

DIFFERENTIAL FERTILITY IN MONTERREY, MEXICO PRELUDE TO TRANSITION?

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The past 30 years have witnessed rapid and significant advances in the Mexican economy. Yet, even though mortality has fallen precipitously, recent investigators have looked in vain for signs of a transition in Mexican fertility. For the country as a whole, no decline is evident.¹ Moreover, available evidence indicates that urban fertility has tended to increase in recent years even though it remains lower than rural fertility.² Rather than signify that no transition in fertility has occurred, however, these results may indicate that the effects of modernization have not been sufficiently pervasive to be reflected at a nationwide or urban level. Since existing theory maintains that fertility declines begin in the upper educational and occupational strata of large urban areas, an adequate assessment of the possibility of a change in Mexican fertility requires the investigation of fertility differentials among socioeconomic subgroups within urban areas. This paper is a first report of such an investigation. The data are based upon a survey of 1,640 males between the ages of 21 and 60, resident in the metropolitan area of Monterrey, Mexico.³

The Monterrey metropolitan area serves as an excellent location in which to investigate differential fertility because of its size (an estimated 950,000 inhabitants in 1965) and its importance as a center of Mexican heavy industry (43 per cent of the economically

active males in 1960 were employed in manufacturing).⁴ The study of fertility in Monterrey takes on added significance because, in the so-called "Western" countries, declines in fertility typically originated in urban-industrial areas.

THE SAMPLE

For the purposes of this study the universe was defined as the resident male population between the ages of 21 and 60.⁵ Using a stratified two-stage cluster sample, a total of 1,803 individuals were selected for interviewing from which 1,640 completed interviews were obtained.

Because men in upper income and age strata had been over-sampled to obtain a sufficient number of cases for analysis, the sample was not representative of the total population aged 21-60. A census of the sampling units had been taken, however, so that each age-income category could be weighted by a factor based upon the relation of each stratum to the total population. In this manner a total of 3,565 cases were obtained whose characteristics are representative of the universe from which the original sample was drawn. The present investigation is based upon this "representative sample."

Table 1 shows the characteristics of the respondents. Data from the 1960 Mexican census for the municipalities comprising the Monterrey Metropolitan Area are presented for comparison. In comparing census with sample figures two factors must be taken into account. First, men living in clearly rural areas were not sampled, although the census figures are based upon the total population of the five municipalities encompassing the Monterrey Metropolitan Area. Second, a period of five years separates the two bodies of data.

Sample data indicate that the great majority of the inhabitants of Monterrey were born elsewhere. Most of these have come from the states of Nuevo Leon, Coahuila and San Luis Potosi. Among migrants, persons born in places of less than 5,000 predominate. Rural migration to Monterrey then, has been quite heavy.

TABLE I. COMPARISON OF POPULATION INTERVIEWED WITH 1960 CENSUS.

<i>Age Group</i>	<i>Sample</i>		<i>Census</i>
	<i>N</i>	<i>%</i>	<i>%</i>
21-25	804	22.6	22.5
26-30	565	15.8	17.9
31-35	581	16.3	14.2
36-40	496	13.9	13.6
41-45	385	10.8	8.8
46-50	239	6.7	9.5
51-55	268	7.5	7.0
56-60	226	6.3	6.6
Total	3,565	100.1	99.9
<i>Marital Status</i>			
Single	833	23.4	27.3
Legally married	2,583	72.5	65.6
Consensual union	81	2.3	4.8
Divorced or widowed	43	1.2	2.3
Separated	25	0.7	—
Total	3,565	100.1	100.0*
<i>Years of Completed Education</i>			
None	332	14.5	18.0
1-5	968	42.5	42.5
6	512	22.4	24.4
7-9	272	11.9	6.8
10 or more	200	8.8	8.3
Total	2,284	100.1†	100.0**
<i>Size of Birthplace</i>			
Under 5,000	1,460	41.1	—††
5,000-19,999	512	14.4	—
20,000-99,999	361	10.2	—
100,000 or more	69	1.9	—
Monterrey	1,113	31.3	—
Foreign born	41	1.1	—
Total	3,556	100.0	—

* Base: male population 20-59. Excludes "not indicated."

† Base: respondents aged 30-60.

** Base: male population aged 30 and over.

†† Not available.

Census data obtained from Estados Unidos Mexicanos, VIII CENSO GENERAL DE POBLACIÓN 1960, Nuevo Leon, State Volume, Mexico, D. F., 1964.

Marital Status

The census reports 6.9 per cent fewer legally married men than does the sample. The census also reports proportionately twice as many men living in consensual union. The sample appears, therefore, to have under-reported the frequency of consensual unions. However, even if a sufficient number is subtracted from the legally married figure to make the census and sample percentages in consensual union equal, the percentage of legally married men in the sample would still be higher than that in the census.

Education

Because of the lack of correspondence between the census age classification and that used in the present investigation the comparison of the level of completed education must be limited to the population 30 years or more in the census and 30–60 years in the sample. The fact that much older men are included in the census calculations probably accounts for the fact that a higher proportion of census men have no education. In addition, the generally higher level of education in the sample may also be due to the advances made in the general population during the five years between the census and the sample.

THE INTERVIEW

Because little was known concerning the reliability of male responses to questions regarding their past fertility, special care was taken to insure confidence in their replies.

In each interview, the interviewer followed a systematic procedure with respect to questions concerning fertility. For example, if the respondent did not know or was not sure of how many children he had had, or if the interviewer judged that the respondent was not sure of how many children he had had, the interviewer was instructed to complete the remaining portion of the interview and to return at a later time when the respondent's wife was present and could supply the necessary information. This procedure applied to all questions in connection with marriage and family formation

(i.e., age at marriage, difference in time between marriage and birth of first child, etc.). In addition, after a completed interview was returned to the central office, a supervisor reviewed the information concerning the number of living children, their age, sex and occupation and compared this information with the data appearing in a life-history obtained in a separate part of the interview. The difference between the number of living children and the number of children ever born must, in all cases, have been due to the number of children who had died. When inconsistencies were found, the interviewer was questioned as to the reason. If the inconsistency was not due to an error by the interviewer, he was instructed to return to the respondent's home and clarify the inconsistency.

THE LEVEL OF FERTILITY IN MONTERREY

The age range employed in interviewing females (usually 20 to 50) differs from the age range used in the present investigation. Therefore comparisons cannot be exact. However, the wives of the married men in the present survey are of comparable ages. Thus, the wives of 86 per cent of the married respondents were between the ages of 20 and 50. Furthermore, the fertility of women over 50 (five per cent of all wives) is counterbalanced by the fertility of women under 20 (nine per cent of all wives). If anything, the mean number of live births to these respondents is probably lower than what would have been the case had women between 20 and 50 been interviewed, because a larger proportion of the wives are under 20 than over 50.

With these considerations in mind the fertility of Monterrey may be compared with that of other large Latin American cities (Table 2). With respect to all respondents the mean for Monterrey equals that of Mexico City and is higher than that of all other cities. When ever-married respondents are considered, Monterrey clearly manifests the highest fertility.

The mean number of live births to ever-married men by age is given in Table 3. Assuming that the oldest men in the sample are at or near the end of their period of reproductivity these data indi-

TABLE 2. COMPARISON OF MEAN NUMBER OF LIVE BIRTHS IN NINE LATIN AMERICAN CITIES

<i>City</i>	<i>Mean Number of Children</i>	
	<i>Ever-Married Respondent</i>	<i>All Respondents</i>
Monterrey ⁶	4.26	3.27
Bogotá	3.88	3.16
Buenos Aires	1.85	1.49
Caracas	3.53	2.97
Mexico City	4.05	3.27
Panama City	3.25	2.74
Rio de Janeiro	2.78	2.25
San José	3.83	2.98
Santiago ¹⁹	2.98	2.38

TABLE 3. MEAN NUMBER OF BIRTHS TO EVER-MARRIED MEN BY AGE

<i>Age</i>	<i>Number of Cases</i>	<i>Mean Number of Live Births</i>
21-25	313	1.59
26-30	406	2.41
31-35	493	3.86
36-40	450	4.73
41-45	373	5.60
46-50	224	5.32
51-55	254	5.96
56-60	218	6.13
All ages	2,731	4.26

cate that the level of completed fertility in Monterrey is extremely high. The mean number of live births to men aged 51-60 is 6.03. The highest mean number of births to women 40-50 reported by Miró is approximately five (Bogotá and Mexico City).⁶ Moreover, the above mean of 6.03 stands in marked contrast to the figure of 2.19 for ever-married women aged 45-49 living in urbanized areas of the United States in 1960.⁷ In fact, in the case of the United States, one must go back to the census of 1910 to find a figure which even approximates that for Monterrey. The mean number of children born to all ever-married women aged 45-49 in the country as a whole in 1910 was 4.74.⁸ Since this figure reflects rural as well as

urban fertility, the difference between the level of completed fertility in the United States at that time and present-day Monterrey must be regarded as a minimum. Comparison with urban levels of completed fertility outside the Western hemisphere is made difficult by the heterogeneous or special nature of the populations studied in recently conducted surveys.⁹ Only in Egypt are levels of completed urban fertility higher than in Monterrey.¹⁰

Only eight per cent of all ever-married men in the Monterrey sample have never had a child. Many of these, however, are young men. More than half (54 per cent) have had four or more children.

FERTILITY DIFFERENTIALS

*Age at First Marriage and the Initiation of Family Formation*¹¹

In Table 4 the mean number of births to ever-married men is classified by present age and age at first marriage (or union). Among all ever-married men and within each age group, the younger the age at first marriage, the higher the mean number of live births.

A large proportion of men marry at a relatively late age. Of the ever-married men, 43 per cent entered into their first union after the age of 25. Considering only those above age 30 at time of interview (since younger men have not had the opportunity to marry at older ages), 50 per cent entered into their first union after age 24 and 36 per cent married after age 26.

Place of Birth

The size of the community of birth was obtained from the Mexican census at the time closest to the respondent's date of birth. The mean and standardized mean number of live births by size of birth-place display a pattern similar to that found in Santiago¹² (Table 5).

The tendency is for fertility to be inversely related to size of birth-place. The higher fertility of all migrants is primarily due to the very high fertility of those born in places of less than 5,000 inhabitants, but the fertility of those born in places of between 5,000 and 99,999 inhabitants is also high. Interestingly, the fertility of those born in

TABLE 4. MEAN NUMBER OF LIVE BIRTHS TO EVER-MARRIED MEN BY AGE AT TIME OF INTERVIEW AND AGE AT FIRST UNION

<i>Present Age</i>	<i>Less Than</i>	<i>Age at First Union</i>					<i>30 or More</i>
		<i>20</i>	<i>21-22</i>	<i>23-24</i>	<i>25-26</i>	<i>27-30</i>	
21-25							
Births	2.08	1.36	0.74	0.00	—	—	
N	156	97	46	8			
26-30							
Births	3.66	3.11	2.14	1.41	0.90	—	
N	96	80	101	84	44		
31-35							
Births	5.32	5.03	4.24	3.25	2.12	1.49	
N	84	122	85	72	98	32	
36-40							
Births	6.72	5.77	5.37	3.94	3.69	2.98	
N	60	81	82	52	128	47	
41-45							
Births	6.42	6.31	6.65	4.70	5.16	3.93	
N	66	68	48	51	84	50	
46-50							
Births	6.60	6.67	5.99	5.29	4.90	2.86	
N	32	46	35	31	33	46	
51-55							
Births	6.09	8.35	5.28	6.70	5.75	4.15	
N	47	31	24	43	64	45	
56-60							
Births	7.04	8.23	7.53	7.56	4.71	4.26	
N	40	23	24	31	51	48	
All ages							
Births	4.70	4.82	4.24	3.99	3.83	3.35	
N	581	548	445	372	503	268	

other large cities (100,000 or more) is lower than that of those born in Monterrey. Further investigation reveals that most of the respondents from such places were born in Mexico City, where fertility appears to be slightly lower than in Monterrey.

The age-standardized mean numbers of live births indicate that the difference between migrant and non-migrant fertility is partly due to differences in age, particularly among those born in Monterrey and those born in places of less than 5,000 inhabitants. Nevertheless, even when controlling for this factor, migrants born in

places of less than 100,000 inhabitants (and migrants in general) still manifest higher fertility than those born in Monterrey.

Fully 65 per cent of the total sample was born in places of less than 100,000 inhabitants. Furthermore, their fertility is so much higher than that of Monterrey natives that the impact of migration upon the level of fertility in this city is of a very high order.

TABLE 5. MEAN NUMBER OF LIVE BIRTHS TO EVER-MARRIED MEN BY SIZE OF BIRTHPLACE, EDUCATION, OCCUPATIONAL LEVEL AND WEEKLY PER CAPITA FAMILY INCOME

<i>Size of Birthplace*</i>	<i>Number of Cases</i>	<i>Mean Number of Live Births</i>	<i>Standardized Mean Number of Live Births†</i>
Under 5,000	1,166	4.64	4.42
5,000-19,999	417	4.17	4.14
20,000-99,999	291	4.30	4.28
100,000 or more	52	3.06	3.13
Total born outside Monterrey	1,926	4.44	4.31
Monterrey	755	3.74	3.98
<i>Education</i>			
No formal education	350	5.21	4.36
Incomplete <i>primaria</i>	1,118	4.60	4.54
Complete <i>primaria</i>	651	4.18	4.30
<i>Secundaria</i> or <i>preparatoria**</i>	439	3.17	3.51
University*	162	2.99	3.03
Total	2,720	4.25	4.25
<i>Occupational Level</i>			
Unskilled	850	4.58	4.48
Semi-skilled and skilled	1,251	4.28	4.33
Lower non-manual	406	3.79	3.83
Higher non-manual	191	3.65	3.13
All levels	2,718	4.26	4.26
<i>Weekly per Capita Family Income (\$)</i>			
less than 35	592	5.85	5.63
35-57	700	4.22	4.47
58-115	734	3.76	3.70
116-289	382	3.17	3.10
290 or more	185	3.36	2.89

* Excludes foreign-born.

† Mean number of live births standardized directly against age distribution of total respondents.

** Complete and incomplete.

Education

The inverse association between fertility and level of education found in previous studies is also observed in Monterrey (Table 5). The difference in mean number of live births between those with no education and those with at least some university education is 2.21. When standardized for age, however, this difference is reduced to 1.33, reflecting the greater proportion of older men among those with no education. The major difference between the five levels of education (whether standardized or not) occurs between those with complete *primaria* and those who have at least some *secundaria* or *preparatoria*. A further point of interest in Table 5 is that in the educational level with the lowest fertility (those with at least some university education) the mean number of live births exceeds the fertility of all ever-married respondents in both Buenos Aires and Rio de Janeiro and equals that in Santiago (see Table 2). This is also true in the case of occupation and income.

Occupational Level

The inverse association of fertility with education is again observed when fertility is classified by occupational level at time of interview (Table 5). The difference between the extreme categories (unskilled and higher non-manual) is less than one child (0.93). When standardized for age, however, the difference is greater (1.35 children) reflecting the greater proportion of older men among higher non-manual workers. In the case of this variable, however, calculations are based upon young men who have only recently entered the labor market as well as older, more established men. To the extent that the occupational level of the former is not indicative of eventual socioeconomic position (or present life styles), this type of classification is somewhat "static" and should be interpreted with a great deal of caution.¹³

Income

A negative association is observed between weekly per capita family income and mean number of live births, as shown in Table 5, whether or not the factor of age is controlled. The difference in mean

number of live births between the lowest and highest income groups is more than 2.5 children. When the mean number of live births is standardized for age the inverse association becomes even more pronounced. In terms of the difference in mean number of live births between the extreme categories, the income differential is substantially larger than either the occupational or the educational differential. On the basis of a more detailed analysis of Santiago data, Tabah and Samuel suggest that fertility may be more closely associated with income than with education.¹⁴ The data indicate that the same may be true in Monterrey although further analysis is obviously necessary.

Economic Activity of Wife

The wives of more than half (52.9 per cent) of the ever-married men in the sample had some work experience (either within or outside the home) before marriage. However, the wives of far fewer men worked after marriage (9.3 per cent) and the wives of only 6.7 per cent of the respondents were working at time of interview. In both Lima¹⁵ and Santiago,¹⁶ on the other hand, the percentage of women currently working exceeds 20 per cent.

The mean number of live births to men whose wives are currently working is 4.08. The mean number of live births to men whose wives are not currently working is 4.31. The difference is small and because these measures are not adjusted for differences in age they must be regarded with caution.¹⁷ When the men whose wives are currently working are classified according to place of work of their wives, the results show that men whose wives work outside the home have had fewer children than those whose wives work in the home (3.89 and 4.41 children, respectively).

Information on previous work experience of wife provides an interesting contrast. Men whose wives worked after marriage have had about the same number of children as those whose wives did not work after marriage (4.32 and 4.28, respectively); men whose wives worked before marriage have much lower fertility than those whose wives did not work before marriage (3.82 and 4.79 children, respectively). The exact nature of the above differentials will be

examined in a future paper. At this point, however, at least three factors may account for the latter differential. The differences by premarital work experience may reflect 1. differences in age at marriage (which in turn may be related to differences in levels of education), 2. differences in socioeconomic characteristics of husband and 3. the effect of employment, per se.

DISCUSSION

Although the findings of this investigation remain tentative, several general observations may be made. To begin with, the overall level of fertility in Monterrey is high in comparison with that of other Latin American cities. In terms of completed fertility, levels as high as that of Monterrey are rarely reported for any large urban area. These findings are even more impressive in light of the fact that Monterrey men marry at a relatively late age and that the initiation of family formation is therefore delayed for some five to ten years. Once married, however, they begin to have children almost immediately and very few remain childless. In view of the probability that some of those who have no children are probably infecund, the percentage who voluntarily remain childless must be very small.

Despite the high level of fertility in Monterrey, one cannot escape the conclusion that Monterrey men and their wives in some way limit the size of their family. The fertility differentials found elsewhere in association with voluntary forms of family limitation clearly exist in Monterrey. Moreover, although lower fertility is associated with later age at marriage, this factor can furnish no more than a partial explanation for the observed differentials. A brief example indicates why. Even if an individual marries at the relatively late age of 35, his first child will probably be born within two years, and if he has completed some *secundaria* or *preparatoria* education, this leaves him, at age 37, with at least 15 to 20 years in which to have two additional children (the mean number of live births to men in this educational category being about three). If one accepts the argument that the biological ca-

capacity to have children during these years must surely enable a reasonably healthy man to have several more than two additional children, one must also accept the possibility that some form of family limitation is practiced.

The data indicate that rural to urban migration is a major factor accounting for the high fertility found in Monterrey. Furthermore, to the extent that such migration is characteristic of other Mexican cities, rural to urban migration is closely related to the decline in urban-rural fertility differentials, for a major feature of this decline is that fertility in urban areas has risen to approximate rural levels. Although urban fertility per se may have risen (and it is not clear that it has), the composition of the urban population has changed so that it now includes many persons with "rural" backgrounds. This also raises a question to which attention has been previously directed.¹⁸ What is the effect of migration upon observed fertility differentials, given the likelihood that migrants occupy different positions in the social structure and possess distinctive characteristics relative to non-migrants? An analysis now in preparation will seek to answer this question.

The subject of female employment deserves special attention, not only because its effect upon and causal connection with fertility is poorly understood, but because the potential magnitude of its effect is very large. In the case of Monterrey, if married women began to enter the labor force, they might do so in very large numbers simply because so few are currently employed. Even less clearly understood is the reason for the close association between premarital employment and current fertility. Several factors have been suggested which may be important and which will be examined more closely in a future analysis.

Finally, of no small significance is the fact that in a large industrial city such as Monterrey very high levels of fertility have been demonstrated. Even the strata in which the lowest fertility is found (upper income, educational and occupational categories) manifest levels of fertility exceeding that in the total populations of several other cities. These findings should give pause to those who would depend solely upon the spread of education and economic benefits for

a decline in fertility. Even if, for instance, everyone were to complete some elementary education, total fertility, given existing rates, would decline only slightly. Thus, computing the mean number of live births to ever-married men in the sample, excluding those with no formal education, the result is a figure of 4.11 as opposed to the observed total of 4.25. Taking a more extreme situation, if the total population were to achieve a completed *primaria* education, again assuming no change in fertility rates, the mean number of live births would be 3.67. In the absence of declines in fertility rates, therefore, a drastic increase in educational level would be required for a substantial decline in total fertility, and even the figure of 3.67 approximates or exceeds the total fertility of ever-married respondents in seven of the eight cities compared in Table 2.

In consideration of the complexity of the phenomena under study, this report must be regarded as a first approximation. Further analyses, now in preparation, hopefully will clarify and amplify the findings to date.

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¹ In fact, evidence shows that Mexican fertility has risen since 1940. See Collver, O. Andrew, *BIRTH RATES IN LATIN AMERICA: NEW ESTIMATES OF HISTORICAL TRENDS AND FLUCTUATIONS*, Research Series No. 7, Berkeley, University of California, Institute of International Studies, 1965; and Zarate, Alvan O., *Fertility in Urban Areas of Mexico: Implications for the Theory of the Demographic Transition*, paper presented at the annual meeting of the Population Association of America, New York, 1966.

² See Robinson, Warren C. and Robinson, Elizabeth H., *Rural-Urban Fertility Differentials in Mexico*, *American Sociological Review*, 25, 77-81, February, 1960; and Zarate, *ibid.*

³ The metropolitan area is located within the *municipios* of Monterrey, Garza García, San Nicolás de los Garzas, Guadalupe and Santa Catarina.

⁴ For a detailed account of the economic importance of the state and region in which Monterrey is located see Yates, Paul Lamartine, *EL DESARROLLO REGIONAL DE MÉXICO*, México, Banco de México, S.A., 1962.

⁵ The description of the sample is drawn from Balan, Jorge, *Metodología, in MOVILIDAD SOCIAL, MIGRACIÓN Y FECUNDIDAD EN MONTERREY*, Monterrey, Centro de Investigaciones, Universidad de Nuevo Leon, forthcoming.

⁶ Miró, Carmen A., Some Misconceptions Disproved: A Program of Comparative Fertility Surveys in Latin America, in Berelson, Bernard, *et al.*, (Editors), *FAMILY PLANNING AND POPULATION PROGRAMS*, Chicago, The University of Chicago Press, 1966, p. 621.

⁷ Source: United States Bureau of the Census, *UNITED STATES CENSUS OF POPULATION: 1960, SUBJECT REPORTS. WOMEN BY NUMBER OF CHILDREN EVER BORN*, Final Report PC(2)-3A, Washington, United States Government Printing Office, 1964.

⁸ Source: Thompson, Warren S. and Lewis, David T., *POPULATION PROBLEMS*, fifth edition, New York, McGraw-Hill Book Company, 1965, p. 256. The figures for whites and nonwhites are 4.59 and 6.18, respectively. It is relevant that "The 1910 Census may have included a considerable number of stillbirths as well as live births in the count of children ever born." *Ibid.*, p. X.

⁹ A comprehensive review of recent fertility surveys can be found in Mauldin, W. Parker, *Fertility Studies: Knowledge, Attitude, and Practice, Studies in Family Planning*, No. 7, New York, The Population Council, 1965, pp. 1-10.

¹⁰ Rizk, Hanna, Social and Psychological Factors Affecting Fertility in the United Arab Republic, *Marriage and Family Living*, 25, 69-73, February, 1963.

¹¹ Data on differential marital fertility have not been presented because of the small number of men who are consensually united, separated, widowed and divorced. Moreover, many of those reported as legally married at the time of the survey may have previously lived in consensual unions so that the category "legally married" is vague. A future analysis is planned which will distinguish between consensual unions, "legalized" unions and legal marriages.

¹² Tabah, Leon and Samuel, Raul, Preliminary Findings of a Survey on Fertility and Attitudes Toward Family Formation in Santiago, Chile, in Kiser, Clyde V. (Editor), *RESEARCH IN FAMILY PLANNING*, Princeton, New Jersey, Princeton University Press, 1962, pp. 283-284.

¹³ This view is supported by the observation that when fertility is cross-classified by occupational level and age the negative association between fertility and occupational level is marked among men over age 40 but much weaker among younger men.

¹⁴ Tabah and Samuel, *op. cit.*, p. 281.

¹⁵ Stycos, J. Mayone, Female Employment and Fertility in Lima, Peru, *Milbank Memorial Fund Quarterly*, 43, 42-54, January, 1965.

¹⁶ Tabah and Samuel, *op. cit.*, p. 281.

¹⁷ Although this finding is in general agreement with those of previous studies of Latin American cities (the differential, however, is not as sharp as that observed by Miró and Tabah and Samuel), the work of Stycos suggests that variations in time spent in marriage are partly responsible for the observed differences. When live births were related to the number of years mated no difference in fertility was found between upper class working women and upper class non-working women. A difference was observed, however, among middle and lower class women. Stycos, *op. cit.*

¹⁸ See, for example, Goldberg, David, The Fertility of Two-Generation Urbanites, *Population Studies*, 12, 214–222, March, 1959; and, more recently, Duncan, Otis Dudley, Farm Background and Differential Fertility, *Demography*, 240–249, 1965. A report of a similar investigation conducted in Brazil is contained in Hutchinson, Bertram, Fertility, Social Mobility and Urban Migration in Brazil, *Population Studies*, 14, 182–189, March, 1961.

¹⁹ Tabah and Samuel, *op. cit.*, pp. 276, 278.

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