

*A comparison of the patterns of change in female labor force participation reveals considerable similarities between Israel and the U.S. In both countries women tend to be concentrated in a small number of "female" occupations, characterized by their close association with tasks traditionally performed by women. The role played by the army and government as agents of change in Israel was considered and both were found to reinforce existing segregation patterns.*

## **Sex Structure of Occupations**

### **THE ISRAELI EXPERIENCE**

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**T**he purpose of this article is to meet the need for cross-cultural studies of occupational segregation by sex. More specifically, it compares various aspects of occupational segregation, in Israel and the United States.

Occupational segregation has come to be recognized as a major factor underlying the unequal status of women in the labor market (Blau, 1972; Blau and Jusenius, 1976; Oaxaca, 1973; Sawhill, 1973). The sex division of labor permits the perpetuation of a system of work relations which assigns the jobs women do lower income, status, and responsibility even when differences in human capital investments are controlled (Bergman and Adelman, 1973; Malkiel and Malkiel, 1973).

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Most systematic research on the subject to date has been conducted in the United States (Blaxall and Reagan, 1976; Lloyd, 1975). While American studies indicate some disagreement concerning the extent of segregation (Williams, 1976) and its causes (Blau and Jusenius, 1976; Lloyd, 1975; Zellner, 1972), empirical findings generally substantiate that sex segregation in the labor market is considerable. So much so, argues Oppenheimer (1970), that men and women virtually operate in separate labor markets.

Is this a universal pattern? There is accumulating evidence that it is, at least in the industrialized countries (Lapidus, 1976; Power, 1975; Chiplin and Sloan, 1976; Darling, 1975). This article takes a look at the Israeli experience. It examines various hypotheses supported by data from other countries concerning women's participation in the labor market and the relationship between sex and occupational structure in the Israeli context.

Many aspects of Israel's unique sociopolitical development would support the expectation that the emerging occupational structure would be different from that which exists in the United States. The pioneering ideology, the strong socialist orientation particularly of the political elites, the egalitarian value system, as well as the formative role played by the powerful trade union movement are all factors which would appear conducive to the evolvment of greater occupational opportunity for women and lower rates of sex segregation than in the United States. This in fact has not happened and some of the reasons are examined.

The article begins with an introduction to women's participation in the labor force. It then examines the extent and nature of occupational segregation and the role of government and the army as potential agents of change.

**BACKGROUND—WOMEN IN THE LABOR FORCE**

Trends in labor market participation among women in Israel are very similar to those characteristic of industrialized societies.<sup>1</sup> Although between 1955 and 1975 participation rose from 26.5% to 31.6%, it was less than in the United States, where labor force participation for women was 48% in 1975. Their proportion in the total civilian labor force increased from 24.5% to 33.5%, while in the United States it grew from 31.6% to 39.3% in the same period. The growth in female involvement came at a time of decreasing participation among males, so that since 1970 women contribute over 50% of the total annual increase of the civilian labor force.

The pattern of change in participation among specific segments of the female population is also similar to that in the United States. In both countries there has been a significant drop in the number of working women aged 14 to 17 with a rise in the proportion of those remaining in school. The decrease in the period 1955 to 1975 was from 31.7% to 12.7%. There was also a 47% increase in the proportion of married women employed in the same period. In 1975, 30.8% of the married women were in the labor force, among Jewish women the figure was 33.9%, while in the United States it was 43%. The fastest growth rate has occurred among married women within the 25- to 34-year age bracket. Between 1970 and 1976, participation in this category grew from 26.9% to 39.2%, an increase of 46% in six years and among Jewish women, from 31.2% to 44.5%. The growth is particularly significant considering the drop in marital age that has occurred in Israel and that this age group also has the highest fertility rate.

Our earlier arguments suggesting that there would be less sex segregation in Israel might also lead one to expect that Israeli women would have higher labor force participation rates. This, as we see, is not the case, but is easily explicable by the following two arguments.

### STATISTICAL CALCULATION OF PARTICIPATION RATES

The lower labor force participation rate of Israeli women is partly an artifact of statistical calculation. Two factors depress the participation figures somewhat when compared to the United States. First, the minimum age used for calculating labor force statistics is 14 years in Israel and 16 years in the United States. Second, single women aged 18 to 20 are mobilized into the army and not included in the civilian labor force. Of the 1976/1977 cohort, 51.5% of the women were recruited into the army (Commission on the Status of Women, 1978).

### EDUCATION

The second explanation for the lower overall labor force participation (LFP) of Israeli women is the lower rate of formal education (see Table 1). The median years of schooling for Israeli women in 1972 was 10.5 years, while that of American women was 12 years.

Formal education is the best single predictor of female labor market participation both in Israel (Hartman, 1978) and in the United States (U.S. Department of Labor, 1976).

Among women with 9+ years of schooling, education is the most important explanatory variable of their labor force participation while the expected wage and husband's income play only a minor role (Gronau, 1973). When education is held constant, differences in participation rates observed among Jewish women from different countries of origin almost disappear. Among those with 16 years and more schooling, participation for women and men are almost equal, 73.8% and 78.1%, respectively, in 1976. At this level of education, participation is even somewhat higher for Israeli women than for American women.

Differences in educational attainment and consequently in LFP are associated with ethnic subgroup. The major ethnic distinction in Israel is between Jews originating from Western industrialized societies who have a predisposition toward female participation and those from developing economies where women are sheltered from public life, encouraged to

TABLE 1  
Civilian Labor Force by Years of Schooling and Sex

<u>Years of schooling</u>	<u>% women</u>	<u>% men</u>
Total	31.4	67.9
0	11.3	55.7
1-4	15.8	72.9
5-8	24.5	77.4
9-10	32.1	58.9
11-12	40.4	61.6
13-15	57.2	68.7
16+	73.8	78.1

SOURCE: *Labor Force Survey*, 1976, Special Series No. 564 (1978) Table 9. Central Bureau of Statistics, State of Israel, Jerusalem.

bear children, and restricted to playing familial roles. The former, known as Europeans, immigrated from Europe and North America. The latter, known as Orientals, immigrated from North Africa and Asia, primarily after 1948. In the mid-1970s, almost half the population of Israel were Oriental immigrants or their offspring.

The subgroups (see Table 2) responded differently to economic forces in Israel. Immigrants from Asia and Africa participate to a lesser extent but the gap between the ethnic groups has narrowed. Comparing 1961 to 1971, Hartman (1978) explains the striking increase in LFP rates among Oriental women by the rise in level of education among the younger cohorts, drop in fertility rates, easing of restrictions on LFP imposed by family obligations, and change in social norms. Number of children and variables associated with ethnicity per se had greater influence on LFP of married women in 1961 than in 1971, while education explained most of the ethnic differences in participation in 1971.

TABLE 2  
 Percentage of Jewish Women in Labor Force by  
 Country of Origin

<u>Country of Origin</u>	<u>1954</u>	<u>1961</u>	<u>1971</u>	<u>1976</u>
Asia-Africa (AA)	14.9	22.5	25.1	26.1
Europe-America (EA)	24.7	31.5	34.1	35.8
Israel	27.4	38.2	38.8	41.7
Father Israeli (II)			34.8	38.8
Father Asian-African (IAM)			37.3	34.7
Father European-American (IEA)			41.4	49.7

SOURCES: Labor Force Surveys 1954, 1961, 1971, 1976.

The lower educational attainment among women over 35 explains why participation reaches a single peak within the 25- to 34-year age bracket and then declines steadily. This pattern is similar to that which existed in the United States in the 1940s, when formal schooling by age categories was similar to that of Israel in the 1970s but is different from the bimodal distribution in participation characteristic of the 1960s and 1970s (Vatter, 1976). The rate of reentry after the child-bearing years is lower in Israel than in the United States, a pattern which can be expected to change with increasing education of the population.

In summary, the trends in participation are very similar to those in other industrialized societies. The lower level compared to the United States is largely the result of differences in the educational distribution of the female population, but the gap between the two countries is greatly diminished among younger cohorts.

### OCCUPATIONAL SEGREGATION

Occupational segregation can be defined as the disproportionate representation of one social category in an occupation, relative to the proportion of that category in the labor force.

For example, in 1972 when women comprised 31.2% of the labor force, their expected proportion in an occupation desegregated with regard to sex was within the range of 31.2%. Further on I examine occupational segregation among women with regard to their ethnic origin. Segregation is a structural variable that characterizes an occupation (or list of occupations), rather than the individuals in it. Measures of the variable are derived from data on the level of participation of each sex in the labor force and its distribution among occupations. The data in this study are based on the 1972 Israel Population Census—the only survey in Israel to provide information on the sex composition, education, and income of 360 occupations (Israel Central Bureau of Statistics, 1976). The lack of comparable data prior to 1972 makes it impossible to examine the patterns of change in occupational differentiation over time.

To obtain an indication of the extent of segregation, we divided the 360 occupations into (1) female occupations, those in which at least 45% of the participants are women, (2) male occupations, those in which less than 25% are women, and (3) nonsegregated occupations, those with between 25% and 44% women. We found that 75.1% of the female labor force are employed in female occupations while 78.9% of the males are employed in male occupations. Only 13.1% of each sex works in occupations in which the other is numerically predominant. This situation is similar to that reported in the United States, where 72.6% of all employed women in 1970 were found in occupations which were 45% to 100% female (Bergman and Adelman, 1973: 510).

The relative concentration of women in occupations in which the median years of schooling is 10.6 and more, compared to men who are concentrated in occupations in which the median years of schooling is less than 10.6 years, reflects the association referred to earlier (and found only among women) between education and labor force participation.

The occupational distribution of women in Israel, as elsewhere, is very different from that of men (see Table 3). Women are found primarily among clerical workers, service workers,

**TABLE 3**  
**Employed Persons by Occupation and Sex**

% of women					
in occupations		men		women	
1972**	1976**	1972*	1976**	1972*	1976**
		Total - percentages			
		69.8	64.6	31.2	31.9
33.5	35.2	5.7	6.7	5.9	7.3
54.6	58.5	7.1	8.0	19.3	22.6
7.4	9.4	4.2	5.3	(.7)	1.1
52	54.5	11.3	11.8	24.1	28.3
26	31	8.3	8.3	8.2	7.5
54	53.3	8.6	8.	21.5	18.3
17	21	8.5	7.6	6.1	4.
11.2	9.9	38.2	36.6	11.2	8.1
15.7	15.8	8.1	7.6	3.	2.9

SOURCES: \*Statistical Abstract of Israel 1975.

\*\*Labor Force Survey 1976.

\*\*\*Supplement Vol. XXVIII, 7, 1976.

professionals of lower status such as nurses, teachers, and social workers, where they are highly overrepresented relative to their proportion in the labor force. Men are more evenly distributed among the occupational categories with the exception of a heavy concentration among skilled workers. The proportion of the male and female labor force among scientific and academic workers is about equal.

The extent of segregation as measured by the variety of occupations recruiting each sex is an indication of the relative opportunities open to them. It has been observed in the literature that women tend to cluster into a narrow range of occupations characterized by more numerous points of entry, fewer



possibilities for promotion (Blau, 1972), and lower income for educational investment (Oppenheimer, 1970; Izraeli and Gaier, forthcoming) than comparable male jobs. In Israel, 65% of the women are employed in 38 occupations (of a total list of 360) in which they form more than 50% of the labor force; 22% are in 6 occupations where they comprise more than 90% of the labor force. These findings are very similar to those reported for the United States (Blau, 1972: 162; U.S. Department of Labor, 1976: 62).

Table 4 shows the distribution of occupations by sex of occupation and median years of schooling of workers in the occupation. We can observe that for every educational category, there are more male occupations than female occupations. Although there are only twice as many men in the civilian labor force as women, there are almost four times as many male occupations as female occupations. The ratios are larger among those occupations in which employees have less than 10.5 years of schooling and smaller when they have more than 10.5 years.

Women in Israel and the United States gravitate toward the same types of occupations. Those in which they comprise 70% and more of the workers (Table 5) are the same in Israel and in the United States. When differences exist they may be due to the lack of comparability in the method used for categorizing occupations in the two countries. For example, women in the United States comprised 84.7% of the dancers and 25.7% of the actors in 1970 (Sommers, 1974). In Israel, these occupations are listed jointly and women form 46.5% of the dancers and actors. Were the category decomposed, it is likely that the rates for each occupation would be very similar to those in the United States.

**TABLE 4**  
**Number of Occupations by Sex and Educational Level**  
**of the Occupation**

<u>Educational Level of Occupation**</u>	<u>No. of male* Occupations</u>	<u>No. of female Occupations</u>	<u>Ratio of male-female Occupations</u>
0 - 7.9 years	65	13	5/1
8 - 8.9 years	42	10	4.2/1
9 - 10.5 years	48	6	8/1
10.6 - 11.9 years	38	10	3.8/1
12 - 13.9 years	17	13	1.3/1
14+ years	30	14	2.1/1
<b>Total</b>	<b>240</b>	<b>66</b>	<b>3.6/1</b>

The rationale for selecting these cutoffs points between educational categories is as follows:

1. Eight years of schooling indicates completion of compulsory education in 1972.
2. Eight-nine years indicates something above the minimum education.
3. Ten and a half years is the median years of schooling of the female labor force.
4. Twelve years indicates completion of high school.
5. Twelve-14 years indicates some post-high school training.
6. The 14+ category was too small to permit the distinction between undergraduate and postgraduate education.

\*Female occupations are those with at least 45% women, male occupations are those with fewer than 25% women, nonsegregated occupations are those with between 25% to 44% women.

\*\*Education level of the occupations refers to the median years of formal schooling of those employed in the occupation.

In only 4 of the 28 occupations in which women form 70% or more is their proportion in Israel greater than in the United States. These are:

	female		difference
	<u>Israel</u>	<u>U.S.</u>	
1. social workers	77	63	14%
2. therapists	80	64	16%
3. psychologists	76	36	40%
4. draftsmen	70	8	62%

In both the United States and Israel, social workers and therapists are feminine occupations and the difference in the

**TABLE 5**  
**Occupations in Which Women Comprise 70% and More**  
**of the Labor Force in Order of Proportion of Female**  
**in the Occupation**

<u>Occupation</u>	<u>% of women in occupation</u>	<u>% of total female labor force</u>
1. Kindergarden teacher assistants	99	1.2
2. Kindergarden teachers	98	1.9
3. Non-certified nursemaids	97	4.1
4. Domestic and cooks	97	3.0
5. Cosmeticians	94	0.5
6. Book-keeping machine operators	94	0.3
7. Dental assistants	93	0.2
8. Key-punch operators	92	0.6
9. Secretaries stenographers and typists	91	9.3
10. Registered nurses	91	2.5
11. Practical nurses and midwives	86	2.7
12. Women hairdressers	86	1.0
13. Teachers in special education	86	0.5
14. Sewers (in factory)	85	2.8
15. Therapists	80	0.3
16. Primary school teachers	77	6.3
17. Social workers	77	0.8
18. Psychologists	76	0.2
19. Food service workers	76	0.8
20. Chambermaids	75	0.4
21. (Skilled) cooks (private household)	75	*
22. Technicians in the life sciences	75	0.9
23. Library attendants	75	0.2
24. Telephone and telegraph operators	73	0.9
25. Stewards	71	0.5
26. Other medical technicians	71	0.4
27. Draftsmen	70	0.1
28. Kitchen workers in institutions	70	0.9
		43.3

\*Less than 0.1%.

proportion of women is not very large. The preponderance of women among draftsmen and psychologists presents an interesting contrast to their more limited representation in

these occupations in the United States. This situation reflects the influence of the personnel policy of the army on the civilian labor market and is dealt with in a later section.

When we examine the primary tasks performed and skills required in most female occupations, two distinguishing characteristics stand out:

- (1) The great majority are extensions of traditional female roles in the home; namely, cooking, cleaning, sewing, caring for children, and serving the welfare needs of others. The influence of this traditional pattern is evident even within the professions. To illustrate, women comprise 23% of the medical specialists in Israel, yet they form 46% of the pediatricians (Histadrut Refuit, 1974).
- (2) Other occupations are those requiring manual dexterity and patience, considered to be specifically female attributes, such as typists, computer key punchers, office machine operators, and electronic components assemblers.

Further support for the influence of the traditional division of labor and status relations between the sexes can be found in the list of occupations in which women are highly underrepresented. They form less than 10% in 154 of the 360 occupations and less than 1% in 45 occupations. They are typically underrepresented in occupations with the following characteristics:

- (1) those requiring expenditure of considerable muscular energy and/or performed under dangerous or difficult conditions such as intense dust or heat
- (2) occupations associated with the traditional male mechanical-technical crafts as well as professions which developed from these crafts, particularly those in the engineering family
- (3) occupations requiring the supervision or control of the work of others—that is, managerial occupations at all levels, particularly when the subordinates are men. Only 7.4% of the managers were women in 1972.

Table 6 lists the occupations subsumed under the general managerial category and the proportion of women in each.

**TABLE 6**  
**Proportion of Women of Total Employed by**  
**Type of Managerial Occupation**

<u>Managerial occupations</u>	<u>Female %</u>
Elected representatives in the government	5.0
Elected representation of local government	5.3
Managers in the civil service, municipalities and national institutions	8.0
Civil service managers in the natural sciences, life sciences and medical field	17.6
Civil service managers in the engineering field	0.0
Civil service managers in the field of the humanities and social sciences	16.7
General managers	4.2
Production managers	2.5
Bank branch and insurance branch managers	6.3
General contractors	0.5
Hotel and motel managers	25.3
Managers in the judiciary	0.0

Those with the highest concentration of women have one or both of the following characteristics:

- (1) They have a relatively high concentration of women workers at the lower levels. Since in many cases lower level managers are promoted from rank and file participants, these occupations provide a large reservoir of women from which to draw. When promotion occurs, the women managers supervise the work of other women.
- (2) Some managerial positions, particularly at the lower levels, are perceived as being an extension of the traditional hostess-homemaker role and consequently all thought especially suitable for women. This would seem to be the case in the hotel industry, which has the highest concentration of women managers.

In very recent years women have begun to penetrate the field of personnel management (usually as assistants to) for

which their supposed natural human relations skills are believed to provide them with a relative advantage.

#### OCCUPATIONAL SEGREGATION BY ETHNIC SUBGROUP

Within the female labor force, the ethnic subgroups are differentially distributed among the occupations and a fairly clear pattern of occupational segregation by ethnic origin is discernible. Since data on country of origin are not available for the 360 occupations, the analysis is based on 10 composite occupational categories. Table 7 presents the proportionate difference between the observed and the expected for each ethnic subgroup regarding a specific occupation. The expected is based on the proportion of the respective subgroup in the female labor force, the observed on the actual proportion of that subgroup within the occupation.

A negative difference means the subgroup is underrepresented in the occupation, while a positive number indicates overrepresentation:

$$Pd = \frac{O-E}{E} ,$$

when Pd = proportionate difference, O = observed proportion of subgroup in occupation, and E = expected proportion of subgroup in occupation. For example, the observed for women from Europe and America (EA) among scientific and academic workers was 50% in 1976, while the proportion of EA in the female labor force (the expected) was 37.6%. There were, therefore, 33% more EA working in scientific occupations than would have been the case had the subgroup been randomly distributed among all occupations. This measure of proportionate difference, which controls for size of ethnic group, enables us to observe the extent of ethnic segregation

**TABLE 7**  
**Proportionate Difference Between Observed and Expected**  
**in the Distribution of Ethnic Groups Within Occupations, 1976**

	<u>II*</u>	<u>IAA</u>	<u>IEA</u>	<u>AA</u>	<u>EA</u>
% of total female labor force	5.6	14.1	20.6	22.1	37.6
Scientific and academic workers	-35.7	-78.7	+78.1	-74.2	+32.9
Other professional, technical and related workers	-7.1	-35.0	+63.6	-35.3	-2.1
Administrators and managers	+34.0	-64.5	+9.2	-66.0	+52.9
Clerical and related workers	+39.3	+45.3	+15.0	-29.9	-13.7
Sales workers	-28.6	-45.3	-51.9	+1.8	+50.5
Service workers	-34.0	-8.5	-60.7	+102.7	-18.8
Agricultural workers	-26.8	-35.5	-11.7	+4.5	+21.0
Skilled workers in industry, builders, transport and other skilled workers	-75.0	+62.4	-79.1	+33.0	+11.4
Other workers in industry, transport, building and unskilled workers	-82.1	+36.1	-81.0	+59.2	+ 6.9

SOURCE: Derived from **Labor Force Survey 1976**.

- = underrepresented.

+ = overrepresented.

\*For key to names, see Table 2.

within an occupation. The most interesting finding is that each ethnic subgroup tends to gravitate more strongly to a different set of occupations. These are associated with such status factors as income and education, so that an ethnically stratified structure emerges.

The immigrants from Europe and America are most overrepresented among managers and sales workers, by more than 50%. The Israeli born of European or American fathers gravitate toward the academic, scientific, and other professions where they are overrepresented by more than 63%. Those born in Asia or Africa are concentrated in the lower status manual occupations—unskilled workers and personal services. The Israeli born of Asian or African fathers (IAA) are the most overrepresented group among the skilled industrial workers and the clerical workers. Both these occupations attract

workers with between 9 and 11 years of schooling which characterizes the majority of IAA in the labor force. The decision whether to enter industrial or clerical work is a function of alternatives and preferences. In the development towns where there are few offices and many factories, most IAA work in factories in the urban centers where there are more clerical positions available, and IAA indicate a definite preference for clerical jobs. Second-generation born Israelis (II) are the most underrepresented of all subgroups in the agricultural, skilled, and unskilled occupations. Their proportion is similar to that of IAA among clerks and to that of EA among managers; in both cases they are overrepresented by more than 40%. The next section considers the prospects for change and focuses on the army and government as potential change agents.

### THE PROSPECTS FOR CHANGE

The Israeli army is potentially an important change agent in relation to the sex division of labor. First, annually it recruits the cohort of 18 year olds—both men and women. Second, the army supplies training opportunities for a variety of skills, many of which have application in the civilian labor market—particularly in the technical and managerial fields. Third, unlike the civilian employer, the army is relatively independent of the preferences of the recruits and has considerable freedom to allocate them in accordance with its needs and policies.

In addition to its defense functions, the Israeli army has played an important role in the development of the new nation. It served as an assimilating institution for tens of thousands of often semiliterate immigrant recruits, as an occupational training center, as the implementing vehicle for pioneering new settlements, and as a major channel for recruitment of political and economic elites. It also had an important effect on the position of women. In the prestate period of Jewish



defense, women were in most military units and "there was hardly a front or dangerous point where women of the Hagana [the volunteer army of the Jewish community in Palestine] did not participate" (Sludski, 1972: 1226). After the establishment of the state, military service was made compulsory for both men and women and equality between the sexes was one of the considerations in the assignment to units and the allocation of work (Commission on the Status of Women, 1978). The two decades following independence (1948 to 1967) brought about a continuous restriction of women to "more suitable" roles and an increase in the sex segregation of occupations. During the periods of relative calm which occurred in the 50s and 60s when fighting units were consolidated but not greatly expanded, the tendency was to "relieve" women of the less desirable jobs—the heavy, dirty, and dangerous work—and employ them primarily in traditionally feminine tasks. In other words, the transition from a voluntary defense force to a national army which occurred after statehood, was characterized by a period of growing sex segregation and a drop in status for women who were concentrated in the secondary jobs of the service sector. The shortage in human (male) resources following the Six Day War (1967), which had resulted in vastly increased borders requiring defense, stimulated the army to reevaluate its policies regarding the use of women.

The potential effect of the army on the sex structure of the civilian labor market lies in two factors—the first direct, the second indirect.

- (1) It may train women for traditionally male occupations. To return to the occupations of psychologist and draftsman, referred to in an earlier section, these are two examples of the army's influence on the civilian labor force. Women have been used extensively for psychological testing and various types of drafting for many years. Their exposure to these occupations combined with the training they received and the availability of these occupations in the civilian labor market contributed toward the prevalence of women in these fields.

- (2) The extent and nature of the sex division of labor in the army create normative expectations and influence the attitude of both sexes, attitudes which are carried over into the civilian labor market.

Despite the army's close identification with the pioneering ideals of Israeli society, its approach to women is highly pragmatic and guided by considerations of efficiency and utility. The army is generally more willing to invest in training women than is the civilian employer. Two constraints, however, make women a less profitable investment than men: duration of service and reserve duty.

- (1) Women serve only 20 months compared to men's 36. The probability of their signing up after compulsory training is considered small. While the army is able to supply inducements to attract recruits to contract for an additional period of service, until recently these were not offered to women, who were trained only for those occupations which require relatively brief induction periods. With the shortage of supposed high caliber males, however, there is a somewhat greater readiness to open new occupations to women, provided they agree to serve for a third year.
- (2) Married women and women with children are, by law, not required to serve in the reserves. Since the Israeli army relies heavily on its reserves, it must prepare a cadre of skilled people for the future. Consequently, women are not trained for occupations for which they are deemed capable but not available in the future. In fact, even women whom the law defines as eligible are not called for reserve duty, a practice the Report on the Status of Women (1978) has recommended be altered.

Despite these limitations, the shortage of educated male recruits and the availability of a reservoir of female high school graduates combined with increasing sophistication of military technology have, in recent years, resulted in the

opening of new occupations to women, as well as in more intensive use of women in higher status technical jobs such as airplane mechanics and electronic technicians. Even so, in 1976 there were only 210 occupations open to women out of 709 recognized by the army, about half of which were clerical occupations (Commission on the Status of Women, 1978).

The army views women's contribution to lie in two factors. First and foremost, they free men for front line combat duty. It has been policy to use women minimally on the front lines and not at all for combat. Second, they perform tasks for which women are considered more suitable such as clerical, educational, and welfare jobs. They have not been considered suitable for physically demanding jobs and for those performed in supposedly unfitting social environments. An example of an unsuitable environment is one with a concentration of lower class boys who might supposedly molest the girls. The army views itself as socially responsible for the moral integrity of its female recruits and is careful to avoid public scandal, particularly since certain religious-political groups disapprove of compulsory military training for women.

Women free men for combat by replacing them in jobs considered also suitable for women. While the replacement policy has always existed, the definition of what is suitable has come to include a wider number of occupations in recent years. This is a result both of an increase in the number of combat units following 1967 which drained existing manpower and of the introduction of new advanced technology.

The creation of new fighting units meant that a maximum number of men had to be released from noncombat jobs and this led to the more extensive use of women. Jobs traditionally closed to women were opened and others were redesigned to create a new specialization for them. For example, a group of female recruits were recently trained to become naval operations officers. They participated in the first 4 months of a 16-month course for ship officers and specialized in tasks previously performed by graduate ship officers at an

early stage in their professional careers. In this manner, men are freed for jobs it is believed only they can or should do and which require greater skill, while the army economizes on training and the investment in women is kept within efficient proportions. Technological developments enhance women's occupational opportunities by creating new jobs considered suitable for women or even by relocating existing ones to places where women can be safely employed.

The army also affects occupational segregation through its relations with the Ministry of Education and the Ministry of Labor and Welfare to participate in solving the problem of women for such occupations as electronics, optics tooling, and drafting, the army gets the high schools to create programs in these fields and design them to attract female students while it supplies instructors. It also sends representatives to a number of Ministry of Education committees where it presents its future manpower needs (Commission on the Status of Women, 1978).

Since the army is viewed as a mechanism for achieving national goals, pressure is exerted on it by the Ministry of Labor and Welfare to participate in solving the problem of occupational training for school drop-outs. Approximately 19% of the females of army age are not recruited for reasons of low qualifications, and 80% of these are Orientals (Commission on the Status of Women, 1978). Their prearmy training in technical fields, followed by their recruitment, argues the Ministry, will solve both the social problem and that of the shortage of skilled workers. The army, however, which does not view rehabilitation as one of its functions, is apprehensive and has responded with only very modest projects.

To summarize, it is most likely that the recent thrust toward employing women in nontraditional army jobs will change some of the stereotypes about what is suitable for them and result in a wider repertoire of occupational opportunities. In Israel, what happens in the army has important ramifications for the economic system as a whole.

**GOVERNMENT**

Government can affect occupational segregation in two capacities—as employer of approximately 13% of the civilian female labor force (including teachers) and as legislator and law enforcement agency. As employer, government service annually recruits an increasing proportion of women into nontraditional occupations, particularly the professions. Between 1970 and 1977, the percentage of women lawyers rose from 17.9% to 45%, engineers from 7% to 16%, and pharmacists from 31% to 64% (Civil Service, 1970, 1977). Market forces are the primary cause for this development. The expansion of government services and consequently increased demand for workers in all fields came at a time when males, especially professionals, were leaving government service for the higher paying and more prestigious jobs in the private economic sector. The available supply of female professionals and semiprofessionals gravitated toward government service attracted by the regular work hours and relatively short workday. The concentration of women (42% of those employed) gives them a bargaining advantage in negotiating terms which increases the attractiveness of the civil service as a place of employment for women. For example, the 1978 collective agreement signed between the government workers' union and the civil service stipulates that a woman with one child under 8 years will work a shorter day up to 4.5 hours less a week at the expense of the employer. This concession is a supposed improvement over an earlier contract which granted this right only to mothers of two children both under the age of 12. It is difficult to assess to what extent such so-called privileges have a negative influence on the advancement of women to the higher grades within the clerical and administrative hierarchy of government service. Table 8 shows the distribution of women employees among the administrative grades and their proportion among the total employed in two time periods. The increase in women in the middle and upper grades is misleading since moving up a grade is the typical manner in which pay increases are obtained, and consequently the

**TABLE 8**  
**Distribution of Women Among Clerical and Administrative Workers in the Civil Service**

Rank	1970		1977	
	100%	100%	1970	1977
15 - 20	.9	1.7	3.1	8.0
11 - 15	19.3	37.8	13.3	33.0
1 - 10*	75.0	34.8	39.4	61.0
temporary	4.8	25.7	15.1	52.0

SOURCE: Civil Service Annual Report 1970, p. 170, 1977, p. 162.

\*In 1976 the minimum grade at entry was 4.

whole hierarchy has been deflated. In 1977 an additional grade 21 was added to raise the ceiling. A study undertaken in Israel for the Commission on the Status of Women (1978) concludes that when age, seniority, and country of origin are held constant, women are still highly underrepresented in the upper grades of the hierarchy where policy is made. Since these positions do not suffer from a shortage of male candidates, this situation is not likely to change as did that of women among the professional workers.

**GOVERNMENT AS LEGISLATOR AND LAW ENFORCEMENT AGENCY**

Contrary to those like Kerr et al. (1960) who argue that the logic of industrialism is inconsistent with the assignment of managers and workers to occupations or roles on the basis of sex, the experience in developed economies reveals that industrialization does not in and of itself radically alter the structure of a deeply embedded system of social relations (Blumer, 1965); in this case, the sex division of labor. Industrialization results in increased levels of female participation in the labor force. It does not, however, eliminate the relevance of ascription for the sorting of workers among jobs in the labor market. Rather, deeply rooted patterns, typical of traditional society, seem to continue with remarkable stability within the industrial structure. For example, women, who

traditionally have inferior status to men in the public domain, are expected to be subordinate to them within the industrial society. When major structural changes occur, they are usually the result of forces external to the economic system, such as government legislation. This is the case in the United States today. It was also deliberate government policy that opened occupational opportunities for women in Russia where, "for a time official decrees obliged higher-education institutions to use a preferential admissions and quotas to increase the proportion of women in such programs" (Lapidus, 1976: 123).

The Israeli government, although ideologically committed to social equality, has not actively intervened to alter the segregative structure of occupations. Its support of segregated programs in the early years of schooling has even indirectly reinforced existing tendencies. The distribution of high school students among the various occupational specializations offered by the Ministry of Education (Israel Ministry of Education and Culture, 1976) reveals that: Of the students taking crafts, which include clerical occupations, fashion, home economics, practical arts, and hairdressing, 100% are females while of those in technical studies which include metal, electricity, mechanics, woodwork, electronics, and industrial chemistry, only 7.25% are females. Pressure applied by the army, discussed earlier, may desegregate the male specializations but not affect the female ones.

In very limited situations, government has intervened to meet problems of labor shortages in specific occupations. For example, the women's department within the Ministry of Labor and Welfare has organized and subsidized courses for women for such occupations as draftsmen, quality controllers, and first-line supervisors in industry and has then urged employers to hire the graduates. It is currently negotiating with the Ministry of Finance, which is unable to attract a sufficient number of male tax inspectors, to train women to be tax inspectors. The initiative, however, is sporadic and specific and does not reflect government commitment to a general policy of desegregation.

The recent election of a right wing government with no historical or ideological commitment to providing occupational opportunities for women makes the likelihood of increased government initiative very unlikely in the near future.

### SUMMARY

A comparison of the patterns of change in female labor force participation reveals considerable similarities between Israel and the United States with differences in years of schooling as the major explanation for the lower participation rates in Israel. In both countries women tend to be concentrated in a small number of female occupations in which they form 70% and more of the employed. These occupations are characterized by their close association with tasks traditionally performed by women.

While industrialization has created employment opportunities for women outside the home, it has not been a major force in eliminating the relevance of sex as a basis for the allocation of work. It has rather developed within the traditional sex structure of occupations transferring the traditional division of labor in the home to the market place. In Israel, the shortage of male workers has been a major impetus for change. The role of the army as an agent of change in Israel was considered and found to reinforce existing segregation patterns. Recent shortages of human resources and changes in military technology, however, were suggested to be forces conducive to opening new occupations to women which will have ramifications for the sex structure of technical occupations in the future. Government as employer has welcomed women into certain traditional male occupations. As legislator, however, it has tended to be a conservative force. The absence of a significant feminist movement (outside a small circle of women, *feminism* is a pejorative word in Israel) and the rise to power of a conservative coalition make it unlikely that in the near future government will become a driving force for creating equal opportunities for women, as is the case in the United States today.



## NOTE

1. The data for this section are derived from the Central Bureau of Statistics, Statistical Yearbook (1975), Labor Force Survey (1976), and U.S. Department of Labor (1976).

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