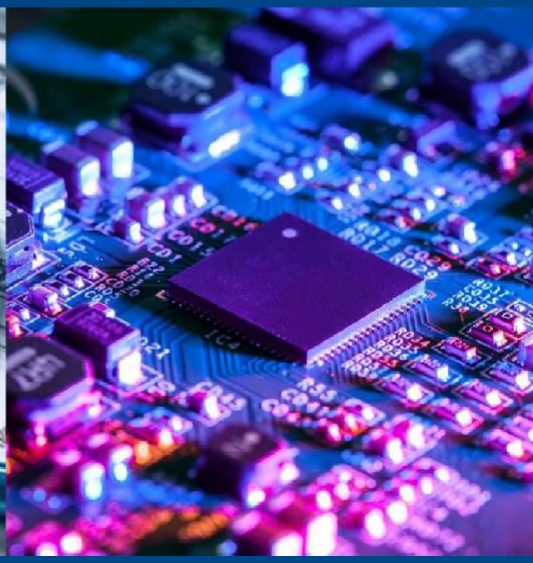

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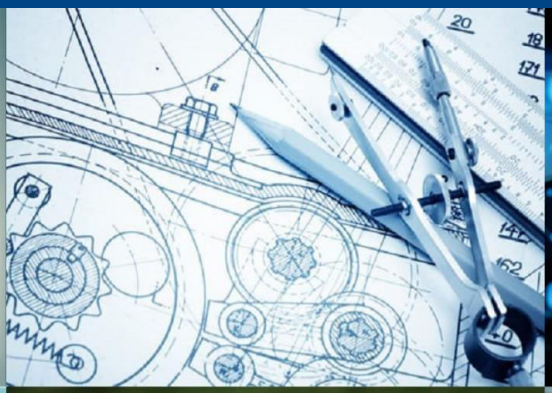

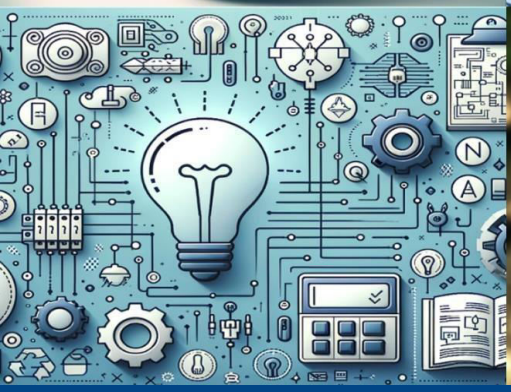

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Relationship of Cardiovascular Endurance and Job Satisfaction among Government Employees in Satara District

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ABSTRACT: This study aims to explore the relationship between cardiovascular endurance and job satisfaction among government employees in Satara District, Maharashtra, using the Cooper 12-Minute Run/Walk Test. A sample of 200 government employees was selected using stratified random sampling across departments. Cardiovascular endurance was measured using the Cooper Test, while job satisfaction was assessed using the Job Satisfaction Survey (JSS) by Singh & Sharma. The results showed a statistically significant moderate positive correlation ($r = 0.38$, $p < 0.01$) between cardiovascular endurance and job satisfaction. The findings suggest that employees with better cardiovascular fitness tend to report higher job satisfaction. The study highlights the need for workplace wellness programs to enhance employee health and morale.

KEY WORDS: *Cardiovascular Endurance, Job Satisfaction, Government Employees and Satara District*

I. INTRODUCTION

Job satisfaction is crucial for the effective functioning of any organization. In the public sector, especially in developing countries like India, physical fitness is often overlooked despite its influence on mental well-being and job satisfaction. Cardiovascular endurance, a major component of physical fitness, is known to improve energy levels, stress handling, and emotional stability—factors directly linked to job satisfaction. The **Cooper 12-Minute Run/Walk Test** is a widely accepted field method for measuring cardiovascular endurance. Despite its simplicity and cost-effectiveness, there is a lack of research applying this test to correlate fitness with job satisfaction among Indian government employees. This study addresses this gap with a focus on Satara District, Maharashtra.

II. OBJECTIVES

- To measure cardiovascular endurance using the Cooper 12-minute Run/Walk Test.
- To assess job satisfaction using a standardized scale.
- To analyze the relationship between cardiovascular endurance and job satisfaction among government employees.

III. METHODOLOGY

3.1 Research Design
A cross-sectional correlational design was used.

3.2 Population and Sample

- **Population**: Government employees (state and local bodies) in Satara District.
- **Sample Size**: 200 employees.

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- **Sampling Technique**: Stratified random sampling (gender, department, urban/rural).
- **Inclusion Criteria**:
  - Minimum 6 months of service
  - Age 30–40
  - Medically fit for light physical exertion

3.3 Tools for Data Collection

1. **Cardiovascular Endurance Test**:
   - **Cooper 12-Minute Run/Walk Test**
   - Total distance (in meters) covered in 12 minutes was recorded.

2. **Job Satisfaction Scale**:
   - **Job Satisfaction Survey (JSS)** by Singh & Sharma
   - 36 items rated on a 5-point Likert scale (covering pay, promotion, supervision, fringe benefits, nature of work, etc.)

3. **Demographic Questionnaire**:
   - Age, gender, job role, department, years of service, location.

IV. DATA COLLECTION PROCEDURE

- Ethical approval obtained.
- Consent forms signed.
- Participants performed the Cooper Test on a 400m track.
- After 10-minute rest, JSS was administered.
- Data were collected over 3 weeks.

V. STATISTICAL ANALYSIS

- Descriptive statistics (mean, SD) for cardiovascular endurance and job satisfaction
- Pearson's correlation (r)
- Independent-samples t-test (high vs. low endurance groups)
- Multiple regression analysis (to predict job satisfaction from VO_2max, controlling for age, gender, years of service)

VI. RESULTS

Table 1: Descriptive Statistics

Variable	Mean	SD
Distance in 12 mins (m)	1820	280
Estimated VO_2max (ml/kg/min)	29.4	3.7
Job Satisfaction Score	131.6	19.4

GRAPH 1: Relationship of cardio-vascular endurance and Job Satisfaction

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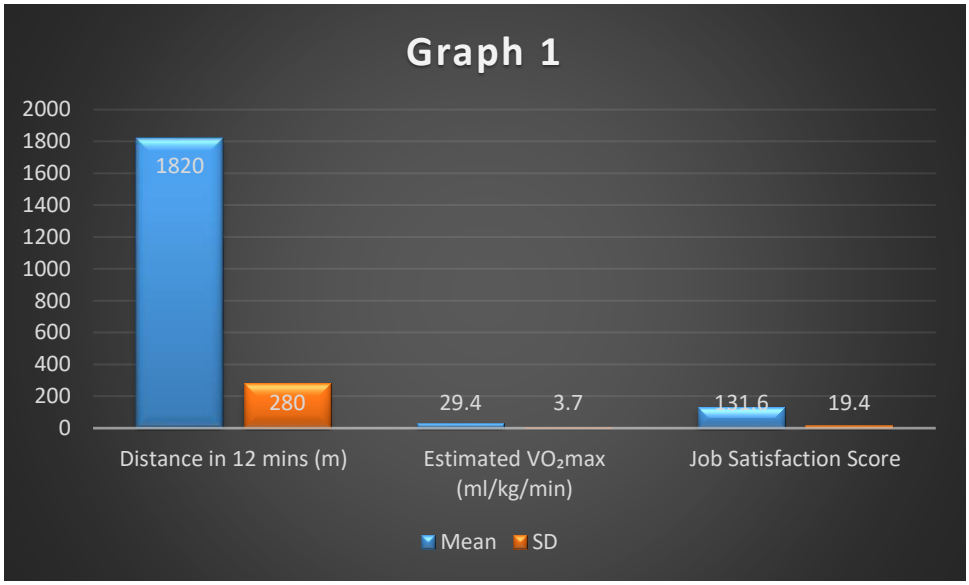

GRAPH 1: Graphical representation of relationship between cardio-vascular endurance and job satisfaction.

Table 2: Correlation between VO_2max and Job Satisfaction

Variables	r	p-value
VO_2max & Job Satisfaction	0.38	< 0.01

Table 3: Group Comparison (t-test)

Group	N	Mean JSS Score	t-value	p-value
High Endurance (>30 VO_2max)	100	140.2	4.12	< 0.001
Low Endurance (≤30 VO_2max)	100	123.0		

VII. DISCUSSION

- A **moderate positive correlation** was found between cardiovascular endurance and job satisfaction (r = 0.38).
- Employees with higher endurance (VO_2max > 30) scored significantly higher in job satisfaction.
- Regression confirmed endurance as a significant predictor even after controlling for demographic factors.
- The findings support past research (e.g., Wattles & Harris, 2003) that showed physical fitness positively influences satisfaction and workplace attitudes.
- Cardiovascular endurance may improve psychological resilience, energy, and stress tolerance—all linked to job satisfaction.

VIII. CONCLUSION

Cardiovascular endurance significantly influences job satisfaction among government employees in Satara District. The Cooper 12-Minute Test proved to be an effective field tool. Promoting regular physical activity and fitness programs in government offices could improve employee morale, health, and performance.

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IX. RECOMMENDATIONS

- Introduce weekly fitness programs in offices.
- Provide incentives for participation in wellness activities.
- Conduct periodic fitness assessments using Cooper Test.
- Train HR managers in occupational health promotion.

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