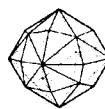


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Occupational Sex Segregation in the Kibbutz: Principles and Practice

SHOSHANA NEUMAN*

I. INTRODUCTION

In Israel, as in other countries, men and women are unequally distributed across occupations. The extent of occupational segregation in the labor force is most frequently measured by the Index of Dissimilarity developed by DUNCAN and DUNCAN [1955]. The index is defined as: $D = \frac{1}{2} \sum |m_i - f_i|$, where m_i is the percentage of the male labor force, and f_i the percentage of the female labor force employed in occupation i . This index ranges between 0 (no segregation) and 100 (total segregation), and the actual value of the index may be interpreted as the percentage of women (or men) who would have to change occupations for the employment distribution of the two groups to be identical.

Between 1972 and 1985 the Index of Dissimilarity (computed using the two-digit occupational classification) was about 60 with very slight variations from year to year¹. In the U.S. the Index decreased slightly from 59.7 in 1958 to 52.6 in 1984 [ALBELDA, 1986, p. 405] — a very small decline for a period of 25 years. In Australia, segregation indices, computed using 71 occupations, declined from 64.22 in 1961 to 62.01 in 1981 — again a small decline over twenty years [LEWIS, 1985]. It is surprising that occupational segregation by sex is so similar in countries on three different continents.

While occupational sex segregation in Israel is similar to segregation in other countries, the kibbutz movement, with its deep ideological commitment to the

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1. Computed using data relating to a two-digit occupational classification collected from manpower surveys. See also COHEN, BECHAR and RAJMAN [1987].

equality of all human beings and, of course, equality of the sexes, might be expected to have a lower rate of occupational segregation than the rest of Israel. This paper investigates this conjecture.

Before presenting the calculations of the Dissimilarity Indices and comparisons between occupational sex segregation in the kibbutz with Israel as a whole, I put forward some stylized facts about the kibbutz movement in general, and its commitment to sexual equality in particular.

II. THE KIBBUTZ

Kibbutzim (plural of kibbutz) are familiar landmarks in Israel in the realm of ideology as well as on the landscape, although it is and always has been a minority movement. The kibbutz movement is, in general, taken to date from 1909, the year in which the first kibbutz, Dgania Aleph, was founded. In 1921 there were about 800 members in 9 settlements [BARKAI, 1977, p. 3]. By the early 1960's the kibbutz population had risen to 77,150 with 224 settlements constituting 3.99 percent of the Jewish population (Central Bureau of Statistics, 1969), and in 1983 there were 114,814 members in 267 settlements, constituting 3.4 percent of the Jewish population in Israel (Centre Bureau of Statistics, 1987).

The kibbutz is a small, collective, rural community, based on voluntary membership that integrates production and household functions². Kibbutz income is derived from production, to which individuals do not necessarily contribute equally. Yet equality is the principle which is supposed to govern income distribution. There are no individual income accounts and the concept of a wage is meaningless. Income is distributed 'to each according to his needs, within the means of the community' [BARKAI, 1977, p. 11].

Once the kibbutz has been established, those who want to join the original group become candidates for a short period, after which they are accepted or rejected as members by a majority vote of the general assembly which is the ultimate source of authority. (For a description of the various cells of the kibbutz organism, see BARKAI [1977, Chapter 1]).

2. The kibbutz is unique not only for its socio-economic features, but also due to its role as the spearhead of the Zionist settlement of the country. However, since the focus of this paper is on socio-economic determinants we ignore this role.

Work in the kibbutz has been of the highest importance not only as a means of economic survival, but even more so as a goal with value in and of itself³. Despite compromises associated with the gradual economic development and rising standards of living, the kibbutz's attitude toward work has remained essentially unchanged.

A question which confronted the kibbutz was: what work would women do? Like most modern socialist movements, the kibbutz has incorporated sexual equality as a value and a goal. According to the Proposal to the Constitution of the *Kvutzot* (the original term for a kibbutz) of 1925, there should be 'an expanding place of work for the women in the branches of the economy' and 'equal duty for all members (men and women) to share housework (bakery, kitchen and laundry)' [TIGER and SHEPHER, 1975, p. 77]. Two decades later, the principle of sexual equality appeared in the writings of the *Hakibbutz Hameuchad*⁴:

'Equal rights for the male member (*chaver*) and female member (*chavera*) in the economic and social creativity, in education, in defence, in public activity and in mission, ...in order to raise the ability of the *chavera* and her self-expression in the life of the kibbutz, the federation and the movement' [TIGER and SHEPHER, 1975, p. 77].

ROSNER [1969] describes the *Hakibbutz Ha'artzi*⁵ position:

'It was evident that the kibbutz is the full solution to the question of women's liberation. It was clear — not in terms of West-European ideas of emancipation, but of the deepest human conviction — that the kibbutz affirms the total equality of the working woman in the kibbutz, shoulder to shoulder with man'.

This is what the ideology states, and, in fact, early in kibbutz history more than half the women worked in production [TIGER and SHEPHER, 1975].

The kibbutz is the most likely place to find sexual equality for another reason as well: it offers women the independence which is a prerequisite for equality. All major household services are collectivized so that women do not have to

3. The attitude that work has value in and of itself received quasi-religious elaboration in the writings of A.D. GORDON [1952], a member of the first kibbutz, who said that work helps to liberate Jews of the Diaspora from their socio-economic past when relatively few did physical work or worked in agriculture.

4. One of the main settlement movements, later on united with *Ichud Hakevutzot* form the United Kibbutz Movement. Today there are five settlement federation: *Hakibbutz Ha'artzi*, *The United Kibbutz Movement*, *Hakibbutz Hadati*, *Haoved Hatzioni* and *Poale Agudat Yisrael*. Their relative shares were, in 1983: 33.3, 58.5, 5.6, 1.6 and 1.0 percent, respectively.

5. See footnote 4.

care for their children or do household work⁶: meals are served in a communal dining hall, a collective laundry does the washing, and a collective store the ironing, mending and most of the tailoring. Children in most of the kibbutzim live in dormitories and are cared for by trained teachers. Neither men or women are bound to each other or to their children by economic responsibilities, and women are free to devote themselves to developing a career. FUCHS [1989] states that 'in contemporary America, the greatest barrier to economic equality is children. Most women want to bear children and are concerned about their well-being once they are born' [p. 39]. This is true for Israel as well. The conflict between family and career frequently constrains the choice of job: mothers are willing to accept low wage jobs in exchange for shorter or more flexible hours, location near home, etc. However, as described above, these barriers and constraints do not exist in the kibbutz and this should lead to more occupational sex equality in the kibbutz.

POLACHEK's [1979] human capital segregation theory would also suggest low rates of segregation in the kibbutz. It is based on the fact that women's employment is intermittent because of domestic responsibilities. They would therefore choose occupations characterized by the relatively slow rate at which skills deteriorate from disuse and with low penalties for intermittent employment. In the kibbutz women are free from domestic responsibilities and work even more continuously than men, who spend, on average, 30-40 days each year on reserve duty in the army.

Education may also influence the sexual division of labor. In the general population men are more educated than women: averages of 11.24 and 10.70 years of schooling, respectively, with similar standard deviations (4.49 and 4.29 years of schooling. Data drawn from the 1983 census). Higher education of males is usually found in other countries as well. Women (and their parents) are less likely to invest in wage-enhancing human capital while in school, because most young women expect to be mothers and to stop working, or to work part-time, when they have young children. However, data on the educational attainments of kibbutz members in 1983 reveals that men and women are, on average, equally educated: 12.58 and 12.65 years of schooling for men and women respectively. The standard deviation is identical (2.74 years). The kibbutz population is more educated and more homogeneous than the population in general. The distribution of males and females by last school completed

6. This is *not* true for other Socialist movements. For example, in the U.S.S.R. women's day-to-day lives consist of full demands as members of the labor force and conventional domestic responsibilities as well [DODGE, 1966]. In China the same dual demands on women exist [SIDEL, 1973].

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is also not very different from that of the population at large (*see Table 1*). Men compose a higher percentage of vocational school and university graduates, while there are more women among teachers' seminars graduates. The greater similarity of educational attainments in the kibbutz compared to the population in general is hypothesized to lead to more occupational equality.

Table 1
 Last School Completed (percentages), by Sex
 The Kibbutz and Israel as a Whole
 Jewish, Employed, 25-65 Year Olds - Israeli Census 1983

Type of school	Kibbutz		General Population	
	Men	Women	Men	Women
Elementary school	7.1	7.4	25.1	26.9
Junior high school	4.9	5.2	4.5	5.3
Yeshiva	0.9	0.1	2.1	0.1
Vocational and agricultural high school	20.7	12.0	25.9	17.6
Academic high school	27.8	28.6	14.2	21.1
Teachers' seminary	2.8	20.3	1.2	8.0
Posthigh school training	11.8	9.3	6.5	5.6
University	24.0	17.0	20.7	15.3
Sample size	4'394	4'139	110'107	72'331

Notes: Yeshiva - school for religious studies.

Differences in sample size in the various tables, relating to 1983, are due to variations in missing values.

The percentage distribution may not total to exactly 100 because of rounding.

However, if marriage markets are incorporated into our analysis a different aspect of women's status in the kibbutz is revealed. Women in the kibbutz marriage market are considered inferior as compared to women in the marriage market outside the kibbutz. According to GROSSBARD-SCHECHTMAN [1984] and GROSSBARD-SCHECHTMAN and NEUMAN [1985], the marriage market is characterized by schedules of supply and demand for women's (and men's) services as wives, mothers, companions, etc. The intersection of demand and supply determines the quasi-compensation (w^*) women can receive for such services. The higher w^* the higher women's bargaining power. Such higher

bargaining power can manifest itself in many ways, sometimes as directly related to women's material, emotional or status benefits within the family, and sometimes women may choose to translate their relatively high bargaining strength into occupational or political strength. Therefore a higher w^* might lead to lower occupational segregation.

In the kibbutz, where all household work is collectivized, a dominant component of demand is missing, namely, the demand for women's services as housewives. Single men also benefit from collectivized services of cooking, laundry, tailoring, etc. They don't need a wife to perform these tasks. This fact leads to a decrease in demand (as compared to the society without the kibbutz) and consequently to a lower w^* and lower bargaining power (vis-à-vis men) for high-status occupations, which might manifest itself in higher segregation into low-status female occupations⁷.

The question we are facing is therefore empirical: Do the deep commitment of the kibbutz to equality; freedom from housework and child care, and educational equality result in occupational sex equality? Or does women's lower quasi-compensation (w^*) in the marriage market offset these forces resulting in less occupational equality as compared to society outside the kibbutz? In order to address this question, I have made use of data from the 1961 and 1983 censuses to calculate segregation indices for the kibbutz and the general Israeli Jewish population. After a brief description of the data and methodology the main findings are presented, followed by a discussion and summary.

III. DATA AND METHODOLOGY

Two data bases have been utilized: the 1961 and 1983 20 percent samples of the Census of Population and Housing. The 1983 data are more detailed and, of course, more recent, and therefore will be more intensively used. The 1961 data are used mainly to check for trends, although this should be done with caution since more observations are required to predict a trend, and the occupational classification was very different in 1961 and 1983. Most changes are related to the renumbering of the occupations. This has no effect on the

7. In the labor market outside the kibbutz low-status occupations are usually low-paid as well. In the kibbutz the concept of a wage or personal income is meaningless and therefore jobs are characterized by their prestige or status and not by salaries paid for performance of these jobs. However, prestige scores attributed to jobs in the kibbutz are most probably affected by salaries paid for them outside the kibbutz.

segregation indices, but some classifications have also been changed so that workers have been reclassified from one occupation to another. Although the 1961 and 1983 data are not comparable, we can nevertheless compare the kibbutz to Israel as a whole in each year.

In order to compare the occupational segregation indices by sex in the kibbutz with Israel as a whole, I first present data on occupational distributions by sex. This gives a first approximation of the amount of segregation.

I then calculate two types of segregation indices. The first is the well-known Duncans' Dissimilarity Index, defined above. This index is, as SILBER [1989a] has shown, a weighted relative mean deviation of the ratios M_i/F_i (where M_i and F_i are the frequencies of males and females, respectively, in occupation i). The second is a weighted Gini Index of Concentration of the ratios M_i/F_i (or F_i/M_i) suggested by SILBER [1989a], henceforth the G-Segregation Index⁸.

These two segregation indices are highly correlated (see SILBER [1989b]). The G-Segregation Index has the advantage that it can be decomposed into the sum of two terms: an 'occupational mix component' and a 'sex composition component', without an interaction term. The Duncans' Dissimilarity Index can be decomposed in a similar way [BLAU and HENDRICKS, 1979] but with a residual that can be interpreted as an interaction between changes in sex composition and employment mix.

The decomposition of the segregation index is important in a comparison of segregation in the kibbutz and Israel, as the occupational mix is different in the two samples (see *Table 2*). The 'occupational mix effect' may be viewed as a change in segregation that would have existed had the sexual composition within each occupation been identical (for the kibbutz and the whole population), with the sole source of difference between the indices due to the differences in the relative frequencies of the occupational categories. Similarly, the 'sexual composition effect' may be regarded as the difference that would have been realized, had the relative sizes of the occupations been identical with the sole source of variation between the two indices due to differences in sexual composition within occupations. The latter is the more relevant effect when comparing occupational sex segregation between two populations with different occupational distributions.

For the 1983 sample there is a three-digit classification, which facilitated calculation of the segregation indices for three types of classification, at one-

8. SILBER [1989a] has shown that this G-Segregation Index may be written as $G_s = f' G m$, where f' and m are, respectively, row and column vectors of the shares f_i and m_i ranked by decreasing values of the ratios $r_i = M_i/F_i$, whereas G is a square matrix, in which the elements g_{ij} are equal to zero if $i = j$, to -1 if $j > i$ and to +1 if $i > j$.

two- and three-digit levels. The 1961 data occupations provide classifications at the two-digit level only, allowing the calculation of two sets of indices.

Table 2
Occupational Distribution (percentages), by Sex
Kibbutz and General Israeli Samples
Jewish, Employed, 25-65 Year Olds — Israeli Census 1983

Occupation	Kibbutz		General Population	
	Men	Women	Men	Women
Scientific and academic professionals	4.91	3.96	9.88	9.04
Professional and technical workers	7.81	28.48	10.23	25.71
Managers	7.71	2.42	8.76	2.57
Clerical workers	8.46	15.31	11.70	28.76
Sales workers, agents, etc.	2.63	2.42	8.49	6.34
Service workers	5.04	30.88	7.05	16.87
Farmers and farm workers	31.15	3.23	4.79	1.71
Skilled workers in industry	19.83	2.26	20.24	2.79
Other skilled workers	8.81	9.77	15.09	4.57
Unskilled workers	3.66	1.28	3.77	1.62
Sample size	4,645	4,372	110,205	72,846

IV. PRINCIPAL FINDINGS

Table 2 presents the occupational (one-digit) distribution for employed men and women of the kibbutz and the general population based on the 1983 census samples. For 1961 the distributions are similar⁹.

9. Not presented in order to save space, may be provided upon request.

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Table 3

Duncans' Dissimilarity Indices and G-Segregation Indices
for the Kibbutz and Israel as a Whole
Jewish, Employed, 25-65 Year Olds — Israeli Census 1983

Classification Level	Duncans' Dissimilarity Indices		
	Kibbutz	Israel	
One-digit level (10 categories)	55.36	42.30	
Two-digit level (86 categories)	68.98	58.98	
Three-digit level (303 categories)	72.65	61.62	

Classification Level	G-Segregation Indices		Difference in G-Segregation Index		
	Kibbutz	Israel	Total	Occupational Mix Component	Sex Composition Component
One-digit level (10 categories)	68.15	49.84	18.31	5.75	12.56
Two-digit level (86 categories)	83.46	72.90	10.56	5.57	4.99
Three-digit level (303 categories)	87.58	77.63	9.95	4.70	5.25

Data Source: Tapes of the Israeli 1983 Census of Population and Housing.

Computations are based on 4 037 kibbutz males and 3 885 kibbutz females,
98 130 Israeli males and 68 208 Israeli females.

Two outstanding differences between kibbutz members and the general population are revealed: a much higher percentage of kibbutz female service workers (31 percent versus 17 percent) and a six times greater percentage of male farm workers (31 percent versus 5 percent). Allowance is made for the different occupational distribution by decomposing the segregation index into two components and focusing on the sex composition effect.

The kibbutz's occupational distribution by sex gives, as a first approximation, the impression of being highly sexually segregated. Only 3 percent of the female members are involved in agriculture, which is the principal economic activity of most kibbutzim. Many kibbutzim have diversified into industrial production as well, but only 13 percent of the female labor force is assigned to

this activity, compared with more than 30 percent of the male labor force. On the other hand, there is a greater concentration of women in the service jobs: a third as opposed to five percent of men. Men compose more than 90 percent of the farm workers and of skilled workers in industry, and 85 percent of the managers, while women compose more than 85 percent of the service jobs.

In order to obtain a more focused view of segregation than is revealed by the occupational distributions, segregation indices have been calculated. *Table 3* presents Duncans' Dissimilarity Indices and G-Segregation Indices, for both the kibbutz and Israel as a whole, at three levels of aggregation. It is clear that occupational segregation by sex is higher in the kibbutz — this is revealed by both computational methods, at all aggregation levels. There are only minor differences between indices calculated at the two- and three-digit classification levels. The Duncans' Index is about 60 for Israel as a whole and about 70 for the kibbutz, that is, in the kibbutz 70 percent of female workers would have to change occupations in order to achieve a sexually egalitarian division of labor.

The G-Segregation Indices are higher than the Duncans' Indices but the differences between Israel and the kibbutz are similar — about ten points for the two more detailed classifications. As mentioned above, this index might be decomposed into an occupational mix component and a sexual composition component, with no interaction component. The decomposition indicates the ten point difference to be almost equally divided between the two components. The first component takes account of the different occupational distributions (presented in *Table 2*), which partially derive from the different rates of participation of both men and (mainly) women in the labor force. In the kibbutz rates of participation of both men and women approach 100 percent. In the general Jewish population the figures for 1983 are 63.5 percent and 36.6 percent, for men and women respectively. Yet a difference of about five points remains, indicating higher sexual segregation in the kibbutz¹⁰. The sexual composition component is much higher when the one-digit classification is used (12.56 versus a value of 5.75 for the occupational mix component),

10. Each of the two components can be divided into two sub-components. The occupational mix component is an arithmetic mean of two factors A and B. A is the difference in segregation due to the difference in the occupational mix, holding the sex-ratios at the levels existing in Israel as a whole. Similarly, the sex composition component is an arithmetic mean of C and D, where C is the difference in segregation due to variations in the sex composition within the different in segregations assuming the occupational distribution was equal to that of the kibbutz, while in D occupational distribution is held constant at the level in Israel

The values of A, B, C, and D at the different aggregation levels are as follows on page 213:

indicating greater sexual inequality between the kibbutz and the rest of the country.

A long run perspective is provided by a comparison between the situation in 1983 and in 1961. The 1961 census can be used to calculate segregation indices similar to those calculated for 1983. Such a comparison between 1983 and 1961 should be treated with caution (since the classification of occupations has changed between the two periods) however, comparisons between the kibbutz and the rest of the country can be validly made, and differences compared.

The 1961 indices are presented in *Table 4*. In 1961 the difference between sexual occupational segregation in the kibbutz as opposed to Israel as a whole, was even larger than in 1983. Both indices reveal a difference of about 13-14 points (at the two-digit aggregation level), compared to the difference of about 10 points in 1983. Furthermore, a decomposition into the two components, reveals that most of the difference is due to sex composition (at the two-digit level: 9.37 points, as compared to an occupational mix component of 3.21 points; in 1983 the shares of the components were almost equal). For the one-digit aggregation level the sex composition component is twice as large in 1961 compared to 1983¹¹.

	Factors			
	A	B	C	D
One-digit level	9.99	1.51	16.80	8.32
Two-digit level	6.69	4.46	6.10	3.87
Three-digit level	4.09	5.31	4.80	5.70

11. The corresponding A, B, C and D factors (see footnote 10) are:

	Factors			
	A	B	C	D
One-digit level	3.24	-6.11	29.30	19.92
Two-digit level	4.48	1.94	10.64	8.10

Table 4

Duncans' Dissimilarity Indices and G-Segregation Indices
for the Kibbutz and Israel as a Whole
Jewish, Employed, 25-65 Year Olds - Israeli Census

Classification Level	Duncans' Dissimilarity Indices	
	Kibbutz	Israel
One-digit level (10 categories)	54.24	31.81
Two-digit level (76 categories)	68.64	54.31

Classification Level	Kibbutz	Israel	Total	Occupational Mix Component	Sex Composition Component
One-digit level (10 categories)	67.37	44.20	23.17	-1.43	24.60
Two-digit level (76 categories)	84.52	71.95	12.58	3.21	9.37

Data Sources: Tapes of the Israeli 1961 Census of Population and Housing.

Computations are based on 3 073 kibbutz males and 2 937 kibbutz females,
71 027 Israeli males and 24 329 Israeli females.

The difference between the higher sex occupational segregation in the kibbutz and the general Jewish population has therefore narrowed, but the decline is minor for a period of more than two decades.

V. EXPLAINING THE PHENOMENON

The higher rates of segregation in the kibbutz stand in sharp contrast with the kibbutz's ideology and commitment to sexual equality. My proposed explanation is in the spirit of the 'New Home Economics', incorporating marriage and labor markets. My hypothesis (already mentioned in the second section which describes the kibbutz) is that women's status in the marriage market is inferior in the kibbutz compared to the marriage market of the society outside the kibbutz. This inferior status is caused by a lower demand for wives' services that results in lower bargaining power, both in and out of the household. Outside the home it might manifest itself, *ceteris paribus*, in higher female segregation

into low-status occupations. This effect might offset the forces which lead to lower segregation in the kibbutz.

Circumstantial evidence in support of this link between marriage and occupation markets can be found for the early days of the kibbutz at the beginning of the century. At that time, the number of males greatly exceeded the number of females [TIGER and SHERPHER, 1975] and the occupational distribution was really egalitarian; men and women worked side by side, both in the fields and in road construction. In fact, one would think that if there were few women, they would have involved themselves in traditional female jobs first, but the contrary was the case. The relative scarcity of women resulted in an increase in demand for women's traditional services and this, in turn, led to an increase in w^* . The high w^* resulted in a strengthening of women's bargaining power and consequently to an egalitarian occupational distribution. As the sex ratio decreased¹², the sexual division of labor increased. In addition, BEN-RAFAEL and GROSSBARD-SCHECHTMAN [1987] found, in a recent case-study of 19 kibbutzim, that women benefiting from a high sex ratio, and therefore more bargaining power, were more likely to fill leadership positions in the kibbutz.

Several other hypotheses have been offered in the literature which may also explain the inconsistency between the outcome predicted by ideology and intentions, and the situation in practice as revealed by the data.

1. The 'socialization' explanation proposes that since the founders of the kibbutz were raised in a culture where the sexual division of labor was polarized, they internalized the values and norms behind polarization [TIGER and SHEPHER, 1975, pp. 264-265]. However, this argument does not explain why the kibbutz has greater sexual segregation than the surrounding society.

2. The 'physical ability' explanation posits that women lack the strength to perform jobs which require great physical exertion such as field work or work with heavy equipment (see, for example, SPIRO [1980, p. 15]), and therefore they perform non-farm labor in order to free the men for farm work and other kinds of physical work. As the kibbutz has a higher proportion of jobs that require physical strength (mainly in agriculture) this might partially explain the higher segregation in the kibbutz.

3. The 'self-selection' or 'occupational sorting' explanation states that the occupational sex segregation index may be higher in the kibbutz because it

12. The sex ratio is defined as the number of men at a given age to the number of women of similar age. The higher the sex ratio the larger the demand for women's services and consequently w^* .

includes all kibbutz women but ignores non-kibbutz women who are not in the paid workforce. The assumption behind this explanation is that the current female labor force is not representative of the choices which current non-participants would make: women who are not in the labor force would enter female dominated occupations because the sex-segregated jobs are most closely related to the domestic tasks of the non-participants. This is in the spirit of TIGER and SHEPHER's [1975] explanation for occupational segregation in the kibbutz — kibbutz women who are relieved of domestic duties choose to enter occupations compatible with child-raising and housework. This explanation is not supported by circumstantial data from the early days of the kibbutz described above. All kibbutz women were in the workforce at those times but also, the occupational distribution was really egalitarian.

Another piece of circumstantial evidence in contrast with this hypothesis is revealed by comparing the female occupational distribution for 1961 and 1983. During this period of about two decades female labor force participation in Israel increased from 27.3 percent to 36.6 percent (Annual Statistical Abstracts, 1962 and 1984) and, according to this hypothesis, the percentage of women in the service jobs that are compatible with household work should have increased, but this was not the case. In 1961 24.74 percent of working women were employed in service jobs and in 1983 the rate decreased to 16.87 percent.

4. The 'labor force participation' explanation states that the greater women's participation in the labor force, the more likely segregation of workers by sex, because of male interest in avoiding direct competition with female workers. This hypothesis, stated by SEMYONOV [1980], might explain the higher sex segregation in the kibbutz, where all women participate in the labor force (a rate approaching 100 percent). Additional evidence in favor of this hypothesis is the narrowing of the difference between sex segregation in the kibbutz and the rest of the country from 1961 to 1983 as a result of an increase in women's participation in the labor force in Israel with no change in the kibbutz.

VI. SUMMARY AND DISCUSSION

This paper compares occupational sex segregation in the kibbutz as opposed to the general population of Israel, and proposes possible factors that are responsible for the higher sexual segregation in the kibbutz (which is in great contrast to the kibbutz ideology of sexual equality). The first hypothesis discussed is unique in the sense that it incorporates marriage and occupation markets and has never been utilized to explain sex segregation in the kibbutz.

More evidence, from other collectives as well, should be used to test these hypotheses in order to find the dominant one. Obviously, there might be other explanations as well.

It should be emphasized that I have analysed occupational sex segregation in the existing labor forces in the kibbutz versus the general population. The two populations differ substantially in rates of participation. While in the kibbutz rates of participation approach 100 percent, for both men and women, in the general population the corresponding figures are much lower: 63.5 percent for men and 36.6 percent for women (in 1983). Segregation indices do not take into account differences in rates of participation, and one therefore can not predict if and how segregation would change as a result of an increase in participation in the general population and particularly if rates would approach 100 percent. This is obviously a drawback of existing segregation indices — they are describing occupational segregation for a given labor force at a given point in time. They are not conditional on the rate of participation. There might be some kind of selectivity bias if the working population is not representative of the whole population. However, investigation of a new segregation index, which corrects such selectivity bias is outside the scope of this paper.

In this paper I have dealt with one aspect of kibbutz life — the sexual division of labor. There are, of course, other aspects of equality, such as political or social, which may well be correlated with occupational equality, but these are not discussed in this paper.

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SUMMARY

The kibbutz provides an environment conducive to occupational sex equality: a deep ideological commitment to equality, a high valuation of work, an egalitarian educational system, and collectivization of household work, in principle, allow women to develop careers. This paper reports on an empirical study which reveals that, contrary to these predictions, the kibbutz exhibits greater occupational sex segregation than Israel as a whole. Using two types of segregation indices, I find a difference of approximately 10 points (on a scale of 0-100) in 1983 in favor of sexual occupational equality in the general population. After allowance is made for differences in the occupational mix, there remains a difference of about five points. The difference narrowed somewhat between 1961 to 1983. Several hypotheses are considered that might explain the inconsistency between the outcome predicted by kibbutz ideology and the reality in practice.

ZUSAMMENFASSUNG

Der Kibbutz bietet ein günstiges Umfeld für die berufliche Gleichheit der Geschlechter: ein tiefempfundenenes ideologisches Bekenntnis zur Gleichheit, eine hohe Wertschätzung der Arbeit, ein egalitäres Erziehungssystem und die Kollektivierung der Hausarbeit erlauben es den Frauen im Prinzip, erfolgreiche berufliche Laufbahnen einzuschlagen. Dieser Artikel berichtet von einer empirischen Studie, aus der hervorgeht, dass — im Gegensatz zu diesen Voraussagen — der Kibbutz eine stärkere berufsbezogene Geschlechtertrennung aufweist als Israel als Gesamtheit.

OCCUPATIONAL SEX SEGREGATION IN THE KIBBUZ

Unter Heranziehung von zwei verschiedenen Arten von Segregationsindices erhält man für das Jahr 1983 eine Differenz von ungefähr 10 Punkten (auf einer Skala von 0 bis 100) zugunsten einer grösseren Gleichheit der Geschlechter in der Gesamtbevölkerung. Nach Berücksichtigung von Unterschieden in der beruflichen Struktur verbleibt eine Differenz von ungefähr 5 Punkten. Dieser Unterschied hat sich zwischen 1961 und 1983 etwas vermindert. Es werden verschiedene Hypothesen aufgestellt, die die Inkonsistenz zwischen dem durch die Kibbutz-Ideologie nahegelegten Ergebnis und der praktischen Wirklichkeit zu erklären vermögen.

RÉSUMÉ

On aurait pu penser à priori que le kibbutz constituait un cadre idéal pour l'installation d'une égalité entre les sexes, dans la répartition de ses membres entre les divers métiers qui s'y pratiquent. On y trouve en effet un engagement idéologique profond en faveur de l'égalité entre les sexes, le travail y est considéré comme l'une des valeurs fondamentales, le système éducatif y est très égalitaire et de nombreuses tâches domestiques sont prises en charge par la collectivité. Tous ces facteurs sans nul doute devraient favoriser l'épanouissement de carrières féminines. L'étude qui est présentée ici indique cependant que contrairement à ce qu'on aurait pu croire, la ségrégation sexuelle dans l'emploi est plus forte au kibbutz qu'en Israël en général, même lorsque l'on tient compte des différences de structure professionnelle. Diverses hypothèses sont suggérées, qui permettent éventuellement d'expliquer ce hiatus qui semble exister entre la théorie (l'idéologie du Kibbutz) et la pratique (la vie quotidienne).