

Elaborating the Ideological and Structural Content of Women's Work in a Globalized Economy

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Abstract

Women's employment in the global market now has been increasing as a result of globalization and internationalization of labour. This study has two main objectives in its attempt to analyze the relations of gender, the global market, and health in the workplace. First, the article tries to elucidate the structural content of work as seen in the work organization; and second, to elaborate the ideological content of work as defined by ideologies of the organization, of the state and of the market production system. The study used quantitative methodology through surveys of 630 women workers in 23 establishments, as well as qualitative methodology using 10 interviews and focus group discussions. The study showed that assembly line work was also reported to be boring, fast-paced and requires upskilling regularly. Most of the respondents (76.3%) did overtime work. Quantitative overload was significantly related to a number of symptoms of psychological health issues such as poor work motivation, low self-esteem, absenteeism, and tardiness. Women workers were exposed to heat (58%), intoxicating odors (42.8%), noise (33%), and other hazards at work. The more work specific health problems of the women were body aches (73.5%), eye problems (36.5%) and urinary tract infection (32.1%). The study showed that ill health under a global economy results from the impact of measures designed to enhance the profitability of capital- from shiftwork, overtime, apprenticeship, homeworking, subcontracting, teleworking, part-time work, and piece-rate work exposure to dangerous chemicals, industrial injuries, stress, or a damaged and polluted environment. This study tried to develop additional theorizing on the relations of women, global market and health using health sociology and medical anthropology.

Keywords: Women Workers, Global Market, Occupational Health, Information technology,

Introduction

The analysis of women's paid work is becoming an increasingly important task because of the rise of women's employment in contemporary times in the Philippines and Asia in the late 1970s. Ong in 1987 noted that during the past quarter century, there is a rise in female labour participation even in countries that traditionally did not allow their women to work outside the household (Pyle, 1983; Hein, 1986; Ong, 1987; Feldman, 1992).

Women's work has coincided with the intensification of global market participated by various nations through economic and legal means. This analysis has come to include information technology which is one of the most significant features of women's work in the 21st century. This study has tried to discourse on several concepts pertaining to women's contemporary work, such as: What is the impact of information technology (IT) on women's employment? Is IT related to job losses and job creation, job satisfaction, job control and

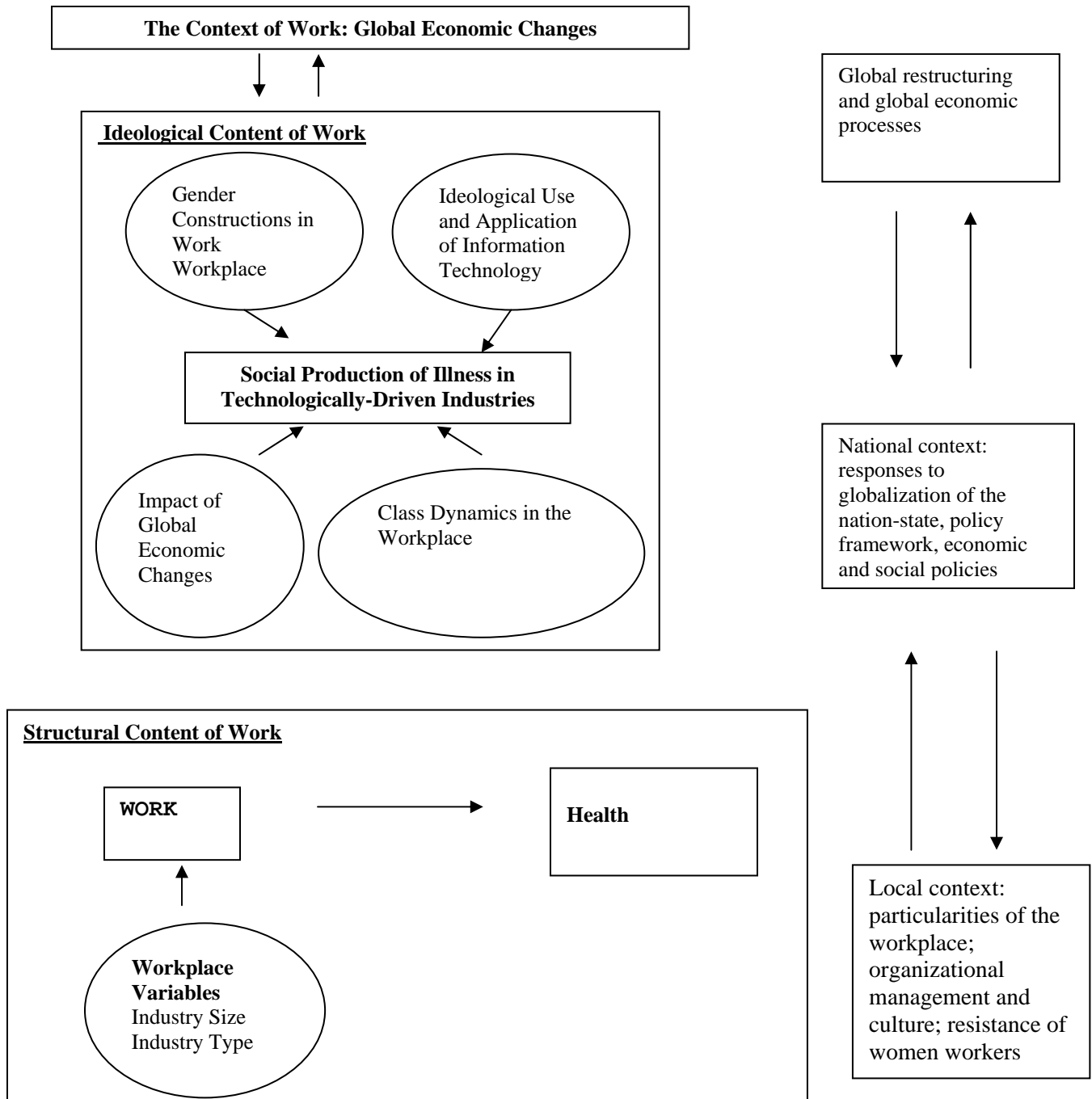
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social relations of work, and skills and training? Is there job expansion, multiskilling, more work integration and coordination between assembly workers, or fragmentation of work, and overload? (Hill, 1981). The legal and socio-economic benefits given to multinationals are based on the premise of creating more jobs and employment. But does the woman's job reflect her opportunities- or lack thereof- in relation to technologies which are viewed to promote development? (Dauber, 1981). Information Technology (IT) was launched as an offshoot of the new demands of the global labour and global market (Fröbel, F., et.al., 1980; Webster, 1996). The relocation of manufacturing industries to low-waged and poorer nations has been pursued for several reasons. For one, labor is cheap with relatively good pool of trained and semi-skilled employees. Second, following the prescriptions of the World Bank, the developing nations provide legal and structural benefits for multinational investments such as unlimited repatriation of profits, reliable transportation and telecommunications, infrastructure, tax holidays, and lifting of trade barriers like quotas and tariffs (Webster, J., 1996).

With electronics output consisting of more than half of the total exports of the Philippines to the global market, the contribution of women in economic productivity and ultimately in the economic performance and growth of the country becomes immensely visible and important (www.peza.gov.ph). What exactly happens within the workplace as it relates to women workers will shed light on the sociological understanding of women's paid work. It is also relevant to look into the effect of work and work conditions to the health of the women workers. The study of physical health is of genuine sociological interest and it is unfortunate that much of the field is already cluttered by sociobiology and genetics -- quantitative researches that are rationally based on western methodologies of scientific investigation and which exclude insider-knowledge and qualitative analysis. Important developments in postmodernism, anthropology, phenomenology and feminism which provide a basis for the sociology of medicine taking into account human embodiment and the larger societal context. The risk factors for health have gone beyond the identification of microbiological processes to include the wider environment - both physical and social. This study examined the health of the women workers starting with an empirical investigation on the work conditions of women workers in selected industries in an export-processing zone in the country. Then it proceeds to a sociological analysis of health with implications for health management and health politics.

This sought to develop up additional or new theorizing on the relations of women, the global market and health. As such, this study has two main objectives in its attempt to analyze the relations of gender, the global market, and health in the workplace. First, this study tries to elucidate the structural content of work as seen in the work organization and work conditions in the workplace; and secondly, to elaborate on the ideological content of work as affected by ideologies of the organization, of the state and of the market production system. The content of work was analyzed in the context of global economic changes. Please see the conceptual framework (Figure 1). This study on the ideological and structural content of women's work is a continuing analysis of a previous comprehensive research on women's work in export zones in the Philippines.

Figure 1: Conceptual Framework



In order to develop an analytical construct of the ideological content of work, a research investigation was done among women workers in certain manufacturing industries operated by multinational companies where variables such as organizational structure, gender relations, hazard exposures, actual illnesses, and work policies were investigated. Ideological content of work pertains to the prevailing ideology of work in the global market today which is mainly driven by capitalism. The results of the actual research investigation were then used to build up cases for the ideological content of work consisting of the following concepts:

1. Gender construction in the workplace
2. Ideological use and application of technology
3. Class dynamics in the workplace
4. Social production of illness

Methodology

For the quantitative aspect of the survey, a questionnaire was used for 630 women from 23 establishments in an export zone in the Philippines, administered by trained research assistants under the supervision of the author. The labour force profile of industries in export zones consists of 75-90% women and only 10-25% men. This suits the target population of the study. The questionnaire looked into the variables of concern including socio-demographic factors, work profile, the labour process and health conditions. Health information was taken from the self-assessment of the workers. Categories were based on the existing health form used by the Department of Labor and Employment (DOLE). The category was based on system affectation- neurologic, dermatologic, genito-urinary, cardiovascular, reproductive, circulatory, and musculoskeletal.

The FGD and Interviews focused on the following topics

1. The extent and nature of women's illnesses and work conditions.
2. Participation of women in labour unions, their work issues, and patterns of interaction and negotiation with management.
3. Ideological use of technology and the role of gender in the use and application of technology.
4. The new organizational management styles to cope with global changes.

The focus group discussion was composed of 6-7 women workers and a labor representative was invited. The women were randomly selected by the research investigator, and were composed of assembly line workers and labor union representative. The discussion was characterized by three phases starting with the warm-up stage where the study was introduced, and the participants got to know each other. This was followed by the elaboration stage where actual discussion occurred. Finally, the cool down stage was the phase where the interviewer/ facilitator tried to summarize the information gathered in the process, and comments or validation were given by the women.

The ethics of research was incorporated through informed consent of the participants, confidentiality, and validation feedback. This study is aimed at not just providing a collation of data and information but also for intervention strategies. This is similar to Habermas emancipatory approach in the conduct of researches. Researches should not only be at the level of baseline data gathering or casual investigation, but must endeavor to come up with policy implications or strategies for empowerment (Habermas, 1995).

Presentation and Analysis of Data

Gender Segregation in the Workplace

The common belief that males are more technologically skilled leads men to occupy IT-related jobs in the Philippines. This is also reflected in the gendered educational structure that produces a dominance of males graduating in computing and engineering courses. Across various industries, there is also gender segregation in polarities between the skill/unskilled, heavy/ light, dangerous/ less dangerous, dirty/ clean, interesting/ boring, and mobile/ non- mobile types of work. The first of each of these pairs is held to be appropriate for males while the second pertains more to female work. The construction of femininity makes women the preferred workers because they are docile, dexterous, patient, attuned to boring and repetitious work, and willing to accept lower pay as it is the men who have to earn a family wage.

In this study, women workers noted that it is the males who were given better training opportunities. In the study, despite the opening up of opportunities for continuing education and desegmentation in the job which in a way dilute the impact of gender and class in the occupational sector, information technology, especially the advanced training, were male's domain. The introduction of new technology simply brings its own version of segmentation (Acker, 1988 in Webster, 1996).

The new era of work definitely offers better employment opportunities for the women. In the study, women represented almost 75% of the total labor force. But the nature of work is still far from totally empowering them. Today, the terms of women's work are precarious especially in the manufacturing sector where it follows the cycle of fluctuations in the global market. This is known as the temporization of work, redolent to the features of Fordist production. The women form a permanent core of work pool although in very precarious terms of casual work, subcontracting and home work as employers now strategize their positions in the global market arena. In many companies, employment transformations brought about by information technology have strengthened the numerical and locational flexibility of women. In every restructuring of the global market, there is an inevitable repositioning of the labor market, which in the age of information technology make women more vulnerable (Nelson, 1979 in Ng, 1987:10). The accommodation of women into the labour force in the new industrial organization however was not sufficient to establish a better position for women in society. In other words, the new developments led to an increase in the number of women in the labour force, but the impact on their quality of life and decision making processes is still to be felt (Palmer, 1977).

According to Ong (1987), women's participation in the labour market has both positive and negative effects. The market can break up patriarchal traditions like arranged marriages that limit individual autonomy. But it can also lead to dual discrimination both at home and at work where gender segregation still exists. She cited that the literature on female labor in export-processing industries has provided a variety of examples on how both positive and negative impact of work affect women- while allowing them to be employed and gain financial autonomy, they are also discriminated at work (Pyle, 1982; Hein, 1986; Ong, 1987).

In the Philippines, women workers are in the 15-34 years age range, accounting for 49% of females in the labour force (NSO, 2002). This has great implication to woman's health, specifically reproductive health. There are accounts of abortion and other reproductive dysfunctions due to chemical exposures in electronic and semiconductor

industries (Lu, 2000). Repetitive tasks in electronic assembly such as soldering to microchips result in certain visual problems and musculoskeletal problems. Repetitious and detailed assembly line eventually leads to mental and physical stress. In the microchip assembly line, for instance, this "...consists of slicing silicon wafers which are two- to four inches in diameter into 500 pieces of microchips of 25 mm and bonding these chips with as many as 50 gold wires, the size of strand of hair, to circuit boards. Workers use a high powered microscope and mass work at top speed because individual quota run as high as 800 chips per worker per day (Eviota, 1992:120)."

While women are employed in export zones at an increasing rate and even represent bigger proportion of the total surplus force, gender stereotyping of job exits. Women tend to be employed in assembly, post assembly, or finishing and administration, while men are found in more skilled jobs (Chant and McIlwaine, 1995; Santiago in Fernandez (ed) 2000). This stereotyping is carried over to major occupational groupings where we see women in sales, professional/ technical and clerical jobs which are perceived to be light and feminine work (Santiago in Fernandez, 2000). In managerial and supervisory positions, there are only 33% women, and 69% of these women have earned a college degree compared to only 58% of the males (Ofreneo, 1995). In fact, for every five high ranking employees, there is only one female (Del Rosario, et.al. 1996).

Socialist and Marxist Feminists argue that the cause of women's exploitation and marginality in the marketplace and socio-economic arena lies in women's dependency in the household (Banejeri, 1980 in Ng, 1987). There are existing structures within the home and ideologies that maintain and reinforce occupational segregation. Women's work at home set limits on how they sell their labor in the market. Due to home responsibilities and reproductive roles, the woman cannot totally devote her labor in the productive sphere. With only a part of her time available for such an endeavor, she resorts to homework, subcontracting work, and teleworking. To accommodate the inherent lack of control of the woman over her labor, she is now willing to sell it in exchange for a lower wage. This becomes more logical when her income adds in a way to her autonomy and gives her a leverage in renegotiating her position at home. Although there is increased sex segregation within industries and across the economic sectors of society, women welcome manufacturing work as the salary, prestige and autonomy that they gain in their new positions provide them with a better bargaining power than their old positions in their homes (Glenn and Feldberg, 1983 in Ng, 1987).

Labor economists hold that differential in earnings is due to differences in skill investment. Thus, women have lesser wages because of the nature of the skill they possess. But recent trends show that there are many factors in the economy, even outside the economy itself, that affect the labor process. The skill required in 'women's' jobs both at home and at work is often undervalued (Beechey and Perkins, 1987; Pollert, 1988). These skills of women derived from traditional homework activities such as sewing, embroidery, weaving are not recognized by employers as skills. The fact that women's work regardless of the technical component of the skill has lesser value is proof that the work is evaluated in terms of ideological orientations related to gender constructions (Baron and Bielby, 1980; Jacobs and Steinberg, 1990).

Skill is not merely a technical qualification or the ability to perform something but it is also an ideological category. The association of masculinity with technical competence and control, and its obverse in women is in fact related to the social and ideological construction

of the concept of 'skill' (Phillips and Taylor, 1980 in Webster, 1996), which is then translated to levels of pay. Women carry with them their subordinate status in the home to the workplace, and this comes to define their status in the workplace. In fact, the increasing participation of women in the labor force is seen as the increasing double burden of both paid work and homework. The UN report states that women constitute 70% of those in absolute poverty because of their unequal labor market position articulated in the patriarchal and capitalist modes of production (Jacobs and Steinberg, 1990).

IT Work: A Male Dominated by Field

Gender differentiation in Information Technology (IT) work can also be viewed sociologically as a social construction and distribution of knowledge. In the study of Saloma in 2002, she noted that IT work is inhabited by a set of knowledge that is constructed by active actors and that this set of knowledge eventually is expressed in the realm of social practices in IT work.

Stephanie Nelson contends rightly that women are no strangers to technology, but historical accounts of technology downplay the role of women (Nelson, 2004). This is reiterated by Slocum who argues that the first tools of civilization were baskets and other plant-harvesting implements created by women (Slocum, 1975).

Saloma said that in a company providing web solutions, there were more men than female workers, more male engineers, and more male software and hardware design engineers. This confirms the gender distribution of knowledge, allocating women to certain specific occupational work. Although she noted that women have a more optimistic place in IT because of the conception that IT is light work and thus a feminine work, they still tend to dominate the lower-end of IT occupations. The breakthrough of women comes only in specific job categories, demonstrating that the social distribution of knowledge in IT jobs is still strongly gendered.

Construction of Class at Work

Sex segregation in the workplace is a real, flagrant manifestation of segregation in the global labor market. The unequal relationship between periphery and core is explained within the context of a global manufacturing system derived along the lines of gender and race. The new international division of labor is characterized by newer categories of gender, race and class. Eco-feminists say that the transfer of the manual manufacture of information technology to third world countries characterizes the fragmentation of work which allocates the most repetitive, exploitative and back-end processing to the poorer nations (Kelly, 1983 in Webster, 1996).

While women experience all aspects of patriarchal relations at work and the effects of the masculinisation of technology to a greater or lesser extent, there are also differences in power relations between and among women segregated by their class and occupational positions. For instance, the study showed that there are two types of secretarial work. The "personal assistants" have better descriptions of their work conditions. Their jobs are valued and recognized by management. They hold key information about the company, and organize the activities of their boss. At the other end of the spectrum, there are the undervalued and increasingly marginalized women in the "typing pool". The former have career development and training opportunities while the latter are relegated to non-career, part-time temporary work. This was also noted in the study of Compton in 1984 between personal assistants,

many of whom are graduates and spoke second and third languages, and secretaries, whose function was straight word processing and who could “type like billyo” all day long. Among the women, the study showed that their status was still stratified by their educational level, competence, and class.

For the FGD and interviews, the women said:

- “We remain as assembly line workers. There is no opportunity for us to be promoted at work. Worse, we are laid off when there is no quota requirement from the market, and then called in again when market is good.” (translated)
- “We are taken in as visual inspectors of microchips, to solder the chips with the use of lead, or even assemble minute parts of the electronics. Bout seventy percent in our plant are women workers.” (translated)
- “Although the assembly line workforce is mainly women, the managers and supervisors are mostly males.” (translated).
- “We are exposed to toxic fumes that some of our co-workers say predispose us to developing some work related illnesses. But there is no available compensation for occupationally-related illnesses. But having a job is better than having none at all.” (translated)
- We, the assembly line workers, are exposed to more hazardous type of work compared to the women in the personnel department such a sthsoe who merely type or do administrative work. We are directly exposed to hazardous chemicals since we handle them in our work.” (translated)

Table 1 below shows that assembly line workers have work that is boring, fast-paced and one that requires upskilling regularly compared to clerical workers. Assembly line work also requires more strict visual inspection, has heavier physical load, and requires handling more chemicals and more exposure to radiation, compared to clerical work. For work environment factors, assembly line work exposes workers to fumes, intoxicating odor, hot temperatures, excessive noise and prolonged work compared to clerical work. Strict supervision is also associated with assembly work while participation in bench-marking is related to clerical work. This implies that clerical work has a higher level of job autonomy compared to the assembly line. More accidents like eye infections, inhalation of dust and being caught in machines are reported among assembly line workers. Wounds are more likely to occur by 1.86 times and hearing loss by 4.77 times more among assembly line workers than clerical workers (Table 1).

Table 1. Chi-square Test of the Relationship of Type of Job (Assembly Line Workers vs. Clerical Workers) and Nature of Task of Workers

Factors	P-value	Odds Ratio*
Work is Boring	.028 *	1.91
Work requires Fast Pacing	.002 **	1.92
Work requires New Quality Regularly	.038 *	1.67
Requires Strict Visual Inspection	.005 **	1.81

Requires Heavy physical Load	.009 **	1.95
Requires Handling Chemicals	.000 *	3.28
Requires Exposure to Radiation	.005 **	2.12
Exposure to Fumes	.075 S	1.66
Exposure to Intoxicating Odors	.001 **	1.99
Exposed in Hot Temperatures	.000 **	2.65
Exposed to Excessive Noise	.001 **	2.19
Requires to Stand for Hours	.001 **	3.16
Eye Infection	.039 *	1.55
Falling Accidents	.020 *	2.31
Caught in Machine Parts	.057 S	1.79
Seminars on Health and Safe Living	.023 *	1.67
Worker Participation in Seminars	.052 S	1.50
Company Policies Covering Promotions	.075 S	1.47
Supervisor Always Watches Workers	.004 **	1.84
Supervisors Tell Workers What to Do	.003 **	1.99
Worker Participates in Bench Marking	.016 *	.61
Wounds	.048 *	1.86
Hearing Problems	.005 **	4.74

*Significant at 5% level of significance; ** Significant at 1% level of significance; S Significant at 10% level of significance

With the changing occupational and economic structure in both developed and developing countries, women do not remain as traditional housekeepers but they participate in employment at extremely high rates. With their perceived, inherent characteristics of being dexterous, meticulous, subservient and docile, manufacturing industries prefer them over males. The hazards affect men and women, but as more women are found in the lower hierarchies such as assembly line work, they become most vulnerable. Women's work is also affected by where they located in the global production chain. The work of women in the so called Third World is different from women workers in the First World. The back-end processing, manual intensive, dirty manufacturing and less skill-intensive tasks are more frequently relegated to developing countries. As such women in the third world are affected by both their gender and class positions.

According to Aiwa Ong, there is indeed an international division of labor within high-tech industries wherein research and development is carried out in core areas (Silicon Valley mostly) and assembly and testing are done in the peripheries and offshore plants located in Malaysia, the Philippines, Singapore, Puerto Rico, Southeast Asia and to a lesser extent in Latin America and Europe (Ong, 2007).

Ideological and Structural Application of Information Technologies (IT)

The challenges that the new workplace poses to its employees are unique especially with the introduction of new information technology. The implications of information technology and automation in industrial organization included a shift to newer and higher value-added activities, upgrading of the technological level of existing industries and production processes, and the phasing out of those products and processes which have lost their

competitive advantage in an increasingly labor scarce economy. Research for the study indicated that entire workstations could now be manned by only one person, as the operation is built in the memory of computers. The intensive use of computers and microchips in production has become so great so as to alter the processes in design, fabrication, quality control, marketing, networking and supervision.

In the 1960s and early 1970s, business activities increased substantially leading to the development of information technology to handle large amounts of data. At first, this created a centralized department handling data where the punch-card operators were separate from the users. Training for the assembly-workers was low-level in nature and only the systems engineers understood the entire process. The innovations were mainly adopted by “an ‘extended elite’ made up of computer experts, representatives of work organization and some experts for specialized applications (CEDEFOP 1989). After this phase, multiple local application of processing was introduced to allow more access among local users.

The new technologies and computer-aided technologies used by the sample industries in this study were:

- computerized decision support systems;
- computer information systems;
- computer aided design (CAD);
- computer aided manufacturing (CAM);
- computer integrated manufacturing (CIM);
- computer numerically controlled machining (CNC);
- mechanized product systems such as conveyor belts or workstations; and
- robotics

Social Production of Illness

For illnesses and health problems, women reported of frequent headache, coughs and colds, body aches, eye problems, urinary tract infection, skin allergy and spontaneous abortions. The accidents they encountered were cuts, and being caught in the machines. Occupational injuries were also investigated and reported by Aiwa Ong. She said that workers who are employed in more hazardous jobs suffer a greater risk of injury and illness. In the case of immigrant workers, she noted that Latino men were two times at greater risk than White male workers to suffer a disabling injury or illness and that Latina women were 1.5 times as likely as White women (Ong, 2007).

Within the local economy, the production-worker, the blue-collar, and the assembly-line worker are the most affected because of their close connection to actual production (WHO, Global Strategy, 1994). In the interviews with women workers, they said, “Some of the women here have asthma, and it is aggravated by dust and chemical exposure. The asthma attacks are reported to be diminished over the weekend, but then recur during the workweek (translated).” The women experience an unhealthy work environment.

The social production of illness paradigm critiques the common perception that illness is caused by poor lifestyles as behavioral theorists contend, instead, arguing that it is caused by work conditions and hazard exposures at work. There has been a tendency over the years to shift the blame to the victims as careless and irresponsible workers. This ignores the dangerous processes and structures that are the real causes of occupational hazards. The women workers said in the interviews that the company gives them health updates on heart disease, family planning and others emphasizing on how to change lifestyle. Little is said

about the work-relatedness of these diseases. The thrust is to change lifestyle and behavior seen to be the “cause “ of illness and injury without looking into how work should be reorganized and redesigned to eliminate hazard exposures.

Medical anthropology can also be used in having a better understanding of women’s health vis-à-vis women’s employment. There is a need to integrate alternative and complementary health systems, as well as elucidating the interaction between biological, environmental and social factors affecting health and illness at both the individual and collective levels (Hughes, 1994). According to Hughes, sickness is not just an isolated event, but that the human body is the most proximate terrain where nature, society, and culture speak, and where social truths and social contradictions are played out. This is truly the case at hand in this study where the socio-economic conditions at work create conditions of illness or health for each woman worker.

Conclusion

This study focused on the position of women in new work organizations in the global market in the Philippines in particular, but extending globally. While opportunities are available to women in the economic sphere, their position is more precarious compared to the males. Even among the women themselves, the study showed that they are polarized along lines of class and level of qualifications.

Based on the study, we posit that there are many factors affecting the position of the woman in the workplace in a global market. There are those who were pushed into low-skill dead end jobs because of automation and technology, reiterating the existing patriarchal relations.

In the end, this study has confirmed that there is gender differentiation in the new work organization, that women’s position in the labour market is affected by both her gender and class status; that technology is not neutral and carries with it skill definitions that are gendered; that illnesses of worker’s are a result of occupational hazards and stresses emanating from organizational restructuring to accommodate the demands of a more competitive global market; that organizational measures such as lean production, shiftwork, among others, have affected the health of women workers; and that the lens through which medical practitioners and policy makers should look at occupational illnesses should shift from a biological/genetic model to the accommodation of structures in the work organization. Ultimately, the problematic of poor, rural women workers moving into factory labour can be approached and solved only with consideration of the wider socio-political and economic policies of governments.

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