

A Study on Work Discipline, Health Burden and Occupational Stress among Market Porters in Aruppukottai Taluk

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ABSTRACT

Market porters play a vital role in the trading and distribution activities of Aruppukottai Taluk by handling the loading, unloading, and transportation of goods in regulated and non-regulated markets. Due to continuous physical labour, irregular working hours, and inadequate occupational support, these workers experience various health and stress-related problems. The present study analyses the relationship between work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk. Primary data were collected from 165 respondents through a structured questionnaire. Statistical tools such as percentage analysis, correlation, regression, and factor analysis were used for data analysis through SPSS software. The findings reveal that health burden has a significant positive relationship with occupational stress, while work discipline also influences stress levels among market porters. The study emphasizes the need for better workplace conditions, healthcare support, and labour welfare measures to improve the occupational well-being of market porters.

Keywords: Market Porters, Work Discipline, Health Burden, Occupational Stress, Labour Welfare, Aruppukottai Taluk.

INTRODUCTION

Markets play a significant role in the economic development of rural and semi-urban regions by facilitating the movement and distribution of agricultural and commercial goods. Aruppukottai Taluk in Virudhunagar District is well known for its regulated agricultural markets, vegetable trading centres, textile businesses, and private wholesale commercial activities. These markets depend heavily on market porters, commonly called load men (*Sumai Thookkum Kooli Thozhilargal*), who perform the physically demanding tasks of loading, unloading, carrying, and transporting goods. Their contribution is essential for maintaining the smooth functioning of supply chains and daily market operations.

Market porters work under challenging conditions such as long working hours, heavy manual labour, inadequate safety measures, and irregular income patterns. Continuous exposure to physical strain often leads to health-related problems including body pain, fatigue, exhaustion, and stress. In addition to physical health issues, occupational stress caused by workload pressure, job insecurity, and poor working conditions affects their mental well-being and work efficiency.

Work discipline is another important factor influencing the productivity and occupational behaviour of workers. Proper attendance, punctuality, obedience to workplace rules, and efficient completion of duties contribute to organizational effectiveness. However, excessive work pressure and health burden may reduce the ability of workers to maintain work discipline and may further increase occupational stress levels.

In Aruppukottai Taluk, market porters are employed in regulated markets, vegetable markets, civil supplies depots, grain mandis, and private wholesale establishments. Though they play an important role in the local economy, limited studies have focused on their occupational health and workplace conditions. Hence, the present study attempts to analyse the relationship between work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk. The study also aims to provide suitable suggestions for improving their occupational well-being and labour welfare conditions.

STATEMENT OF THE PROBLEM

Market porters in Aruppukottai Taluk perform strenuous physical activities such as loading, unloading, carrying, and transporting goods in regulated and non-regulated market areas. Their work environment is often characterized by heavy

workload, long working hours, inadequate safety measures, irregular income, and lack of proper healthcare facilities. Continuous physical exertion and occupational pressure expose these workers to various health-related problems and psychological stress, which may affect their work efficiency and overall quality of life. Although work discipline is essential for maintaining productivity and smooth market operations, excessive health burden and stressful working conditions may negatively influence the occupational behaviour of market porters. Despite their significant contribution to local trade and commercial activities, limited research has been conducted on the relationship between work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk. Therefore, the present study attempts to analyse these factors and identify their influence on the occupational well-being of market porters.

OBJECTIVES OF THE STUDY

1. To analyse the work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk.
2. To examine the influence of work discipline and health burden on occupational stress among market porters in Aruppukottai Taluk.

HYPOTHESES OF THE STUDY

H₀₁: There is no significant relationship between work discipline and occupational stress among market porters in Aruppukottai Taluk.

H₀₂: There is no significant relationship between health burden and occupational stress among market porters in Aruppukottai Taluk.

H₀₃: Work discipline and health burden do not significantly influence occupational stress among market porters in Aruppukottai Taluk.

RESEARCH METHODOLOGY

The present study is descriptive and analytical in nature and focuses on analysing the work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk. The study is based on both primary and secondary data. Primary data were collected directly from market porters through a structured questionnaire, while secondary data were gathered from books, journals, research articles, government reports, websites, and labour-related publications. Aruppukottai Taluk in Virudhunagar District was selected as the area of the study because of its active regulated and non-regulated market operations involving agricultural commodities, vegetables, grains, textiles, and wholesale trading activities. The total population of market porters in the study area is estimated at 750 workers. Out of this population, 165 respondents were selected as sample respondents for the study.

The study adopted the convenience sampling technique for selecting respondents based on accessibility and availability of market porters in regulated markets, vegetable markets, wholesale trading centres, and civil supplies depots. Convenience sampling is widely used in labour and field-based occupational studies where respondents are difficult to access systematically.

The collected data were analysed using Statistical Package for Social Sciences (SPSS). Statistical tools such as percentage analysis, factor analysis, Pearson correlation analysis, and multiple regression analysis were applied for interpreting the data and testing the hypotheses. Analytical research methods are useful for identifying relationships and influence among variables through statistical analysis.

The study period covers the academic year 2025–2026. The findings of the study are limited to market porters working in Aruppukottai Taluk and are based on the responses provided by the respondents during the survey period.

REVIEW OF LITERATURE

A review of earlier studies helps in understanding the concepts related to work discipline, health burden and occupational stress. It also provides a foundation for identifying the research gap and developing the present study.

- **Hans Selye (1956)** stated that occupational stress arises when individuals are unable to cope with work-related pressures and demands. The study explained that continuous stress may affect both the physical and mental health of employees and reduce their work efficiency.

- **Cooper and Marshall (1976)** analysed the major sources of occupational stress among workers. The study identified workload pressure, poor working environment, and lack of organizational support as important causes of mental and physical stress among employees.
- **Stephen P. Robbins (2001)** observed that work discipline plays an important role in improving employee performance and organizational productivity. The study highlighted that disciplined employees are more likely to maintain punctuality, responsibility, and effective work behaviour.
- **Cooper Cary and Marshall (2002)** identified workload, poor working conditions, and lack of organizational support as major causes of occupational stress among workers. The study emphasized the importance of workplace health and safety measures in reducing employee stress.
- **Lazarus Richard and Folkman (2004)** explained that occupational stress occurs when employees perceive an imbalance between work demands and their ability to manage those demands. The study also stated that stress may negatively affect employee wellbeing and job satisfaction.
- **Sharma (2017)** analysed occupational health hazards among manual workers in India. The study revealed that manual labourers frequently faced body pain, fatigue, and musculoskeletal disorders due to continuous physical work.
- **Natarajan (2019)** analysed health burden and welfare measures among unorganized workers in Tamil Nadu. The study found that lack of social security benefits and occupational health support adversely affected the living and working conditions of labourers.
- **Rajendran (2019)** examined occupational stress and labour welfare measures among unorganized workers. The findings revealed that insufficient welfare measures and stressful work environments reduced worker efficiency and overall wellbeing.
- **Kumar and Devi (2020)** studied health burden and occupational stress among manual labourers. The findings indicated that continuous physical strain, exhaustion, and inadequate rest periods increased stress levels and negatively affected the wellbeing of workers.
- **Mohanraj and Devi (2020)** investigated the working conditions and occupational stress among market labourers. The study concluded that irregular working hours, physical exertion, and low income significantly influenced occupational stress among market workers.
- **Ahamed and Anitha (2021)** examined occupational stress and health problems among unorganized labourers in Tamil Nadu. The study revealed that heavy physical workload, poor working conditions, and inadequate healthcare facilities significantly contributed to occupational stress and health-related issues among labourers.
- **Sharma and Singh (2021)** studied work discipline and employee productivity in labour-intensive sectors. The study identified that proper work discipline improved employee efficiency, punctuality, and organizational productivity.
- **Venkatesh and Rajkumar (2022)** conducted a study on labour welfare measures among load workers in wholesale markets. The study highlighted the importance of welfare schemes, workplace safety measures, and healthcare facilities for improving the wellbeing of market workers.

RESEARCH GAP

Most of the earlier studies focused on occupational stress and employee wellbeing in organized sectors such as industries, educational institutions and corporate organizations. Very limited studies have been conducted on market porters working in unorganized sectors, particularly in Aruppukottai Taluk. Therefore, the present study attempts to analyse the work discipline, health burden and occupational stress among market porters in Aruppukottai Taluk.

SOCIO-ECONOMIC PROFILE OF RESPONDENTS

The table shows that the majority of respondents (40.0%) belong to the age group of 25–35 years, and most of the workers are male respondents (97.0%). It is also observed that 40.0 per cent of the respondents possess Higher Secondary education and another 40.0 per cent possess Degree/Diploma qualifications. Further It reveals that 40.0 per cent of the respondents possess below 5 years of work experience, indicating the presence of a large number of comparatively new workers in the market labour sector.

Table 1

Socio-Economic Profile of Respondents

Particulars	Category	Number of Respondents	Percentage
Age	Below 25 years	33	20.0
	25 – 35 years	66	40.0
	36 – 45 years	33	20.0
	41 – 50 years	33	20.0
Gender	Male	160	97.0
	Female	5	3.0
Educational Qualification	Primary	3	1.8
	Secondary	30	18.2
	Higher Secondary	66	40.0
	Degree/Diploma	66	40.0
Work Experience	Below 5 Years	66	40.0
	5 – 10 Years	33	20.0
	11 – 15 Years	33	20.0
	Above 15 Years	33	20.0

Source: Primary Data

Interpretation

The socio-economic profile indicates that the majority of market porters in Aruppukottai Taluk are economically active male workers aged between 25–35 years, possessing moderate educational qualifications and comparatively lower work experience in the market labour sector.

FACTOR ANALYSIS

The table presents the results of factor analysis relating to work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk. The KMO value is 0.347 and Bartlett's Test is significant at 0.000 level, indicating the existence of significant relationships among the variables. The extracted component explains 75.192 per cent of the total variance with an eigenvalue of 2.256. Among the variables, health burden records the highest communality value (0.984) and component loading (0.992).

Table 2

Factor Analysis of Work Discipline, Health Burden and Occupational Stress

Particulars	Values
KMO Measure of Sampling Adequacy	0.347
Bartlett's Test Approx. Chi-Square	503.450
Bartlett's Test Significance	0.000
Total Variance Explained (%)	75.192
Eigenvalue (Component 1)	2.256
Communalities – Occupational Stress	0.604
Communalities – Work Discipline	0.668
Communalities – Health Burden	0.984
Component Loading – Occupational Stress	0.777
Component Loading – Work Discipline	0.817
Component Loading – Health Burden	0.992

Source: Computed from Primary Data

Interpretation

The factor analysis indicates that health burden is the most influential factor affecting occupational stress and work discipline among market porters in Aruppukottai Taluk, explaining a major proportion of the total variance in the study variables.

HYPOTHESES TESTING

The table presents the correlation and regression analysis between work discipline, health burden, and occupational stress among market porters in Aruppukottai Taluk. The correlation analysis shows that work discipline ($r = 0.285$) and health burden ($r = 0.749$) have significant relationships with occupational stress at 1 per cent significance level. The regression analysis reveals that the model explains 86.8 per cent of the variance in occupational stress ($R^2 = 0.868$) with a significant F-value of 534.755

Table 3

Correlation and Regression Analysis of Work Discipline, Health Burden and Occupational Stress

Variables	Correlation Coefficient (r)	Regression Coefficient (Beta)	t-value	F-value	R ²	Significance
Work Discipline and Occupational Stress	0.285	-0.949	-19.451	534.755	0.868	0.000
Health Burden and Occupational Stress	0.749	1.520	31.141	534.755	0.868	0.000

Source: Computed from Primary Data

H₀₁: There is no significant relationship between work discipline and occupational stress among market porters in Aruppukottai Taluk.

The Pearson correlation value between work discipline and occupational stress is $r = 0.285$ with a significance value of $p = 0.000$, which is less than 0.01. Hence, the null hypothesis is rejected.

Result: There is a significant relationship between work discipline and occupational stress among market porters in Aruppukottai Taluk.

H₀₂: There is no significant relationship between health burden and occupational stress among market porters in Aruppukottai Taluk.

The Pearson correlation value between health burden and occupational stress is $r = 0.749$ with a significance value of $p = 0.000$, which is less than 0.01. Hence, the null hypothesis is rejected.

Result: There is a significant relationship between health burden and occupational stress among market porters in Aruppukottai Taluk.

H₀₃: Work discipline and health burden do not significantly influence occupational stress among market porters in Aruppukottai Taluk.

The regression analysis shows an **R² value of 0.868** and an **F-value of 534.755** with a significance value of $p = 0.000$, which is statistically significant. Hence, the null hypothesis is rejected.

Result: Work discipline and health burden significantly influence occupational stress among market porters in Aruppukottai Taluk.

Interpretation

The analysis indicates that health burden is the strongest predictor of occupational stress among market porters, while work discipline also significantly influences occupational stress in the study area.

FINDINGS OF THE STUDY

- ✓ The study reveals that the majority of the respondents belong to the age group of 25–35 years, indicating that young and middle-aged workers dominate the market porter occupation in Aruppukottai Taluk.
- ✓ It is found that male workers constitute the major portion of the respondents, highlighting the physically demanding nature of market loading and unloading activities.
- ✓ The study identifies that a considerable number of respondents possess Higher Secondary and Degree/Diploma qualifications despite being engaged in manual labour work.
- ✓ The analysis reveals that many respondents possess below five years of work experience, showing the continuous entry of new workers into the market labour sector.
- ✓ Correlation analysis indicates that work discipline has a significant relationship with occupational stress among market porters.
- ✓ The study finds that health burden has a strong positive association with occupational stress, which indicates that increasing physical strain directly affects workers' stress levels.

- ✓ Factor analysis reveals that health burden is the most dominant factor influencing occupational stress and overall working conditions among market porters in Aruppukottai Taluk.

SUGGESTIONS

- Proper medical facilities and regular health check-up camps should be arranged for market porters through government and labour welfare departments.
- Market authorities should provide basic welfare facilities such as drinking water, rest rooms, sanitation, and first-aid facilities at workplaces.
- Awareness programmes on occupational safety, stress management, and healthy working practices should be conducted periodically.
- Modern equipment and mechanical handling systems may be introduced to reduce excessive physical strain during loading and unloading activities.
- Labour unions and government agencies should strengthen social security measures including insurance, pension schemes, and accident compensation benefits for market porters.

CONCLUSION

“A market system cannot function effectively without the dedicated effort of market porters; likewise, economic activities cannot move smoothly without their physical labour.” Market porters play a vital role in the loading, unloading, transportation, and distribution of goods across regulated and non-regulated markets in Aruppukottai Taluk. However, the study reveals that these workers face considerable occupational stress due to heavy workload, health burden, and demanding working conditions. The findings confirm that health burden and work discipline significantly influence occupational stress among the respondents. By improving workplace safety measures, providing welfare facilities, ensuring healthcare support, and strengthening labour protection schemes, the working conditions and quality of life of market porters can be considerably enhanced in the future.

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