Abstract

This paper is based on research in a rural Taiwanese village in which married women with children are a major source of labor for local industry. Responsibility for job and home expose these women to repeated stressors that can lead to increased susceptibility to illness. Existing explanatory models linking employment and women’s health, however, do not adequately explain the women’s response to their work. A refined model incorporating political and socioeconomic structures is constructed and discussed.

About the Author

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WOMEN AND WORK IN RURAL TAIWAN:
BUILDING A CONTEXTUAL MODEL LINKING EMPLOYMENT AND HEALTH

Introduction

During the past two decades, Taiwan's economy has ranked among the fastest growing in the developing world. As its economy has grown and the demand for labor increased, women have entered the wage labor force in large numbers. In 1979, approximately one-third of Taiwan's labor force was female. Forty percent of women age 15 years and older were workers and over one-half of these women (52 percent) were married and living with one or more family members (DGBAS, 1979:48-49).

To understand the meaning of work to women such as these, I lived in the Taiwanese rural village of Hsin Hsing for four weeks during the summer of 1982. The village and its people were already well known to me; I had done 17 months of field research there in the late 1950s, visited often in the 1960s while studying the migration of Hsin Hsing residents to the capital city of Taipei, and lived and studied there twice in the 1970s. During the 30 years of study, the economy of Hsin Hsing changed dramatically from a system based almost purely on agriculture to one founded predominantly on off-farm employment. By 1979, four-fifths of the village men were engaged in non-agricultural activities and village women had been drawn into the off-farm labor force in large numbers, to meet the area's great demand for workers by labor-intensive industries.

A majority of these employed women held jobs that entailed physical hazards. Those who handled cotton fibers were exposed to cotton dust and the risk of respiratory disease. Others routinely came into contact with chemicals known to cause skin and eye irritations, as well as a variety of more serious conditions faced by workers in the textile, apparel, and electronics industries. Most worked at jobs that involved lifting, bending, carrying, and standing, all of which can have adverse effects on health. A majority also held jobs conducive to stress and, in their dual roles as workers and housewives, they were exposed to repeated stressors as well. Thus, the social aspects of their work, like the physical ones, exposed the women to many health hazards.

I did not collect detailed or systematic data on the women's health. Yet in interviews about their work and its meaning to them, invariably the subject of the women's health status and behaviors was discussed. They readily attributed a number of acute symptoms and illnesses to the physical aspects of their work. But without longitudinal data, it is impossible to evaluate the overall effects of these hazards on their future health (Waldron 1980:443) or to assess the long-term consequences of the social aspects of their work on their health (House et al. 1986). Nevertheless, to understand what these consequences might be, I turned to the literature about women, work, and health in the United States.
There I found two interpretations, or polar views, of the relationship between women's well-being and the social aspects of their work. These I labeled the rewards and the stress/strain models. Both were based on the assumption that women's cognitive responses to employment mediated between health outcomes and individual situations (see, for example, Haw, 1982; Lewin and Olesen, 1985; Stellman, 1977:40-80). One interpretation emphasized the perceived rewards of working and, hence, the positive effects of employment on health, while the other stressed the perceived tensions of working and, accordingly, the negative consequences of employment on health.

Neither model, however, adequately explained the response of Hsin Hsing women to their work and life situations. My attempt to understand why this was so raised a number of questions: Why do women assign different meanings to their situations? What do these meanings reflect about the social, political, and economic contexts in which they are situated? How is women's health or illness shaped by the dynamics of this larger system? The answers to these questions led to the development of an exploratory model linking employment and health. This model outlines the relationship between microphenomena such as meanings attributed to work and health states and macrophenomena such as national socioeconomic processes and the world capitalist system. The purpose of this paper is to describe women's work and its meaning in Hsin Hsing and to discuss the contextual model developed.

The paper begins with a brief review of the two models that have been offered to explain the consequences of work for the health of women. Next, the development of Taiwan and the traditional Chinese family are discussed to establish the political, economic, and the cultural contexts in which the women of Hsin Hsing are embedded. Following this discussion, descriptive data about Hsin Hsing are presented and the meaning of work to its women is explored. In a final section, the contextual model linking employment and health is discussed and its applicability to Taiwan and the United States is considered.

The Rewards and Stress/Strain Models of Employment and Women's Health

Researchers who adopt the rewards model to explain the effects of employment on women's health tend to focus on the positive aspects of the worker role in contrast to the negative aspects of the housewife role (Ferrie 1976; Haw 1982; Hochstim 1970; Nathanson 1980, Weissman and Klerman 1977). According to this view, working offers a challenge and opportunities for self-direction not found in housework and leads to favorable conceptions of self. Further, it provides relief from the social isolation of housework by making social contacts and support available to women and by alleviating the problems of boredom and meaninglessness considered endemic among housewives. Wages and salaries earned through work are also viewed as rewards; they are considered to give women a sense of independence, thereby mitigating the feeling -- assumed to be common among housewives -- of inability to change and control their lives. Earnings are also thought to improve women's position within the family; in recognition of their
proposes a contribution to the group budget, their authority in decision-making increases.

Proponents of the rewards model, then, believe that the increased self-esteem, social interaction, autonomy, meaningfulness, and status that accompany women's employment decrease their susceptibility to illness and disease. In their view, working is positive for women's health. What they often fail to recognize, however, is that self-actualization is possible only under conditions of economic security. Many women enter the labor market not to fulfill themselves but rather to supplement the family's income or to guarantee its survival. For such women, the rewards of working may be outweighed by the stresses and strains associated with it.

Although it is difficult to define stress, much evidence exists to suggest that situations perceived as threats to a person's well-being can produce physiological changes (Selye, 1976) and that repeated or prolonged stress can increase susceptibility to health problems (Cassel 1976; Selye 1976). Four stress/strain models to explain this relationship have been developed.

Some researchers suggest that role overload is associated with an increase in symptoms of ill health (Gove and Geerken, 1977; Woods and Hulka, 1979). Employed women who carry dual responsibilities for home and job become debilitated by the effort needed to fulfill both sets of role requirements (Haw 1982; Haynes and Feinleib 1980; Miller et al. 1979). The pressures created by the two roles thus may increase their susceptibility to disease.

Others believe that the demands of multiple roles on married women compete to create role conflict and result in vulnerability to ill health (Gove and Geerken 1977; Miller et al. 1979; Powell and Reznikoff 1976). According to this view, when the expectations of mates are not mutual, women may experience feelings of frustration, of being pulled in opposite directions in the performance of different roles. Additionally, when married women enter the labor force out of economic necessity, their inner conflict may increase if their husbands hold traditional gender-role orientations and resent their working. Women's exposure to pressures created by conflicting expectations and active or passive resentment, then, may increase their risk of physiological and psychological problems.

Yet another explanation offered by proponents of the stress/strain model is the theory of discrepancy (Weissman and Klorman 1977). According to this view, "... access to new opportunities, and efforts to redress the social inequalities of women in the United States are discrepant" and this discrepancy may be a contributory factor in the recent increase in depression in American women (ibid.:108). "Depressions may occur not when things are at their worst, but when there is a possibility of improvement, and a discrepancy between one's rising aspirations and the likelihood of fulfilling these wishes" (ibid.). The inability of social and economic measures to keep pace with women's higher expectations, then, is believed to cause an increase in women's vulnerability to psychological distress.
The final variant found within the stress/strain model is that suggested by researchers who posit that the work conditions of women are hazardous to their health (Haw 1982; Haynes and Feinleib 1980; Miller et al., 1979). Women usually hold jobs of lower status, poorer quality, and lesser remuneration than men. Their jobs are repetitive and predictable, governed by deadlines, closely supervised -- frequently by non-supportive superiors -- and dead-end. These negative dimensions of women's occupations are speculated to be frustrating and stressful and thus detrimental to their health.

Proponents of the stress/strain model, in sum, posit that working attacks the physiological and psychological integrity of women, thereby making them vulnerable to illness. While this explanation is plausible, researchers who pose it leave several unanswered questions: Why are women exposed to similar stressors not equally prone to sickness? Why are some women able to adapt to adverse stimuli but not others? The stress/strain model, in other words, does not explain variations in health outcomes among working women. The following sections present data that may suggest why this is so.

Development in Taiwan

When the Nationalist Government retreated to Taiwan in 1949, it found a primarily agricultural island marked by conditions not all favorable to development. The policies it adopted to foster economic growth have been documented in detail elsewhere (Ho 1978; Lin 1973). Suffice it to say that the government initially strengthened agriculture to provide a base for industrialization, pursued a strategy of import substitution for a brief period during the 1950s, and then in the 1960s adopted a policy of export-oriented industrialization.

The latter policy produced dramatic changes in Taiwan's economic structure. Agriculture's share in national output declined as industry's rose. By 1973, agriculture contributed only 11 percent to Taiwan's Gross Domestic Product, while manufacturing accounted for 43 percent (Ho, 1978:130). Industrialization was not restricted to a few urban centers, however. During the late 1960s, industry began to disperse to the countryside to gain access to labor and raw materials. By 1971, 50 percent of the industrial and commercial establishments and 55 percent of the manufacturing firms in Taiwan were located in rural areas, and the proportion of farm households with members working off-farm grew (Ho, 1979). Although the response of farm households to these changing conditions varied, most reacted in ways that were consonant with traditional Chinese culture and the Chinese family system.

The Traditional Chinese Family

The economic family, the chia, is the basic socioeconomic unit in China. Such a family takes one of three forms: conjugal, stem, or joint.
The conjugal family consists of a husband, wife, and their unmarried children; the joint family adds two or more married sons, their wives, and children to this core group. The stem family—a form that lies somewhere between the conjugal and joint family types—includes parents, their unmarried offspring, and one married son with his wife and children.

China's patrilineal kinship structure recognizes only male children as descent group members with rights to the family's property. In the past (and to a large extent today) residence was patrilocal; when a woman married, she left her natal home to live as a member of her husband's family, severing her formal ties with her father's household. Parents considered daughters a liability: household members who drained family resources as children and who withdrew their assets (domestic labor and earning power) when they married. Sons, in contrast, steadily contributed to the family's economic security during its growth and expansion and provided a source of support in old age. Not surprisingly, parents strongly preferred male children.

Members of the older generation also strongly favored arranged marriages. Marriage brought a new member into the household, joined two people in order to produce children, and established an alliance between families. The needs of the family, therefore, took precedence over the desires of the individual in the selection of a mate. When parents arranged marriages, they attempted to recruit women who would be compliant, capable workers, who would produce heirs for the group, and who came from families willing to forge bonds of cooperation and obligation.

Traditionally, all members of the family lived under one roof, except for a few who worked outside to supplement or to diversify the group income. Ideally, the family functioned as a single, cooperating unit in all activities. Members of the household had clearly defined tasks which were allocated primarily on the basis of gender. Dominating the public domain, men worked outside the home in the fields or elsewhere. Presiding over the domestic sphere, women managed the household and serviced its members, helped with agricultural chores and, frequently, engaged in supplemental cottage industry. Men and women, in other words, performed different tasks as members of a cooperative enterprise in which all property belonged to the family as a whole, except for the personal items and clothing brought by a woman as part of her dowry.

An authoritarian hierarchy based on gender, generation, and age dominated life within the family. The oldest male had the highest status; women's status, although it increased with age and with the birth of sons, was lower than that of any man. The desires of women were subjugated to those of men, just as the wishes of the young were subjugated to those of the old. The older generation socialized women from birth to accept their inferiority and subordination to males and to observe the "three obediences" to parents, husband, and sons. Despite the fact that women's work was necessary for the maintenance of the household, family members took women's labor for granted. Reproductive capacity, rather than hard work or economic
contributions, defined women's status. Women were brought into the family for the purpose of bearing and rearing a new generation; whatever their other achievements were, their position in the family depended on fulfilling this expectation. Women, in short, had no real control over their lives; social and economic marginality marked their experience.

**Hsin Hsing Village**

Hsin Hsing is a nucleated village approximately 125 miles southwest of Taiwan's capital city, Taipei, and located beside a road that runs between two market towns, Lu-kang and Ch'i-hu. Its people are Hokkien (Minnan) speakers, as are most in the area; their ancestors emigrated from Fukien, China, several hundred years ago.

The bus ride from Lu-kang to Hsin Hsing is made on a cement road flanked by clusters of village houses, farmland, and more than 30 factories. These factories are labor-intensive and range from large establishments that manufacture textiles and furniture, to medium-sized enterprises that build bamboo and wood products, to small, satellite factories (or family workshops) that perform piece work for larger firms. In addition to the factories situated along the road, the area is dotted with others that also produce articles for local and foreign consumption. Many are located within or adjacent to their owners' homes, as are the seven small satellite factories, three artisan workshops, and twenty-six retail and service shops and small businesses located in Hsin Hsing.

In 1979, 382 people lived in the village, although the villagers considered the population to include 543 people in 73 households (see Table 1). Eighteen percent of families (34 percent of the population) were of the joint type, almost three times as many as there had been in the late 1950s when we first studied Hsin Hsing (see B. Gallin 1966 and Gallin and Gallin 1982a). This increase probably reflected the villagers' belief that the joint family provided the means for socioeconomic success in a changing world (see Gallin and Gallin 1982b). A family that included many potential wage workers, as well as other members who could manage the household, supervise children, and care for the land, had a better chance of diversifying economically than did a family of small size.

The organization of the joint family did facilitate the employment of women in Hsin Hsing, as can be seen from the fact that seven of the ten women who were both under 40 years of age and members of joint families engaged in remunerative activities (see Table 2). These women had mothers-in-law resident in the household who could assume some of their role responsibilities during the daytime -- for example, supervising their children or working the family land. Women without available mothers-in-law, by contrast, were far less likely to pursue paid employment. Only four of the twelve women who were under 40 years of age and members of conjugal families worked for wages.

It is obvious, then, that the existence of a supportive family structure in which mothers-in-law took over some of the younger women's tasks had a
direct impact on women's access to wage work. Accordingly, the joint family was a strategy some villagers utilized to attain socioeconomic mobility of the family. But attainment of this goal often occurred at the expense of daughters-in-law, who assumed double work loads and achieved security only through the social mobility of the family as a whole (see R.S. Gallin, 1984).

Village families employed other strategies as well to promote their well-being. Wives of men who considered farming neither their primary nor their secondary activity took to the fields, replacing their husbands as the principal agricultural workers. Further, to the extent that working was compatible with their child-care responsibilities, married women joined their unmarried daughters and daughters-in-law in the wage-labor force to earn supplemental income for the family.4

The entry of women into the public sector can be seen from the fact that in 1979 two-thirds of the married women in the village identified their primary activity with roles non-traditional for women; two-fifths said they were wage laborers or entrepreneurs; and one-quarter listed themselves as farmers or assistants in a family business (see Table 3). Among women 39 years of age and younger, only 16 identified housekeeping as something they did. This does not mean that their counterparts did not manage and maintain the household and care for their children. This means that approximately three-quarters of these married women performed dual roles -- they were both non-domestic workers and housekeepers. In the next section, attention turns to a discussion of this double burden and the women's attitudes toward it.

Women's Work in Hsin Hsing

The daily routine of married women who work off-farm is not unlike that of 39 year old Mrs. Chen whose day begins when she rises at 6:00 A.M. to prepare breakfast for her family of nine (five children ranging in age from eight to sixteen years, Mr. and Mrs. Chen, and her in-laws). Before leaving for work, Mrs. Chen tends to the few chickens and ducks she raises for the family's consumption and does the daily marketing, buying her food from itinerant merchants who come to the village early in the morning. "Sometimes," she says, "if I am busy I will give my mother-in-law money and she will buy the food for me." More usually, however, her mother-in-law helps only by looking after the children when they come home from school.

Mrs. Chen works in a local factory eight hours a day. (She earns NT $230 -- $5.75 U.S. -- a day and works 28 days a month.) The factory is about a ten-minute bicycle ride from the village and she makes the trip four times a day -- at 8:00 A.M., at noon when she returns home for lunch, at 1:00 P.M. when she resumes work, and at 5:00 P.M. when her factory-day ends. According to Mrs. Chen:

I have to punch in on a timeclock four times a day: in the morning, in the evening, and before and after lunch. If I punch in one minute late, I lose $3-4 plus the $300 bonus that a worker receives for perfect attendance throughout the month.
Mrs. Chen's job involves placing pre-cut baseball bats on a spindle for finishing. She processes approximately 50 bats per day, which she says "requires a lot of strength." Because the factory is owned by Japanese and the workers neither speak nor understand the language, the owners have hired a translator to supervise the workers. Mrs. Chen describes the supervisor as "very bad."

He does not allow us to talk to each other while we work. If he sees us talking he comes over and tells us to stop talking. Once I became very angry and argued with him. I told him, "The workers you hired are not deaf-mutes." Now his impression of me has deteriorated and he has threatened to fire me because of my attitude.

Mrs. Chen says she was not frightened by this threat--"I am tired of the work." But she also admitted that she has not since argued with the supervisor. Working in the factory, she says, is not bad [although] the noise from the machinery is very loud. I do get tired, but I am used to it. I have to work to make money for the household necessities and to pay the children's school expenses. I was born to do these things. I must do these things.

At home in the evening, Mrs. Chen cooks, cleans, does the laundry, and tends to the children. Her husband does not share in these tasks. He does, however, take part in farming activities; this apparently explains why Mrs. Chen says that only during the busy agricultural season does she "often get up, go to the fields, return home to cook breakfast, go to work, return home, go to the fields, and then finally return to cook the evening meal." More usually, however, her husband takes care of the field tasks, if there are any, and then joins other village men to chat. She, in contrast, has little time to chat, since her domestic chores usually occupy her until she is ready for bed at 11:00 P.M.

The above excerpt from my field notes was chosen for several reasons. First, it illustrates the extent to which the conditions of the women's work are stressful; their jobs involve highly predictable and repetitive activities paced through external controls, all of which may make them vulnerable to ill health. Second, it illustrates the extent to which time pressures and role overload associated with the women's double burden (as workers and housewives) expose them to repeated stressors that may be associated with negative health outcomes. Third, it illustrates the women's attitudes toward their situation.

The excerpt shows that the women saw their work as neither rewarding nor stressful. They acknowledged the negative consequences of the work conditions, but thought factory jobs were a welcome alternative to agricultural activities (which they defined as "bitter"). They said they had too much to do (role overload), but did not consider their lives to be governed by incompatible norms (role conflict). They saw no discrepancy
between their expectations and their life options, but believed that what they were doing was what they should be doing.

The women of Hsin Hsing, in short, viewed their situation in ways different from what the literature had suggested. They considered paid employment as neither a positive nor a negative activity, but instead evaluated it on the basis of traditional, cultural norms. Socialized in norms of hard work, responsibility, compliance, and subordination to the interests of the patriliny, women accepted the expectation that they would sell their labor power to reproduce the family group. Held responsible for maintaining and servicing the household, women accepted the double burden of domestic responsibilities and wage labor. Provided with only a modicum of education and training, they subscribed to the belief that they would attain security and upward mobility through marriage and the advancement of the family economy. How the women saw their employment (what it meant to them, in other words) was shaped by the context in which they were embedded.

Women's Employment and Health in Political, Economic, and Social Context

The political economy of Taiwan is inextricably embedded in the world capitalist system (see Figure 1). To promote and sustain economic development, the government has depended heavily on foreign capital and trade, and its economy is extremely vulnerable to international market fluctuations. As a result, Taiwan's labor-intensive industries require both a cheap labor force to ensure that capital does not seek low wage rates elsewhere and an elastic labor force responsive to the demands of business cycles.

To produce this requisite labor force and to ensure the province's comparative advantage, the government must encourage an ideological climate that produces submissive and tractable workers willing to accept poorly-paid jobs and to be drawn into or expelled from the labor market according to the exigencies of the capitalist economy. This it does by reinforcing and perpetuating -- through the educational system and the mass media -- the cultural ideal of patriarchal familism. The authoritarian structure of the traditional Chinese family, by relegating women to a subordinate and dependent position, socializes and shapes individuals who meet all the criteria that define the required labor force. It effectively reproduces values and behaviors necessary for contemporary capitalism to operate in Taiwan.

Cultural traditions, then, do not just persist. Rather, they are reproduced to justify and sustain employment practices and labor processes that underpin the political economy. Culture and the political economy thus are inextricably entwined. And it is in the core of this nexus that I began to understand the responses of Hsin Hsing women to their work and life situations. Let me explain.

We saw above that the entry of women into the off-farm labor force was a response to both demand and supply factors. Married women found employment
in local factories when the supply of workers proved insufficient to meet the needs of the labor-intensive industries that burgeoned in the area, in response to the government's policy of export-oriented development. Familial considerations acted as supply-side factors that propelled married women into industry. To guarantee the family's economic survival or to further its fortunes, in-laws and husbands pressed women into paid employment.

As workers, the women were exposed to a variety of stressors that were products of the social aspects of their jobs. As both workers and housewives, they were also exposed to stressors that posed potential threats to their health. Their cognitive response to these stressors, however, were not produced in vacua. They were shaped by a culture that stresses the precepts of patriarchal familism. Thus, the meanings the women attributed both to their non-domestic and domestic situations conformed to traditional norms: to the expectation that they would contribute their labor to the family enterprise and bear and rear children.

It is difficult to assess what the long-term consequences of these meanings will be. On the one hand, the women of Hsin Hsing showed little of the frustration or resentment purported to increase women's susceptibility to disease. In this sense, traditional culture may protect their physiological and psychological integrity. By sustaining and reinforcing their position within the social structure, the culture may mediate the effects of situational stressors and help vitiate the influence of employment on their health. On the other hand, it must be recognized that the employment of the women of Hsin Hsing exposes them to physical and chemical hazards that can be detrimental to their health, and it forces them to carry dual responsibilities that may increase their susceptibility to disease. Yet, although the women complained of fatigue, muscle pains, and skin, eye, and respiratory problems, they neither stayed home from work nor visited health care providers for these ailments. If the effect of their socialization, then, is to decrease their responsiveness to symptoms, traditional attitudes and expectations may heighten their vulnerability to increased morbidity and mortality.

The relationship of employment to these women's health, in short, is problematic. Detailed, longitudinal data are not available to assess the impact of wage labor on women's well-being. Yet, the synchronic data collected suggest that an explanatory model of the effects of employment on women's health must go beyond existing models and tie macro- and microphenomena into a dynamic whole that assumes contextual variations. This is so because the Taiwan data indicate that this relationship is dependent on the context in which women are embedded.

That context, in the case of Taiwan, reflects the province's semiperipheral position in the world economic system. Because of this position, the industrial sector exhibits the features of competitive capitalism (Baran and Sweezy 1966:6; O'Connor 1973:13-14). In the case of the United States, by contrast, that context reflects American's core position in the world system and its monopoly capitalist economy (Baran and Sweezy, ibid. and note 3; O'Connor 1973:15-16).
Both forms of capitalism imply different economic imperatives that are ideologically or culturally expressed in differing ways. In the case of Taiwan, traditional culture is reinforced to sustain values that cement the integrity of the family as a work unit and to reproduce workers who satisfy the needs of the economy. In the case of the United States, by contrast, new wants, standards, and norms are created (Baran and Sweezy 1966:128) to produce a body of consumers who identify self-respect, status, and recognition with material possessions and individual achievement.

The penetration of these dissimilar views into Taiwanese and American families has different consequences for the meanings women attach to their work and, in turn, to their health. Women in Taiwan are not faced with incompatible cultural pressures -- their self-worth remains primarily determined by a matrix of values emanating from traditional familial culture -- and the social aspects of their work appear to have no psychological repercussions that can be linked to illness. Women in the United States, in contrast, may or may not be caught in a dilemma. If their employment conflicts with conservative definitions of female roles, they may find themselves in a particularly stressful situation that ultimately undermines their health. If their work is congruent with the cultural imperative of self-achievement, however, their employment may have no deleterious effects on their health.

To unravel the linkages between employment and women's health, then, we must understand how global forces and national political economies impinge on culture and how cultural constructs relate to cognitive and bodily responses. An explanatory model of the linkage must take into account: 1) the historical stage of a country's capitalist development; 2) the institutional influences that are associated with different stages of capitalism; and 3) the socialization process along with its psychological repercussions. In sum, we must understand how macro and microphenomena interact to produce health and illness.
NOTES

Acknowledgements

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1. During our six field trips, we collected data using both anthropological and sociological techniques, including participant observation, in-depth interviews, surveys, censuses, and collection of official statistics contained in family, land, school, and economic records.

2. "Health" is not a conceptually coherent category. It has been operationalized using objective indices of biochemical function (Haynes and Fienleib 1980) and subjective measures of physical and mental well-being (Woods and Hulka 1979; Powell and Reznikoff 1976). Thus, the paper makes no distinction between physiological and psychological health or between clinically-defined and self-defined health (i.e., disease and illness) -- a limitation found in the literature reviewed.

3. Ho's data are not disaggregated by area, but our observations suggest that throughout the 1960s industry mainly penetrated towns and rural areas within commuting distance to cities, rather than the more distant countryside such as the village area studied.

4. The proportion of married women working in industry is higher in rural areas than in the city; this is a result of the imbalance between supply and demand in the countryside (i.e., a small pool of available single women combined with a large demand for cheap labor). Married women are accordingly recruited into the labor force to meet employers' needs. For discussion of young, working women in Taiwan's cities, see Diamond (1979), Kung (1976, 1981), and Arrigo (1980, 1985).

5. While it might be argued that farming and helping with a family business fell within the traditional definition of the female role, such activities were traditionally secondary to women's primary responsibility for the management and maintenance of the household.

6. My comments here apply only to women who are members of the petty bourgeoisie and proletariat. According to Gates (1979:390-391), the petty bourgeoisie constitutes approximately 47 percent of Taiwan's population and includes almost all agricultural owner-operators and a large group of small businesspeople and artisans. The proletariat comprises about 20 percent of the population and includes factory and
Figure 1: A Contextual Model of Employment and Women's Health
Table 1
Population of Hsin Hsing Village by Family Type,
January - June, 1979

<table>
<thead>
<tr>
<th>Family Type</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjugal</td>
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<td></td>
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<tr>
<td>Households</td>
<td>33</td>
<td>45.0</td>
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<tr>
<td>Persons</td>
<td>163</td>
<td>30.0</td>
</tr>
<tr>
<td>Average number of persons per household</td>
<td>4.9</td>
<td></td>
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<tr>
<td>Stem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>27</td>
<td>37.0</td>
</tr>
<tr>
<td>Persons</td>
<td>194</td>
<td>36.0</td>
</tr>
<tr>
<td>Average number of persons per household</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Joint</td>
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<td></td>
</tr>
<tr>
<td>Households</td>
<td>13</td>
<td>18.0</td>
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<tr>
<td>Persons</td>
<td>186</td>
<td>34.0</td>
</tr>
<tr>
<td>Average number of persons per household</td>
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<td></td>
</tr>
<tr>
<td>TOTAL - Number of households</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Number of persons</td>
<td>543</td>
<td></td>
</tr>
<tr>
<td>Average number of persons per household</td>
<td>7.3</td>
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</table>

Source: Field interviews
Table 2
Work Status of Hsin Hsing Married Women by Family Type and Age
January - June, 1979

<table>
<thead>
<tr>
<th>Family Type/Age</th>
<th>Work Status</th>
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<td></td>
<td>Working for Remuneration</td>
<td>Not Working for Remuneration</td>
<td>Totals</td>
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<td></td>
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Source: Field interviews
Table 3
Primary and Secondary Activities of Hsin Hsing Married Women by Age
January - June, 1979

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<th>20 to 39</th>
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<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
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<td>5.9</td>
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<tr>
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<td>--</td>
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<td>34</td>
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Source: Field Interviews
REFERENCES

Arrigo, L.G.


Baran, P.A. and P.M. Sweezy

Cassel, J.

Diamond, N.


Directorate - General of Budget, Accounting and Statistics (DGBAS)

Ferrie, M.M.

Folkman, S. and R.S. Lazarous

Gallin, B.

Gallin, B. and R.S. Gallin
1982a Socioeconomic Life in Rural Taiwan Twenty Years of Development and Change. Modern China 8:205-246.


Gallin, R.S.
Gates, H.  
1979 Dependency and the Part-time Proletariat in Taiwan. Modern China 5:381-407.

Gove, W.R. and M.R. Geerken  

Haw, M.A.  

Haynes, S.G. and M. Feinleib  

Ho, S.P.S.  


Hochstim, J.R.  

House, J.S., V. Strecher, H.L. Metzner, and C.A. Robbins  

Kung, L.  


Lewin, E. and V. Olesen  

Lin, C.Y.  

Miller, J., C. Schooler, M.L. Kohn, and K.A. Miller  


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