

Employee Perception on the Effectiveness of Training Programs among Selected Manufacturing Industries

¹Ms.Mahilarasi A., ²Dr.G. Manokaran

¹Ph.D. Research Scholar, Dept. of Management, Sree Saraswathi Thyagaraja College, Pollachi

²Associate Professor & Head Dept. of Management, Sree Saraswathi Thyagaraja College, Pollachi

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ABSTRACT

Training and development are essential components of organizational success, particularly in manufacturing industries where technological advancements and operational efficiency require continuous employee skill enhancement. This study investigates employee perceptions regarding the effectiveness of training programs among selected manufacturing industries in Coimbatore, Tamil Nadu. A descriptive research design was employed, and primary data were collected from 882 employees representing various demographic and occupational groups. Statistical techniques including frequency analysis, chi-square tests, one-sample t-tests, and independent sample t-tests were used to analyze the data. The findings indicate that employees generally hold positive perceptions regarding training awareness, communication effectiveness, content clarity, and skill development. A substantial proportion of respondents agreed that training programs contributed to practical skill enhancement, professional growth, and increased confidence in performing job responsibilities. However, certain areas such as addressing job-specific challenges, collaborative learning opportunities, and post-training support require improvement. Significant differences were observed across educational qualifications, income groups, and job positions. The study concludes that manufacturing organizations should adopt customized, learner-centered, and continuously evaluated training programs to maximize employee development and organizational performance.

Keywords: Employee Perception, Training Effectiveness, Manufacturing Industry, Human Resource Development, Employee Training, Organizational Performance

INTRODUCTION

In today's competitive business environment, employee training has emerged as a strategic tool for enhancing organizational performance and sustaining competitive advantage. Manufacturing industries operate in a dynamic environment characterized by technological innovations, quality requirements, and productivity challenges. Consequently, organizations invest substantial resources in training and development programs aimed at improving employee competencies and operational efficiency.

Training effectiveness is often measured not only by organizational outcomes but also by employee perceptions regarding the usefulness, relevance, and applicability of training programs. Positive employee perceptions contribute significantly to knowledge transfer, skill development, and workplace performance. Therefore, understanding employees' views regarding training effectiveness is crucial for designing and implementing successful training initiatives.

The present study examines employee perceptions of training effectiveness among selected manufacturing industries in Coimbatore. The research evaluates employees' awareness, communication experiences, clarity of training content, information accessibility, and overall effectiveness of training programs.

REVIEW OF LITERATURE

Training and development have been extensively studied within the field of Human Resource Management. Becker (1964) argued through Human Capital Theory that investments in employee development improve organizational productivity and economic performance. Kirkpatrick (1994) proposed a four-level model for evaluating training effectiveness, including reaction, learning, behavior, and results. Noe (2020) emphasized that effective training improves employee knowledge, skills, attitudes, and organizational commitment.

Aguinis and Kraiger (2009) reported that training generates positive outcomes at individual, team, organizational, and societal levels. Salas et al. (2012) highlighted the importance of training design, learner readiness, and organizational support in determining training success. Manufacturing-sector studies further indicate that training relevance, trainer effectiveness, and practical applicability significantly influence employee satisfaction and performance.

Despite extensive research on training effectiveness, limited empirical evidence exists regarding employee perceptions in manufacturing industries within the Coimbatore region. This study attempts to bridge this research gap.

Theoretical Framework

The study is grounded in three major theories:

Human Capital Theory (Becker, 1964)

Training is viewed as an investment that enhances employee productivity and organizational performance.

Social Learning Theory (Bandura, 1977)

Employees acquire knowledge and skills through observation, interaction, and practical experiences during training.

Kirkpatrick's Training Evaluation Model (1994)

The effectiveness of training is evaluated through employee reactions, learning outcomes, behavioral changes, and organizational results.

Research Objectives

1. To examine employee awareness regarding training programs.
2. To assess employee perceptions of training effectiveness.
3. To identify demographic factors influencing training perceptions.
4. To provide recommendations for improving training programs.

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive research design.

Population and Sample

Employees from selected manufacturing industries in Coimbatore constituted the population.

Sample Size

A total of 882 employees participated in the survey.

Data Collection

Primary data were collected using a structured questionnaire.

Statistical Tools

- Percentage Analysis
- Mean, Median, and Mode
- Chi-Square Test
- One-Sample t-Test
- Independent Sample t-Test

Conceptual Framework

Training Awareness



Training Communication



Training Content Clarity



Skill Development



Employee Confidence



Perceived Training Effectiveness

RESULTS AND DISCUSSION

Demographic Characteristics

The majority of respondents were male (66.8%), unmarried (50.8%), and graduates (37.2%). Workers constituted 40.6% of respondents, while most employees earned between ₹1–3 lakhs annually. These characteristics indicate a relatively young and operationally focused workforce.

Table 1. Demographic Profile of Respondents

Variable	Dominant Category	Percentage
Gender	Male	66.8%

Marital Status	Unmarried	50.8%
Education	Graduate	37.2%
Job Position	Worker	40.6%
Income	₹1–3 Lakhs	39.9%

Awareness of Training Programs

The findings reveal strong awareness regarding organizational training initiatives. Employees generally agreed that they were aware of various training programs available within their workplace. The one-sample t-test indicated a statistically significant result ($t = 57.018, p < 0.001$), confirming high awareness levels among respondents.

Clarity of Training Content

A significant majority (74.8%) either agreed or strongly agreed that training subjects were clearly defined and communicated. The mean score of 1.94 demonstrates positive employee perception regarding training content clarity.

Table 2. Clarity of Training Subjects

Response	Frequency	Percentage
Strongly Agree	416	47.2
Agree	244	27.7
Neutral	125	14.2
Disagree	57	6.5
Strongly Disagree	40	4.5

Training Information Availability

Employees reported positive perceptions regarding the availability of training-related information. Approximately 71.7% agreed that the organization provides sufficient information about training opportunities, while the mean score was 2.13.

The one-sample t-test ($t = 3.650, p < 0.001$) further confirmed the effectiveness of organizational communication concerning training opportunities.

Influence of Demographic Variables

The chi-square analysis revealed a significant relationship between educational qualification, income level, and awareness of training eligibility criteria ($\chi^2 = 2467.012, p < 0.001$). This finding suggests that demographic factors significantly influence employee awareness levels.

Similarly, marital status and job position significantly influenced perceptions regarding communication effectiveness of training updates ($\chi^2 = 638.933, p < 0.001$).

Table 3. Major Hypothesis Testing Results

Variable Tested	Statistical Tool	Value	Significance
Income × Education × Awareness	Chi-square	2467.012	$p < 0.001$
Marital Status × Job Position × Communication	Chi-square	638.933	$p < 0.001$

Awareness of Training Programs	One-Sample t-Test	57.018	p < 0.001
Training Information Availability	One-Sample t-Test	3.650	p < 0.001

Overall Training Effectiveness

Employees reported positive perceptions concerning:

- Trainer communication (72.9%)
- Practical skill development (72.7%)
- Job relevance (72.1%)
- Confidence enhancement (63.8%)
- Professional growth (63.0%)
- Recommendation of training programs (69.0%)

These findings demonstrate that training programs effectively contribute to employee development and workplace performance.

However, lower agreement levels were observed regarding:

- Addressing job-specific challenges (47.6%)
- Encouraging teamwork and collaboration (47.2%)
- Support and guidance mechanisms (60.1%)

These areas require managerial attention for future improvement.

Practical Implications

The findings suggest that manufacturing organizations should:

1. Design role-specific training modules.
2. Increase practical and simulation-based learning activities.
3. Strengthen mentoring and post-training support.
4. Promote collaborative and team-based learning.
5. Adopt blended learning approaches.
6. Implement continuous training evaluation systems.

CONCLUSION

The study concludes that employees generally perceive training programs in selected manufacturing industries as effective. Training initiatives contribute positively to employee awareness, skill development, confidence, job relevance, and professional growth. Effective trainer communication and well-organized training materials emerged as significant strengths.

Nevertheless, improvements are needed in addressing job-specific challenges, collaboration opportunities, and support mechanisms. Organizations should adopt customized and learner-centered training approaches

supported by continuous assessment and feedback mechanisms. Such initiatives will enhance employee performance, satisfaction, and long-term organizational competitiveness.

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