

PUBLIC PERCEPTION ON OUTLOOK ON INDIAN MANUFACTURING INDUSTRY WITH SPECIAL REFERENCE TO CHENNAI

AUTHORS

JAYASREE MARIAPPAN

BBA LL.B (HONS) IVTH YEAR

SAVEETHA SCHOOL OF LAW

SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES (SIMATS)

CHENNAI 600077.

EMAIL ID: csjayasreemariappan@gmail.com

B. BEULA JAYARANI

B.COM LL.B (HONS) IIIRD YEAR

SAVEETHA SCHOOL OF LAW

SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES (SIMATS)

CHENNAI 600077.

EMAIL ID: beulajayarani2004@gmail.com

VAGESH KAUSIK

BBA LL.B (HONS) IIIRD YEAR

SAVEETHA SCHOOL OF LAW

SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES (SIMATS)

CHENNAI 600077.

EMAIL ID: vagsisking@gmail.com

VARDHA H VARIAR

B.A LL.B (HONS) IIIRD YEAR

SAVEETHA SCHOOL OF LAW

SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES (SIMATS)

CHENNAI 600077

EMAIL ID: vardhah27768@gmail.com

ABSTRACT:

The Indian manufacturing industry has long been recognized as a vital component of the country's economic growth. Public opinion on this industry is influenced by various factors such as economic indicators, government policies, job creation, environmental concerns, and technological advancements. Understanding public sentiment is crucial as it can impact investment decisions, policy formulation, and overall industry development. In recent years, public opinion on the Indian manufacturing industry has witnessed both optimism and concerns. Positive aspects include the industry's contribution to employment generation, foreign direct investment, and technological advancements. However, challenges such as infrastructure limitations, regulatory complexities, and skill gaps have also been raised as areas requiring attention. The main aim of this study is to discuss and analyse the major impact and public's perspective on the overlook of Indian manufacturing industries. The kind of research followed in this study is an empirical research method. This study has used primary data which is collected from 200 respondents with a convenient sampling method. The independent variables include age, gender, educational qualifications, occupation and the dependent variables include opinion on Indian manufacturing industries. The study has found that the investment and consumption crisis is the major issue faced by the manufacturing industry in India. The study concluded that simplifying regulations, improving ease of doing business, and developing a skilled workforce are essential to attract investments and enhance the industry's competitiveness.

KEYWORDS: Indian manufacturing industry, Employment, Automobiles, Small and Medium scale Enterprises, Investment

INTRODUCTION:

The Indian manufacturing industry plays a significant role in shaping the nation's economy and development trajectory. With a rich industrial heritage and a diverse range of sectors, manufacturing has been instrumental in India's growth, job creation, and technological advancement. The Indian manufacturing sector encompasses various industries, including automobiles, textiles, chemicals, machinery, electronics, pharmaceuticals, and more. It has traditionally been a key driver of economic growth, contributing to the country's Gross Domestic Product (GDP), export earnings, and foreign direct investment (FDI). Manufacturing's share in India's GDP has steadily increased over the years, reflecting its growing importance. One of the key impacts of the manufacturing industry on the nation is its role in job creation. Manufacturing has been a major employer, providing opportunities for skilled and unskilled labour across urban and rural areas. The sector's ability to absorb labour, particularly in small and medium

enterprises (SMEs), has helped in poverty reduction and socio-economic upliftment. The manufacturing industry's growth has a multiplier effect on the overall economy, generating employment not only within the sector but also in related industries and services. Furthermore, the manufacturing industry contributes to technological advancement and innovation. It acts as a catalyst for research and development, leading to the creation of new products, processes, and technologies. Innovation in manufacturing enhances productivity, efficiency, and competitiveness, driving overall economic growth. With the government's focus on initiatives like Make in India and Digital India, there is a concerted effort to promote indigenous manufacturing and foster a culture of innovation and entrepreneurship. The manufacturing industry also has a significant impact on the nation's trade balance. A robust manufacturing sector enables India to produce goods for domestic consumption and export, reducing import dependency and contributing to foreign exchange earnings. The growth of manufacturing exports strengthens the country's global competitiveness and enhances its position in international markets. It also helps in diversifying the export basket and reducing reliance on specific sectors. In 2020-21, India received a record Foreign Direct Investment (FDI) of \$81.97 billion. In December 2021, as reported by the Index of Industrial Production (IIP) in India, industrial output climbed 0.4% from 2020. It technically increased at a slower pace, after a 1.3% gain in November 2021. However, the Indian manufacturing industry also faces several challenges. These include infrastructural constraints, regulatory complexities, skill gaps, and environmental sustainability. Infrastructure development, including transportation networks, logistics, and power supply, is crucial for the smooth functioning and expansion of manufacturing activities.

AIM: To discuss and analyse the major impact and public's perspective on the overlook of Indian manufacturing industries.

OBJECTIVES:

- To analyse the major issues faced by the Indian Manufacturing Industry.
- To discuss the major benefit of the Indian Manufacturing sector.
- To examine the satisfaction level of different manufacturing sectors in India

LITERATURE REVIEW:

Aman Mudgil (2023) has conducted an analysis on the Identification of Enablers for Green Manufacturing in Indian SMEs. The primary aim of this research is to raise awareness among industries about the emerging trend of green manufacturing in Indian SMEs. Consequently, manufacturing companies are encouraged to embrace green manufacturing practices to minimize environmental impact and reduce waste generation. The paper identifies various factors associated with the facilitators of green manufacturing in Indian SMEs.

Golam Rabbani (2023) has explored small firms in the Indian manufacturing sector, presenting key observations about them. The author utilized a unique dataset encompassing both informal and formal sectors, providing insights into the continuum of firms in Indian manufacturing. The study reveals the substantial prevalence of informality in the Indian manufacturing landscape.

Meeta Gandhi (2023) has delved into Managerial Insights into Green Supply Chain Management (GSCM) Practices within Indian SME Manufacturing Firms. This research entails a comprehensive examination of various GSCM practices in Indian SME manufacturing firms. It investigates the impact of GSCM practices on business performance, encompassing environmental, operational, and financial dimensions. The study primarily focuses on Indian manufacturing firms, especially SMEs in the western region of India.

N. Mehta (2023) has conducted an analysis of the Impact of Foreign Direct Investment on the Manufacturing Sector in the Indian economy. The study's objective is to assess how FDI influences the output of the Indian manufacturing sector during the period from 1991 to 2020. The results indicate that FDI inflows lead to an increase in manufacturing sector output. Furthermore, the study highlights that a higher level of education (human capital) and a greater technology gap between the host and home countries contribute to more substantial technology spillover and, consequently, a more pronounced impact of FDI on manufacturing sector output.

Alok Yadav (2023) has scrutinized the Environmental Sustainability of Additive Manufacturing through a Case Study of the Indian Manufacturing Industry. This research investigates how additive manufacturing technologies contribute to creating a sustainable environment within the Indian manufacturing sector. The study presents a real-time case study in Indian SMEs, demonstrating how additive manufacturing processes help reduce environmental impacts. The research also outlines the potential opportunities for additive manufacturing in promoting sustainability, particularly in the context of pattern making in Indian climatic conditions.

Bishwanath Goldar (2023) has analyzed the impact of ICT investment, adoption of ISO 14000 certification, and their influence on export performance in Indian manufacturing plants. The results of econometric analyses indicate a significant positive effect of ICT investment and ISO 14000 certification adoption on the export intensity of manufacturing plants. Additionally, the study identifies two other key determinants of export performance in Indian manufacturing plants: the extent of outsourcing of

manufacturing activities and the proportion of imported materials in the total materials used, both of which have a positive impact on exports. The research also highlights that higher contract worker intensity leads to improved export performance, especially in low-technology industries. **Rajendra K. Gupta (2022)** has discussed the concept of World Class Manufacturing and Operations from an Indian perspective. Despite government efforts to promote a liberalized business environment, ease of doing business, and infrastructure modernization, significant achievements in these areas have remained elusive. The author, drawing from extensive industrial experience across various sectors and using Indian examples, outlines essential criteria and efforts required for organizations to attain world-class status in manufacturing. **Dhaval Birajdar (2023)** has conducted an analysis of the Role of Drivers, Barriers, and Critical Success Factors for Lean Readiness in Indian Manufacturing Industries. This research aims to identify critical success factors necessary for the successful implementation of lean tools. The study also investigates contextual factors, such as organizational culture, to understand the relationship between critical success factors and organizational readiness for lean practices in Indian manufacturing industries, with the ultimate goal of adopting lean tools. **Arun Arora and Vijay Kumar Singh (2022)** have examined the Future of Indian Manufacturing through the lens of Lean and Green Manufacturing Systems (LGMS). The authors of this study have considered potential barriers to implementing lean and green manufacturing methods and ranked the most crucial obstacles that need to be addressed first to ensure the successful implementation of lean and green manufacturing systems. **Sumeet Gupta (2022)** has discussed the Impact of Covid-19 on the Indian Manufacturing Sector in an analytical study. The research analyzes the impact of the pandemic on the sector and suggests strategies to mitigate its effects and prepare for future challenges. It emphasizes the role of the government in providing support to industries, including financial aid, tax reductions, and support for labor-intensive sectors, as well as the need for businesses to focus on supply chain management and better planning to address unforeseen events effectively. **Nitesh Verm (2023)** has examined the Implementation of Kaizen in Northern Indian Manufacturing Industries. This study offers insights for manufacturers seeking to enhance their firms' performance through the implementation of kaizen, particularly in developing countries. The findings of the study provide a clear focus on various issues related to continuous improvement within firms, extending beyond operational measures. **Sunitha Raju (2023)** has discussed the Impact of Imports from China on Indian Manufacturing Performance, providing a comprehensive analysis of trade competitiveness. The paper examines the significance of imports from China with a focus on comparative disadvantage imports ($RCA < 1$) and their impact on India's industry output and performance. It also highlights factors beyond trade competitiveness that influence the Indian manufacturing sector. **Swapan Sarkar (2022)** has examined the Identification of Performance Determinants Through Ratio Analysis - A Study on Indian Manufacturing Firms. This study focuses on

understanding the influence of three financial parameters—solvency, liquidity, and turnover—on the performance of Indian manufacturing firms. The research is divided into chapters that provide an overview of the Indian manufacturing sector, theoretical factors affecting financial performance, and practical factors influencing financial performance in Indian manufacturing firms. **S.A. Jyothi Rani and P. Preethi (2023)** have conducted a Statistical Evaluation of Productivity in the Organized Manufacturing Sector from an Indian Perspective. This paper seeks to explore the factors, specifically labor and capital, that influence overall manufacturing output and determine the most suitable model for the available data. The study also underscores that the Indian organized manufacturing sector is largely influenced by capital-intensive segments, demonstrating an increasing return to scale. It further identifies a significant disparity between labor-intensive and capital-intensive sectors in India, which could impact employment growth in the country. **Rahul Nath Choudhury (2022)** has assessed the Impact of the Mobile Manufacturing Sector on the Indian Economy. The study examines the significant contributions of Indian policy initiatives, such as the Digital India campaign, to the growth of the mobile manufacturing sector. By analyzing factors such as domestic sales, exports of mobile handsets, FDI inflows, and employment generation during the period from 2014 to 2019, the research reveals the positive impact of this sector on the Indian economy. **Panchajany Eswari and K.T. Veeramanju (2022)** have observed Innovations in the Indian Automobile Industry: An Industry Analysis of Maruti Suzuki India Limited. This study highlights the innovative practices adopted by Maruti Suzuki India Ltd. The paper elucidates how digital transformation serves as a catalyst for enhancing the company's business operations. The company's ability to predict and forecast sales while shifting its focus from preventive to predictive maintenance has contributed to an increase in its brand value and net worth. **Ramphul Ohlan (2023)** has analyzed the Measurement of Energy Efficiency in the Hotel Industry, with a focus on India. The study presents novel findings that offer valuable insights for hotel managers to enhance energy efficiency and for policymakers to reduce environmental impacts in the hotel sector. **Ca Yukti Chandok (2022)** has examined the Analysis of the Growth of the Paper Industry in India. This study aims to analyze and compare the growth of the paper industry in India during the pre and post-recession periods, considering the significant impact of the global economic crisis on the Indian paper industry. The study concludes that there is a notable difference in the growth of the paper industry in India between the pre-recession and post-recession periods. **Smiti (2023)** has discussed the Evaluation of Industry 4.0 Readiness in the Dairy Industry: A Case Study in India. This research paper presents a case study assessing the readiness level of the dairy industry for implementing Industry 4.0. It utilizes the Impuls maturity framework, a maturity model, to evaluate the readiness level of the dairy industry through a survey conducted in various dairy plants across Delhi/NCR, Haryana, Mohali, and Chandigarh. **Selladurai Muthusamy (2022)** has examined the Performance of Agro-based Industries in India with a specific focus

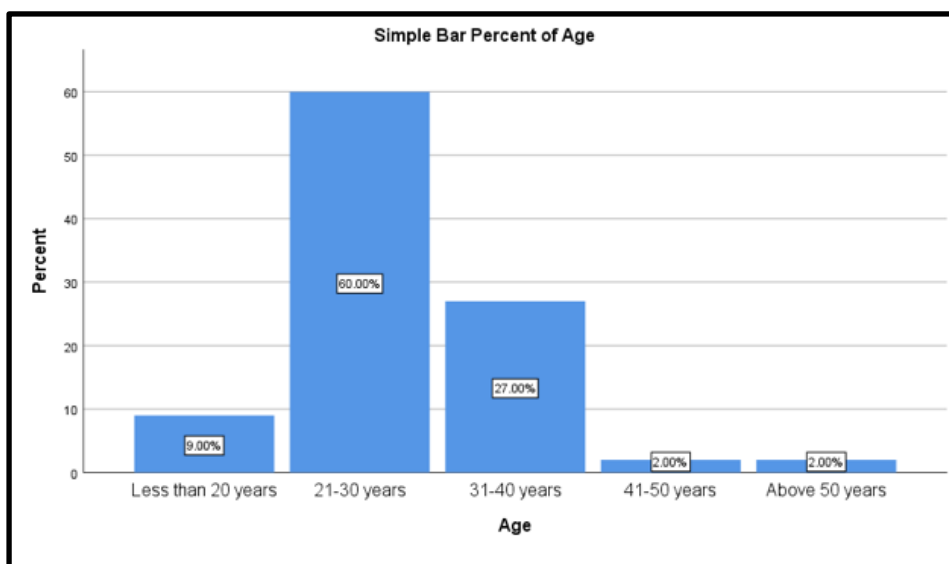
on the Sugar Industry. The Indian sugar industry is cyclical as it caters to both the domestic market, the largest in the world, and generates surplus energy to meet the increasing energy needs of India. It has also become a crucial player in the alcohol industry. **Anupam Singh and Anmol Negi (2022)** have conducted research to Identify the Potential of the Fertilizer Industry in India. This paper reviews prior marketing research on fertilizers, both domestically and internationally, offering readers a comprehensive understanding of the Indian fertilizer industry. The analysis covers aspects like demand and supply positions, consumption trends, and the growth factors of the fertilizer industry in India using secondary data.

METHODOLOGY:

The primary source of data was obtained by conducting an empirical study on seeking responses from the general public around Poonamallee, Chennai . The data was collected through questionnaires and also relied on secondary sources of data such as books, journals, e-sources, articles and newspapers. The present research is conclusive, descriptive and based on empirical design. The sampling size of the paper is 200. SPSS software is used for analysis purposes. The sampling frame is that the respondents belong to all kinds of age groups. The independent variables are age, gender, education qualification and occupation. The research tools used are graphs, percentage, chi-square tests and anova test.

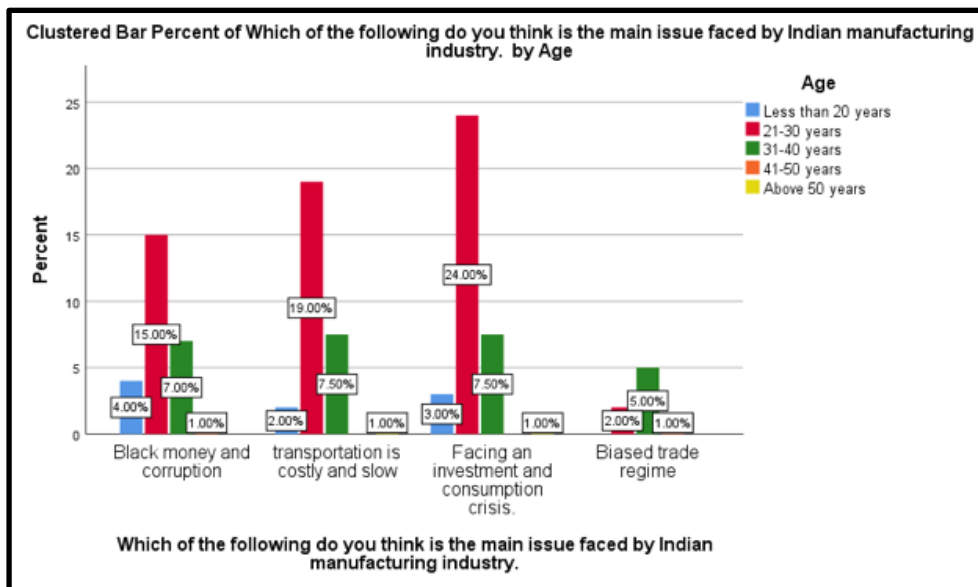
ANALYSIS:

FIGURE 1



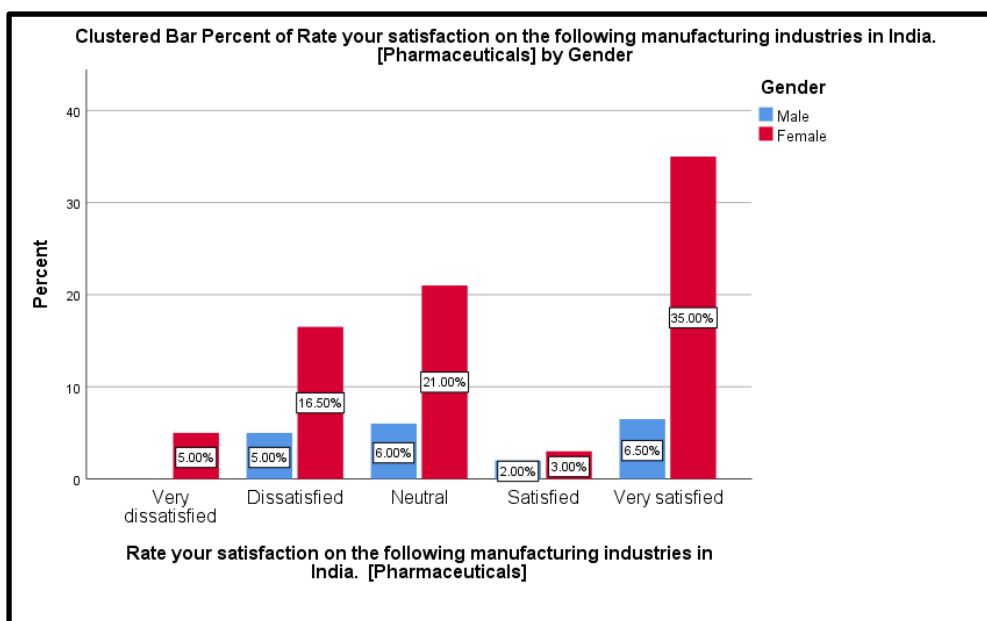
LEGEND: Figure 1, shows the opinion of the respondents based on their age group.

FIGURE 2



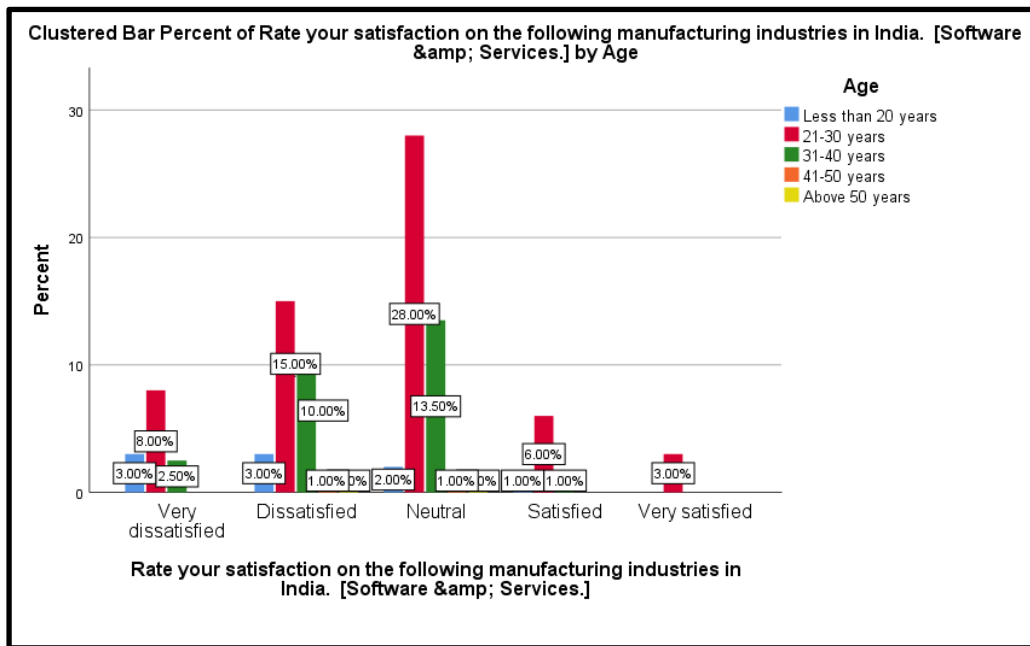
LEGEND: Figure 2, shows the responses based on the categories of age regarding the main issue faced by the Indian manufacturing industry.

FIGURE 3



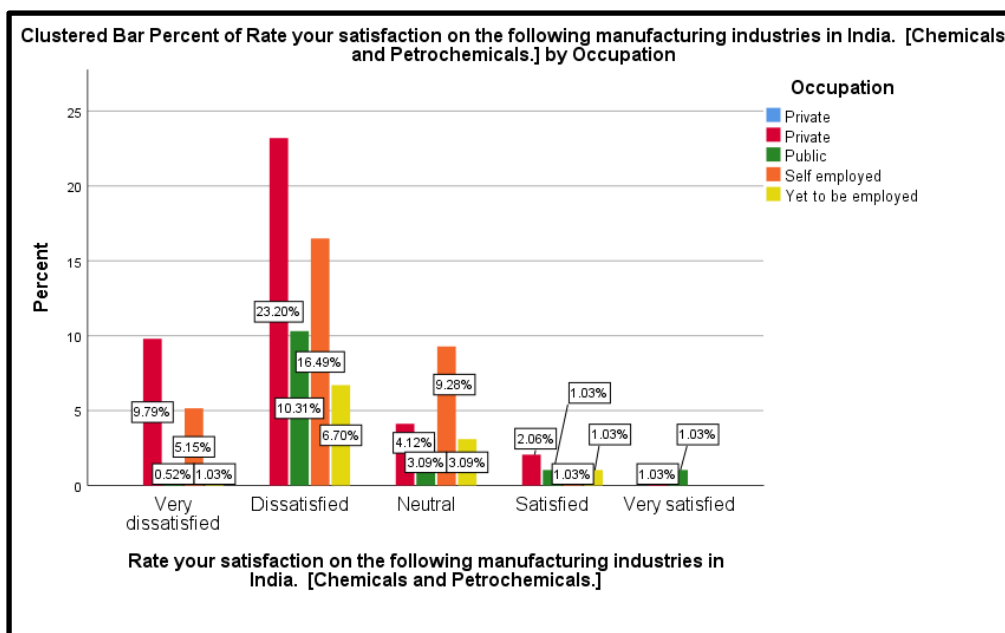
LEGEND: Figure 3, shows the responses categorised based on gender regarding the satisfaction level of the Pharmaceuticals manufacturing industries in India.

FIGURE 4



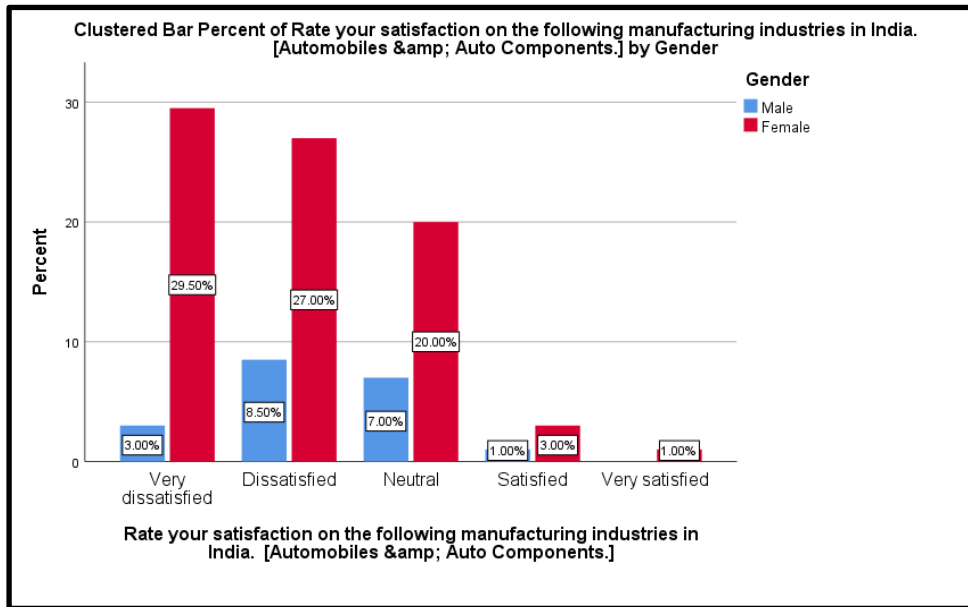
LEGEND: Figure 4, shows the responses categorised based on age for the questionnaire regarding the satisfaction level of the Software & services industries in India.

FIGURE 5



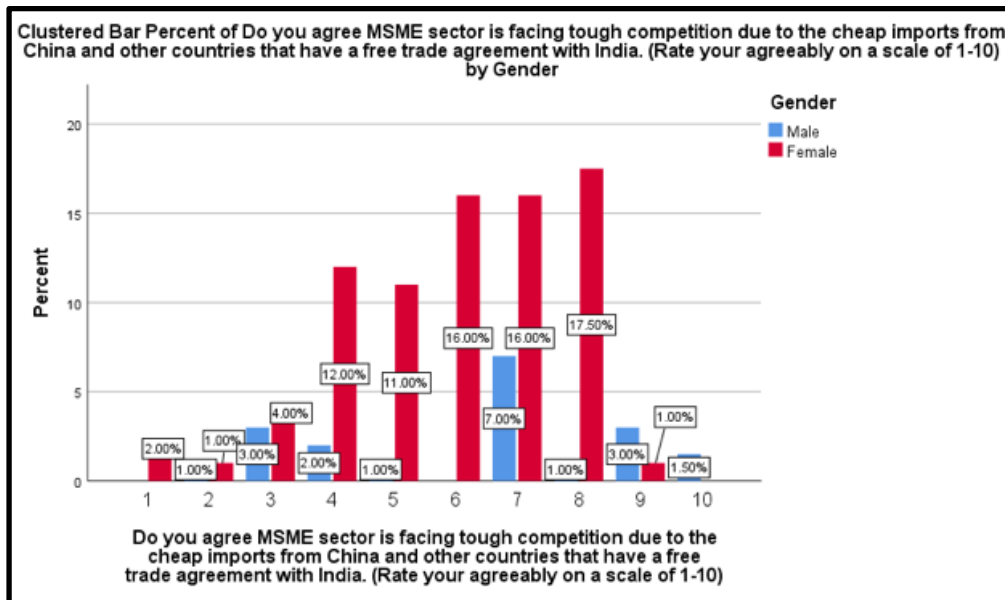
LEGEND: Figure 5, shows the responses categorised based on the Occupation for the questionnaire regarding the satisfaction level of Chemicals and Petrochemicals as manufacturing industries in India.

FIGURE 6



LEGEND: Figure 6, shows the responses based on the Gender category for the questionnaire regarding the satisfaction level of Automobiles & Auto components.

FIGURE 7



LEGEND: Figure 7, shows the responses based on the Gender category for the questionnaire regarding the agreeability scale that MSME sector is facing tough competition due to the cheap imports from China and other countries that have a free trade agreement with India.

RESULT:

In **Figure 1** it shows the responses of different age groups. In this the highest responses from the age category of 21-30 years have responded to the questionnaires. In **Figure 2** it shows the responses from the different age groups for the questionnaire regarding the main issue faced by the Indian manufacturing industry. In this the highest responses from the age category of 21-30 years have responded as Facing an investment and consumption crisis. In **Figure 3** it shows the responses from the different gender groups for the questionnaire regarding the satisfaction level of the Pharmaceuticals manufacturing industries in India. In this the highest responses from the category of Female have responded as Very satisfied. In **Figure 4** it shows the responses from the different age categories for the questionnaire regarding the satisfaction level of the Software & services industries in India. In this the highest responses from the category of 21-30 years have responded as Neutral. In **Figure 5** it shows the responses from the different Occupation for the questionnaire regarding the satisfaction level of Chemicals and Petrochemicals as manufacturing industries in India. In this the highest responses from the category of Private sectors have responded as Dissatisfied. In **Figure 6** it shows the responses from the different gender for the questionnaire regarding the satisfaction level of Automobiles & Auto components. In this the highest responses from the category of Female have responded as Very dissatisfied. In **Figure 7** it shows the responses based on the Gender category for the questionnaire regarding the agreeability scale that MSME sector is facing tough competition due to the cheap imports from China and other countries that have a free trade agreement with India. In this the highest responses from the category of Female have responded as 8.

DISCUSSION :

The respondents from the age category of 21-30 years have responded to the questionnaire at large. This states that most of the respondents for the questionnaires are from the age category of 21-30 years (**Figure 1**). The respondents from the different age category have expressed their view for the questionnaire regarding the main issue faced by the Indian manufacturing industry. In this the highest responses from the age category of 21-30 years have responded as Facing an investment and consumption crisis. This states that as the Indian manufacturing industries face many challenges like the shortage of infrastructure and skilled labour which leads to decrease of productive rate. This results in the investment and consumption crises for the Indian manufacturing industries. Thus, it is considered as a main issue faced by the Indian manufacturing industries (**Figure 2**). The respondents from different gender groups have expressed their view for the questionnaire regarding the satisfaction level of the Pharmaceuticals manufacturing industries in India. In this the highest responses from the category of Female have responded as Very satisfied. As the Indian Pharmaceutical manufacturing industry has played a major role in the development of the economy

and it has reached from Zero to 13 percent of the global market the respondents have responded as very satisfied for Pharmaceuticals manufacturing industries in India (**Figure 3**). The respondents from different age groups have expressed their view for the questionnaire regarding the satisfaction level of the Software & services industries in India. In this the highest responses from the category of 21-30 years have responded as Neutral. In 2021, India emerged as a prominent participant in services trade, ranking among the top ten nations in terms of services exports. Notably, the IT industry made up 7.4% of India's GDP in the fiscal year 2022, and it is anticipated to elevate its contribution to India's GDP to 10% by the year 2025. (**Figure 4**). The respondents from different Occupation groups have expressed their view for the questionnaire regarding the satisfaction level of Chemicals and Petrochemicals as manufacturing industries in India. In this the highest responses from the category of Private sectors have responded as Dissatisfied. This indicates that the manufacture of petrochemicals adds to contamination of the air, water, and soil. This can have an impact on smaller systems, such as individual ecosystems, but it also has global implications. Thus, it is responded as Dissatisfied (**Figure 5**). The respondents from different gender groups have expressed their view for the questionnaire regarding the satisfaction level of Automobiles & Auto components. In this the highest responses from the category of Female have responded as Very Dissatisfied. Due to low demand in the market the vehicle manufacturers are facing a big crisis. The increase in the cost of vehicles and the credit crunch also forced many consumers to postpone their plans to buy a vehicle. All these factors have made a bad impact on the automobile industry in India (**Figure 6**). The respondents from different gender groups have expressed their view for the questionnaire regarding the agreeability scale that MSME sector is facing tough competition due to the cheap imports from China and other countries that have a free trade agreement with India. In this the highest responses from the category of Female have responded as 8. During the same period, India's trade deficit widened as imports from China surged by USD 50 billion, while exports only increased by USD 2.5 billion. Trade with China constitutes more than 40% of India's total trade deficit. This leads to a situation where the MSME sector is facing a tough competition due to the cheap imports from China and other countries that have a free trade agreement with India (**Figure 7**).

LIMITATION:

The sampling method followed in this study is a convenient sampling method. The study is unable to collect data sufficiently due to the reduced geographical arena. Since the study is restricted to the territory within Tamil Nadu and therefore the conclusion derived by average is not perfectly accurate. Since the study collected responses from the general public at large, the findings are mostly based on generalised opinion rather than legal or scientific background.

SUGGESTION:

The following are the suggestions for the study. Enhance competitiveness through innovation: Indian manufacturing industries should focus on innovation and research and development (R&D) to stay competitive in the global market. Investing in technology and product development can help create differentiated and value-added products, improving competitiveness and expanding market share. Foster collaboration and partnerships: Encourage collaborations between manufacturing companies, research institutions, and academia to foster knowledge sharing, technology transfer, and joint R&D initiatives. Collaboration can help in leveraging complementary strengths, sharing resources, and accelerating innovation and growth. Improve infrastructure and logistics: Enhance infrastructure development, including transportation networks, power supply, and logistics, to facilitate smooth and efficient movement of goods. This will reduce costs, improve supply chain efficiency, and enable timely delivery of products, both domestically and for exports. Focus on skill development and training: Strengthen skill development programs to address the industry's skill gaps. Collaborate with educational institutions and vocational training centres to provide industry-relevant training and certifications. Emphasise upskilling and reskilling to meet the changing demands of advanced manufacturing technologies. By implementing these suggestions, Indian manufacturing industries can unlock their potential, overcome challenges, and drive sustained growth, contributing significantly to the nation's economic development and employment generation.

CONCLUSION:

The Indian manufacturing industry has a profound impact on the nation's economy, employment generation, and overall development. It drives economic growth, fosters innovation, creates employment opportunities, and contributes to the country's trade balance. Addressing the challenges and capitalising on the industry's potential are vital to sustaining its growth trajectory and maximising its positive impact on India's socio-economic fabric. India is gradually progressing on the road to Industry 4.0 through the Government of India's initiatives like the National Manufacturing Policy which aims to increase the share of manufacturing in GDP to 25 percent by 2025 and the PLI scheme for manufacturing which was launched in 2022 to develop the core manufacturing sector at par with global manufacturing standards. Simplifying regulations, improving ease of doing business, and developing a skilled workforce are essential to attract investments and enhance the industry's competitiveness.

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