INSTITUTE OF RESEARCH ADVANCES

IRA-International Journal of Management & Social Sciences ISSN 2455-2267 Vol. 03 Issue 02 (May, 2016)

Paper DOI: https://dx.doi.org/10.21013/jmss.v3.n2.p4

Women Vs Men in Manufacturing Sector

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ABSTRACT

India today is at the cusp of a paradigm change in its growth and its position in the world. Its rapid development in all fields has been faster than anywhere else in the world and it is emerged as a global power for its skilled workforce including both men and women. In today's time women are not only competing but also matching their steps with men in many fields. Though, women have proved their mettle, but their presence in manufacturing sector seems to be negligent or on decline. Indian manufacturing sector is predominantly employs majority of the males. It is also seen that there are a less number of women who are currently work or are keen to work in this sector. "Women may not be as welcome" in manufacturing isn't only about perception, but it is found globally in a recent report from the International Trade Union Confederation (ITUC) that women are paid about 18 percent less than men doing the same manufacturing work on average and this is the fourth largest gender pay gap of any industry, according to the study. If Indian women are achieving success and climbing corporate ladders in all sectors then, why is she lagging behind in this sector? This paper focuses on assessing the employment opportunities for women, challenges being faced by them at work and future scope and to further explore the working environment of manufacturing sector for women.

Keywords: Manufacturing Sector, Gender Differentiation.

1. Introduction: Manufacturing Industry in India has gone through various phases of development over the period of time. Manufacturing means production of goods for use or sale using labor and machines, tools, chemical and biological processing, or formulation. In its earliest form, manufacturing was usually carried out by a single skilled artisan with unskilled or semi skilled labour. Before the Industrial Revolution, most manufacturing happened in rural areas, where household-based manufacturing served as a supplemental subsistence strategy to agriculture [1]. Manufacturing sector is classified into two broad sub sectors: Organized and Unorganized. The organized sector includes all units that are registered under Factory Act 1948, 2m(i) and 2m(ii) and the data on manufacturing is collected through Annual Survey of Industries (ASI), annually. This sector accounts for only 0.72 per cent of the enterprises. The unorganised sector includes those units which are not covered by the Annual Survey of Industries and do not include government and public sector undertakings. The data is collected by National Sample Survey Organization (NSSO) and more than 99 per cent of all manufacturing units fall in this sector.^[2]

2. Research Methodology

- **2.1 Rationale for the Study:** In today's time, women are not only competing but also matching their steps with men in many fields but their presence in manufacturing sector seems to be on declining rate. It is important for us to understand all the reasons and the factors behind the fewer roles of women in manufacturing sector. Based on above this research was undertaken.
- **2.20bjective:** To assess the employment opportunities for women, challenges being faced by them at work and future scope and to further explore the working environment of manufacturing sector for women.

2.3 Research Design:

Research Type : Descriptive, Analytical and Qualitative research

Sampling Technique: Judgmental Sampling

Sample Size : 100 respondents

Data Source : Primary Sources and Secondary Sources

Review of Literature

3 **Contribution of Manufacturing Sector in India:** Globally, the manufacturing sector is vast, wide spread and at a large scale, contribution to 100% of manpower utilization, being capital and labour intensive, to bring the industry with determination and focus to another level. It has grown at a robust rate over the past ten years and has been one of the best performing manufacturing economies by contributing about 16.1% of India's GDP in 2009-2010 [3], 50% to the country's exports and by giving employment to millions of people [4]. In a country like India, where employment generation is one of the key policy issues, this makes this sector a critical sector to achieve inclusiveness in growth. The immense growth of this sector is based on large orders from the automobile, Defence, Aerospace, Engineering sectors etc. This sector holds the key to India's gradual progression towards sustained GDP growth. As per UNIDO's new report titled "Yearbook of Industrial Statistics 2010", India has emerged as one of the world's top 10 countries in industrial production [5], while as per the report "Global Manufacturing Competitiveness Index" 2010, by Deloitte Touche Tohmatsu and the US Council on Competitiveness, India is ranked second for its manufacturing competence [6]. For India's consistent development, manufacturing sector is considered an engine of that development and to run this engine successfully, men and women both are required. But the data concerning the current scenario of employment and proportion of gender variance in employability has something different to state.

4 SWOT Analysis of Manufacturing Sector:

- **4.1 Strength:** The strengths of the manufacturing industry are its relative stability, labor cost advantage, skilled work-force, rich sources of natural resources, and democratic regime. Although the demand for manufacturing tends to fluctuate with the ups and downs of the economy, but this sector is characterized by regular periods of recovery following any downturns. Moreover, manufacturing has become highly efficient over the last century, with the ability to maximize both the productivity of the workers and machines to maximize profits.
- 4.2 **Weaknesses:** Since the manufacturing industry is a mature industry, there are full possibilities of having a severe competition and little room for growth within. Manufacturing can be a cash cow for those who are already in it but may be unattractive to new entrants. Also, as the manufacturing industry is built on the production of not only the major industrial products but also non-essential goods such as spares, accessories etc, thus any severe downturn in the economy can have a crippling effect on it. The industry is also having its inherent deficiencies such as infrastructure inefficiencies, shortage of skilled labour, high transaction cost, procedural delays, lack of awareness of global technologies & trends in Manufacturing IT etc. which are eroding away the competitive advantage of the manufacturing sector in India. It is also observed that the productivity of the Indian manufacturing industry is approximately 1/5th of the productivity as compared with the manufacturing industry of United States of America and it is about ½ as compared to the productivity levels in South Korea as well as Taiwan [7]
- **4.3 Opportunities:** The Manufacturing industry in India is believed to have the potential of enhancing the India's economic development, productivity and to face competition from the global markets. There are opportunities in Technology and Bio-technology areas as these are growing market segments having higher profit

margins. These are knowledge-dependent market segments that require highly specialized workers, which make it difficult for low wage countries to compete in this market segment, thereby creating opportunities for more industrialized countries. Foreign markets are also providing opportunities for these manufacturers to increase their profitability through exports. India is increasingly getting recognized for high value goods requiring a fair amount of engineering precision and quality and considered good in complex assembly of products and value based manufacturing.

- **4.4 Threats:** The largest threats to the manufacturing industry are from low wage countries which made it impossible for many businesses in other nations to compete; as a result, they either close or move overseas to find cheap and skilled labour force, better or latest technology, newer and cheaper sources of raw material, enhanced research and development, easier entry and exit modes and support from government and financial institutions etc.
- demand cheap labour and female labour easily fall in this category but the quality of employment in units is very exploitative (Rustagi, 1999). Patriarchal system exists in Indian Society where women are dominated by men, and the same is applicable in the manufacturing sector too. It is the psyche of the society that "Manufacturing Industry" means "Men's Industry" i.e. The Manufacturing Industry engages more men as compared to women, keeping in view the some of the characteristics of this industry like odd work hours, more physical labour, night shifts and technical jobs etc. Though at times we hear that in garment and dress designing factories, women employability is more in comparison to men but, just to bring forth that in the largest manufacturing unit of garment manufacturing in Tirupur, Tamil Nadu (India) the workforce is largely dominated by men.^[8] Women, on the other hand are left with the option of remaining insecure.

6 Status of women in Manufacturing Sector: In today's world, women have been making and marking new achievements in every industry like their counterpart men. Though, women have proved their mettle, but their presence in manufacturing sector seems to be negligent or on decline. They are neither welcomed nor entertained to work in any sector and as far as manufacturing sector is concerned, the opportunities available to women are minimal. From the 1920s and 30s and up till 90s, the formal manufacturing sector has continued to eliminate women from their workforce. This sector does not highlight any prominent female achievers as the entire workforce, and reports comprises mostly of males. Dreze and Sen (1995), Dunlop and Velkoff (1999), Nihila (1999) stated that although the cultural restrictions, which women faces are changing but women are not still as free as men to participate in the formal economy. "Women may not be as welcome" in manufacturing isn't only about perception, but it is found globally in a recent report from the International Trade Union Confederation (ITUC) that women are paid about 18 percent less than men doing the same manufacturing work on average [9] and this is the fourth largest gender pay gap of any industry. Due to lack of sufficient encouragement or prominent names, the demand to pursue a career in this field is lukewarm. According to UNIDO Report, share of women in the total employment in the Indian manufacturing sector remained stagnant at 10.9 per cent between 2000 and 2007.[10] The major employers of women in manufacturing include food and beverages, leather and leather products, paper and paper products, chemical products, communication equipment and furniture maker. South India has a much higher participation of women in the unorganized manufacturing sector than north India. In countries like Sri Lanka and Vietnam, there are more women in the manufacturing industry than men [11]. Then why India is lagging behind in giving her equal roles. At a National Seminar on Policies and Strategies for Working Women in the Context of Industrial Restructuring (New Delhi, 1997), Gita Sen emphasised that the new economic regime of the 1990s creates two simultaneous disadvantages for poor women in India. On the one hand, they face increasing pressures to earn from petty selfemployment, in the informal sector and in production for larger industries. On the 202

other hand, crumbling social security systems forces women to revert to being primary care-givers and responsible for the well-being of their society and communities. Sometimes they are even made responsible to handle the dual responsibility of working and nurturing the family.

Findings of The Research

- **Challenges Being Faced by Women:** 96% women brought out various challenges and issues being faced by women working in the Indian Manufacturing environment, posing a great hindrance for them in pursuing career in this sector or to say, any career at all.
- 7.1 Gender Discrimination: The biasness between men and women is the major factor which restricts and blocks all the opportunities for women. Women have to face discrimination at every step like at workplace, in education, in domestic life etc and the root of all kind of discriminations and bias against the women lies in the customs, traditions and the typical mindset of the society which looks the women as inferior beings, resulting in rise in the number of victimized women. Studies by Elson(1999), Mehra and Gammage(1999), OECD (2002) have found that gender gap exists in earnings even for same level of education, age and job tenure of women as compared to men. The peril of gender discrimination is going to be very severe on the whole of humanity. No doubt, the world celebrates the "International women day" but do we respect the women in real? It is the fact that the world treats its half population as inferior and insignificant.
- **7.2 Upbringing of a Girl:** 89% of the respondents stated that people prefer "Son" as a child, may be because of "Vansh" continuation or likely hood of being a heir to family and responsible to look after aged parents in old age, a social evil still prevalent in our society. It is an acute and persistent problem, especially for a developing country like India. A girl lives an improvised life in most parts of the world be it a developing country or a third world country. When a boy is born, he

is considered as insurance but, when a girl is born, she is treated like a liability for life. Sometimes basic issues like food, care, or education and at times issues like marriage, dowry, her moving to new house after marriage and other social systems prevalent in the society create hindrances in her upbringing. As a matter of fact, she does not get love, protection, proper care in terms of food and nutrition, healthcare, security etc from her own immediate family. There is no scope in the given circumstances, motivation or an opportunity for her to prove herself to the world. Her place is inside the four wall of home, not in the open world of men. Some of the political leaders have come out in the open and voiced such archaic views in response to the recent incident of 16 Dec12 at New Delhi. She is forced into drudgery and house slavery from a very tender age.

- 7.3 Role of Parents: 47% respondents brought out the fact "A girl is never a child" as she is not allowed to enjoy the beautiful days of her childhood when it is the ripe time for her to learn and grow. Even through the different phases of social and economic development and introduction of globalization, Privatization and Liberalization, it could not bring an honorable impact to improve their quality of life. Most of the parents do not see the value of educating especially a daughter who would get married and go to the different house, or remain a housewife (because of the inherent nature of responsibility entrusted with them), so there is no point investing in their education. Even if they do so, it may not be for their development, but to find a suitable match for her. In some cases, even if they educate the girls, they are not sent for professional courses or parents are not willing to send their daughters outside the place of residence for doing a job, which not only puts restriction on her education but also career opportunities in a particular region.
- **7.4 Lack of Technical Skills:** 64% respondents brought out that it is a psychological belief in our society that women lack the aptitude to succeed in technical fields and majority of the people associate males with science and females with the arts. This belief, despite the fact that elementary-school girls now earn higher grades in math and science than do boys, certainly deters girls and

women from pursuing opportunities in engineering and manufacturing and it too often discourages parents from lobbying their daughters to pursue these opportunities. So, access to higher and technical education remains a significant barrier to women's full participation in the workforce in developing countries.

- Women are exploited at all levels and by each segment ,whether it is at their respective homes in form of domestic violence or marital rape or exploitation at work place in the form of physical and mental torture by the boss and colleagues. They are compelled to keep their head down in a speechless manner tolerating the cruelty of all. Ignorance, violence and crimes committed against women in India have emerged as alarming issue which reflects countries socio-economic disability which in turn, threatens the dignity and honour of womenfolk of the country. If women raise their voices against the crimes, then they cannot get justice despite their voices for survival. This ultimately affects their mentally stability and endurance, due to which they are often seen withdrawing themselves from the society, losing their self esteem or even resorting to suicide which often result as a matter of social disgrace.
- 7.5 Pay Discrimination: 63% of brought out that there appears to be a trend between the conservatism and wage gap between males and females. Pay is a reflection of capabilities of individual and fundamental part of everyday life, enabling individuals to support themselves and their families. This pay gap and discrimination evokes a passionate debate. Women with equal education to men and in equal occupations are not generally rewarded with equal wages. Paci (2002) found that gender discrimination in wages and employment against women leads to a chain reaction of economic distortions which reduces efficiency and threatens economic development Women are more likely than men to major in fields like education and the social sciences, which typically lead to lower-paying jobs. One of the reasons for this discrimination is that the society pushes women

into roles and profiles demanding less of her time and effort, thus landing them into jobs that are less paid.

- **7.6 Gender Isolation:** 43% respondents stated that as there are very less number of females in the manufacturing sector, so the women who are working in this sector feel isolated as they find problems in mixing up with the men there. Every person at the work place especially in the manufacturing setup treats her as "woman" rather than a "Colleague" which makes her survival difficult and creates a challenge for her to prove at each opportunity.
- 7.7 Physical Work: According to 56% respondents, "Manufacturing" is synonym to "More Physical work" which is a normal psyche of the society. It is also assumed that women can't do as much of physical work, which the men do in our society. The reality is that, though the women are made different by virtue of their genetics and biologically, however given an opportunity, women in India have proved their mettle in all the fields whether it is in field of household chores, agricultural field, engineering, technology, space and aeronautics, mathematics and even the male dominated bastion of defence. It is hypocrisy by men to decide themselves that women are looking for soft jobs or jobs involving less of physical labour, thus resulting in negligent or declining role of her in the manufacturing sector.
- **7.8 Less Role Model:** 72% respondents stated that there is a dearth of women who raise to top leadership roles. There are just 3% of fortunes 500 CEOs are women. So, there is need of women who become role model for other women but it would take generations to build these better women who qualify for the job, to get the appropriate mentor ship and act as source of encouragement for other women.
- **7.9 Growth Factor:** 68% respondents stated that there are very less chances for women to grow in this sector as they find it harder than men to bag the most senior jobs. There are promotion obstacles for women and women tend to get

"sorted" in low-paying professions, sometimes even by the force of law. As per NCEUS 2008, it is observed that in most industry groups there is a hierarchy of jobs where the women are placed at the bottom [12]. Nearly 80 to 90 percent of the workforce on the shop floor is female and men are in a majority among white collar jobs. Women are placed in low paid, insecure and informal jobs, while the better paid supervisory and managerial jobs are reserved for men. This sector fails to give women an equal opportunities as the men are having.

- **7.10 Workplace Flexibility:** 79% respondents stated the one problem which needs much of attention is workplace flexibility. Due to odd working hours in this sector and flexible workplace policies, women struggle a lot in making a right balance between her work and family. Adding a demanding boss, deadlines and ambition to succeed, resulted in generating causes which leave women to feel overwhelmed and guilty.
- **7.11 Night Shifts:** 26% of women brought out that women avoid working in this sector due to night shifts which are without proper protection or transport facilities. Gang rape of many girls during their night shift's in companies or call centre's is the reason for rising fear in the women's mind. Also, women have to see her family also with her job. So, if industry demands night shifts from her which is without any safety, then how she can able to do her duties well.
- 7.12 Sexual Harassment in the Workplace: 89% of women brought out that one of the evil of the modern society is the sexual harassment, molestation and eve teasing which women endures in the day to day environment including, at the workplace from their male counterparts and other members of the society. Many activists blame the rising incidents of sexual harassment against women on the influence of "western culture" but they are ignoring the fact that any culture doesn't provoke anybody to do wrong without the person conscience consent. Men always see the women as a source of entertainment to which they can use anytime for their enjoyment "with permission or without". The imaging of women as

victims of managerial violence became more effective when linked with the metaphor of sexual violation. Because of this fear, most of the women don't want to work or move out of the house or even are sometimes not permitted by the head of the families.

- 8 Recommendations and Suggestions: Women constitute one half of population of India and if we are looking forward to make India a developed country and making Indian manufacturing sector globally competitive, we need to engage this half of population in our workforce. The shortage of skilled workforce is nothing new to manufacturing industry and if we don't make manufacturing more attractive to today's young girls and women, we will lose this potential labor pool, which is more competent, mentally agile and stable, willing to work and ready to prove themselves in any condition and environment. This is achievable only if, all the segments of the society like- schools, workplaces, home and individuals collaborate and collectively send a message that "girls and boys are equally capable of achieving in technical fields." Given the situation, it will enable girls to believe in themselves, their capabilities, assess their abilities more accurately, and can see manufacturing as a viable career choice. There are some suggested measures for changing the existing environment prevalent in our country as a whole and the society thus generating interest among women for the manufacturing sector and make them an equal participant and responsible for the development of the country.
- **(a) Start at the Top**: Change all the customs, traditions, beliefs, gender biasness etc prevailing in the society which confine the women behind the four walls. It can be possible by the contribution of Home, Schools, Colleges, Society and Government.
- **(b) Home:** Home is the first school for a child to grow and learn, and mother is the first teacher. Parents at home should provide conducive environment to their children(whether a boy or girl) for their proper learning and making them capable 208

of facing the challenges of life at varied fronts and empowered them in true sense of functionality, where they can make informed choices and decisions. There should be Zero tolerance for violence against girls. It is not only learning for education but even learning life skills at the right age. There should be no discrimination on the basis of gender. Parents should also act as a career counselor for their children, so as to support and motivate their children to pursue career in engineering or technical fields.

- (c) Schools/Colleges: The schools, colleges and institutes for all types of vocational coaching, together should create equal opportunities for girls to learn and become leaders. The educational bodies should adopt creative techniques to generate interest of girls in this field. And also develop training programs for girls to focus on machines, technical aspects, create knowledge bank and prepare them for broader aspects of industry and tasks. Provide sufficient exposure to student through industrial visits, on hand training and interaction with the female employees in different profiles and levels. This will enable them to be more informed and aware about the live and role of engineers, people's orientation and socially beneficial aspects of engineering and provide an assurance that they can be an active participant in the growth process of the Indian economy. Educational institutions can also provide scholarships for girls at the senior level of educational, incentive and fee relaxations schemes at initial stages of education to motivate parents to let the girls continuously attend the school, and also to create a situation where money doesn't come in between the progress and education of girls. There should be periodic seminars and conferences and counseling regarding the importance and career options in manufacturing industry.
- **(d) Society:** Society plays a very important role in designing the fate of the girl. The problem of today is that, we still are following the regressive beliefs, customs and traditions, which are totally responsible for all the problems being faced by the women. The need is to change our outlook to see the immense benefits and

contributions that woman can make to the society. There are different measures by which society can help in increasing the role of women in manufacturing.

- i) Evolve strategies to erase the evil of gender discrimination from the minds of all the people in society.
- ii) Promote the education of girls because by doing this we shall contribute in making a strong and assertive individual for the future who shall contribute immensely towards the economic development of India.
- iii) The society should always build a positive image of a girl, enhancing her self esteem & self confidence and motivates the girls and women to go outside for work instead of confining her behind the four walls of the house.
- **(e) Government:** The government should develop opportunities for women in various departments in manufacturing and ancillary industries by providing unanimous support in terms of policies, subsidies and exemption, scholarships and opportunities to a girl who wants to make her career in manufacturing.
- i) The strategies should be adopted to change the mindset of looking at the girl child as a lesser being, a liability or a property, all this needs to be changed, if we are looking at changing the condition of women. All this discrimination and bias originate from this kind of regressive approach in the society.
- ii) The parents should be counseled time to time to increase the participation of their girl child and their benefits.
- iii) Female foeticide, infanticide, rape, sexual abuse, and violence against girl child and women should be considered as the most heinous forms of crime against humanity and strictest forms of punishment should be reserved for the perpetuators. Further, an all round support should be extended to the victims including physical, psychological, legal and economic care.
- iv) The legislation should regulate the condition of women actually engaged in factory work the hours of work, periods of rest, the prohibition of night work and/or the handling of machinery.

- (f) Create a Flexible Work Environment: A conducive work environment not only develops the economy on the whole but also gives an opportunity to a woman to enhances her productivity and promote her personal development. This in fact increases the role of workplace more, as there is a need to shift from a present discriminating culture to a results oriented culture having those who are the best, irrespective of the gender. The suggestive measures for workplace, to increase the role of women are:
- i) Accept women as an equally capable participant and colleague instead of just a women worker, who is there for passing her spare time
- ii) Giving proper recognition to a female employee's work.
- ii) There is a need for fairness of evaluation i.e. clear criteria for success, clear rules about advancement and transparency in the evaluation process.
- iii) Accept that women have dual responsibility of looking after home along with the office, of which she can never be relieved of. Moreover a men can work and concentrate on his job just because he has a wife to look after his and family needs at home, but when a women steps out, she doesn't have a wife to do the same.
- iv) The manufacturing companies should provide conducive and healthy environment to women because without this, the women will never step-in into this sector and which will affect our economy development.
- v) Exhibitions/ conferences/ seminars should be held where female employees interact with other engineers to motivate and to learn from them.
- vi) The professions should be socially-conscious, application-driven and teambased.

Conclusion: There is no denying that the role of women in society has changed enormously in the past 50 years. Just to bring some data on record, "As per Census 2011, the population of India is 1210.19 million comprising 586.47 million (48.5%) females and 623.72 million (51.5%) males. Females have a share of 48.1% in the urban population and of 48.6% in the rural population. On education front,

the number of girls per 100 boys enrolled in different levels of school education is on the rise over the years, but the gap still continues well over 10 in primary education, more than 20 at middle level and secondary classes. And the most important issue discussed above, Work force participation rate of women and men is a good indicator of economic development of the country. In 2005-06, in rural areas, Labour force participation rate of women was 15.20% and that of men was 56.60%. It has been observed that 38% women and 62% men are employed in unorganized manufacturing sector in India. This indicates clear gender divide in labour force participation rate. Rural-urban differentials are also notable.[13] Women is considered as the real architect of society as within her is the power to create, nurture and transform. In today's time women are not only competing but also matching their steps with men in many fields but she is lagging behind in manufacturing sector. She is facing the various challenges to pursue her career in this sector. Because of society's psychological belief that women lack the aptitude to succeed in technical fields, the career of women in manufacturing is considered inappropriate. Today, women are equally as qualified for a position as males, but they are still getting less pay and growth to managerial positions as compared to men. The time demands the equal status for women at home and organizations. Now the time has come to advance our approach from "Education for all" to "Work for all" and "Security for work". All round development of a woman is possible only if we work at the grass root level and educate the society and root out regressive mindsets, customs and traditions in the society which are against the girl. For this individual, social organizations, government and other structures of the society should come forward and initiate viable programs. Only then we can think of all round development of woman and solution to tackle their various problems. Women are the guardians of the future generation and if they are in such pathetic condition wrought by the deliberate bias and discrimination against them then we can imagine the horrific future that is stored for the coming generations. Attracting and retaining more women in the manufacturing workforce will maximise innovation, creativity and competitiveness. India can develop and grow only when one half of the population is recognized as equivalent to the other half. There are

few lines by Lousia May Alcott(American Novelist) which describes the plight of women:

"When women are the advisor, the Lords of creation don't take the advice till they have persuaded themselves that it is just what they intended to do; then they act upon it and if it succeeds, they give the weaker vessel half the credit of it; if fails, they generously give herself the whole"

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