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**Psychosomatic Complaints as
Related to Desire of Pregnancy, Contraceptive
Practice and Frequency of Intercourse**

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Problem and Definition of Variables

In a collaborative study on pregnancy and child development¹ a special quantitative evaluation of 6,117 cases was carried out to test the hypothesis (4) that psychosomatic complaints as an essential aspect of psychoneurotic maladaptation are associated with either fear of pregnancy or an especially pronounced desire for a child.

An index of psychosomatic complaints was constructed from spontaneous responses during the first trimester of pregnancy in the women's diaries in which they had to record numerous physical and environmental factors relevant for the health of the mother and the fetus. The psychosomatic score comprised the following complaints counting one point each: (1) pains in the stomach; (2) constipation; (3) circulatory disturbances; (4) headaches; (5) pain in the back; (6) unusual weakness; (7) sleeping disturbances; (8) anxiety and nervousness; (9) depression; (10) loss of appetite, and (11) tachycardia, cardiac arrhythmia or chest pain.

Complaints were scored on a four point scale in two-way contingency tables and as present or absent for multivariate statistical analyses.

Desire or rejection of pregnancy was deduced: (a) from responses to the interview question of whether the present pregnancy was wanted, and (b) from two more indirect indicators which were interview responses to questions of previous contraceptive practice and frequency of sexual intercourse. The latter variable was included because it was correlated positively with both desire of pregnancy and contraceptive practice.

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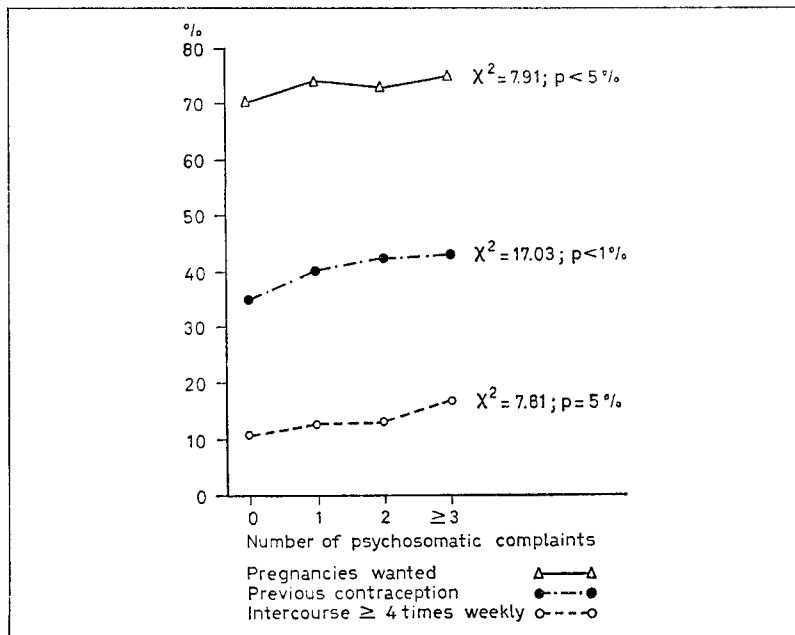


Fig. 1. The 4-point score of psychosomatic complaints as related to desire of pregnancy, previous use of contraceptives and frequency of sexual intercourse in the total group.

Results

There was an overall positive relationship between the score of psychosomatic complaints and desire of pregnancy, use of contraceptives and frequency of intercourse each, as demonstrated in figure 1. These results, however, may be produced by the fact that desire of pregnancy and the two related variables, on the one hand, are determined by numerous factors, such as age of mother, social class, years of married life, number of living children and previous miscarriages, and that psychosomatic complaints, on the other hand, also seem to depend on some of these factors; they increase with age, are more pronounced in women who expect their first child, who had a preceding miscarriage, who got married less than 2 or more than 5 years ago and whose husbands are civil servants, employees (white collar) or students.

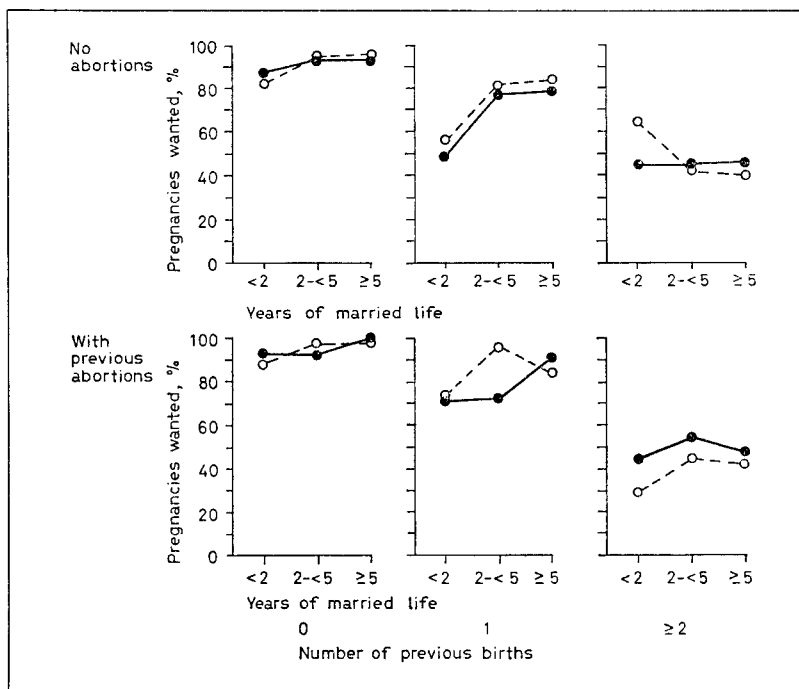


Fig. 2. Percentage of desired pregnancies in women with (----) and without (—) psychosomatic complaints according to years of married life, number of previous deliveries and abortions.

Therefore, we analyzed the associations between psychosomatic complaints and each of the three variables (desired pregnancy, use of contraceptives and frequency of intercourse) in several five-dimensional contingency tables. More precisely, we tried to assess quantitatively whether the kind of associations observed in the total collective (fig. 1) was strongly modified for certain subgroups as for those women who are married less than 2 years, who have one child and no previous abortions – or for those women who have been married for a long time and had no children or abortions yet.

The sample size was not large enough to consider all the background variables mentioned above simultaneously. Therefore, we selected three potentially important characteristics for each of the following five data sets (table I).

The statistical tests we used are special tests for log-linear models

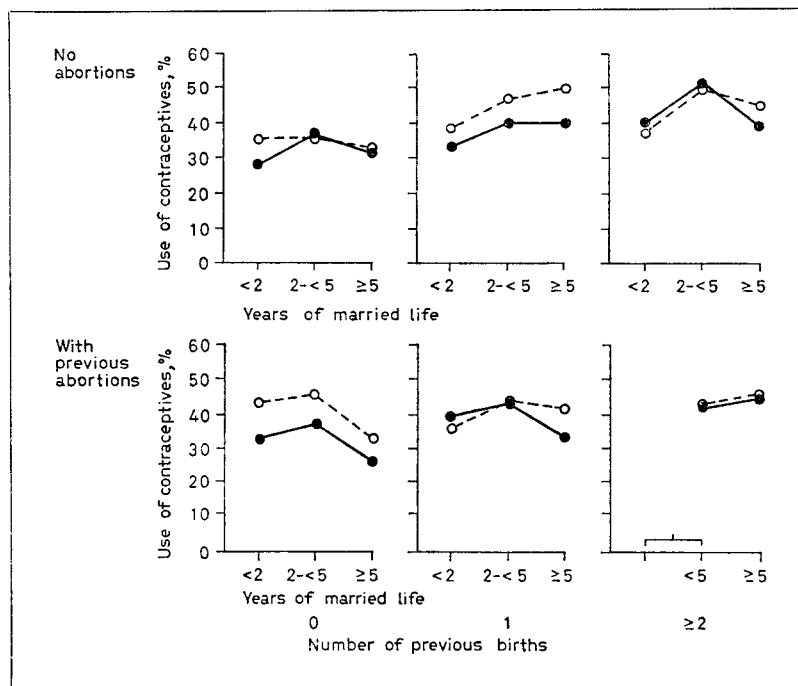


Fig. 3. Percentage of previous use of contraceptives in women with (----) and without (—) psychosomatic complaints according to years of married life, number of previous deliveries and abortions.

(1–3). The test results can either be inconclusive or they provide us with one of the following three results regarding the association between variables 1 and 2: (1) the kind of association differs within subgroups (model 12/1345/2345 is rejected); (2) the association in the total collective is feigned by heterogeneities in the data and there is no association within each subgroup (model 12/1345/2345 is accepted, but the difference in fit, as compared with model 1345/2345, is not significant); (3) the association in the total collective is roughly the same as in the subgroups (model 12/1345/2345 is accepted and the difference in fit, as compared with model 1345/2345, is significant). The results of the tests are summarized in table II and demonstrated graphically for data sets II, IV and V in figures 2–4.

Thus, for the association between psychosomatic complaints and desire of pregnancy it is necessary to look at subgroups of women: In primi-

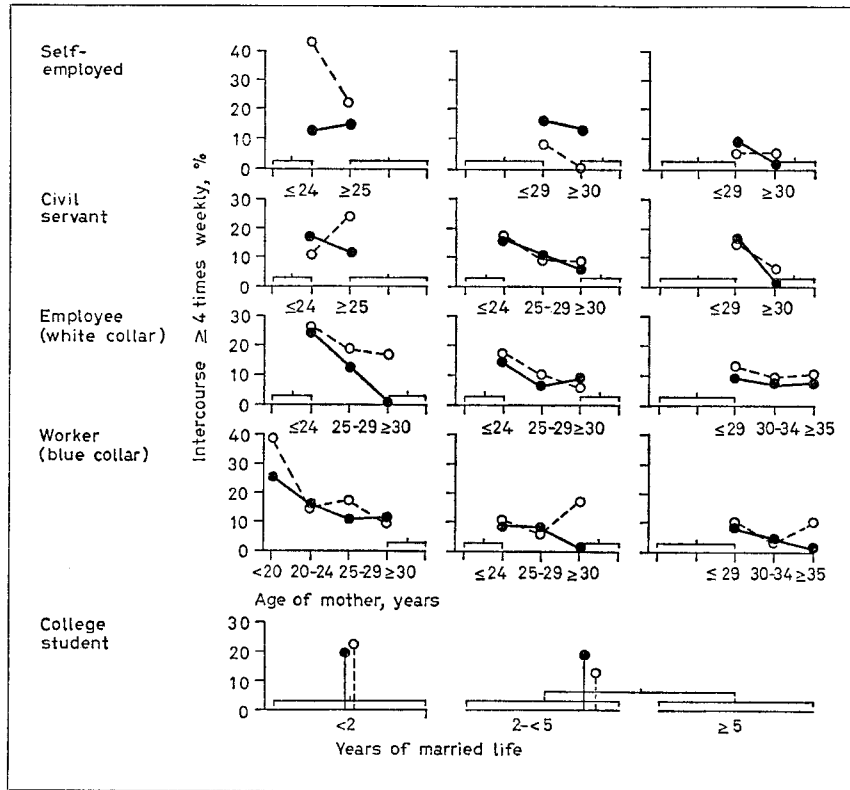


Fig. 4. Frequency of sexual intercourse in women with (----) and without (—) psychosomatic complaints according to age, years of married life and social position of husbands.

parae for instance, psychosomatic symptoms do not seem too relevant for the attitude to pregnancy (fig. 2, left), whereas in the group expecting the second child the overall higher rate of wanted pregnancies in women with psychosomatic complaints (above, middle) is increased considerably if the women had additional abortions and have been married for 2-5 years (below) and it is reversed in this group after 5 years of married life and generally after the second child (below, right).

On the other hand, previous use of contraceptives (fig. 3) and frequency of intercourse (fig. 4) are generally increased, if complaints are present, no matter which group is considered (table II, data set III, IV

Table I. Sets of variables used for multivariate statistical test

Data set	Variables	
	1	2
I	psychosomatic complaints (present, absent)	desire of pregnancy (yes, no)
II	psychosomatic complaints (present, absent)	desire of pregnancy (yes, no)
III	psychosomatic complaints (present, absent)	use of contraceptives (yes, no)
IV	psychosomatic complaints (present, absent)	use of contraceptives (yes, no)
V	psychosomatic complaints (present, absent)	sexual intercourse (≤ 3 , ≥ 4 times weekly)

Table II. Results of statistical tests for log-linear models

Data set	Tested model					
	12/1345/2345		1345/2345		difference	
	χ^2	d. f.	χ^2	d. f.	χ^2	d. f.
I	53.2	29	—	—	—	—
II	52.39	17	—	—	—	—
III	40.23	29	59.89	30	29.66	1
IV	8.39	17	21.86	18	12.47	1
V	71.83	74	77.95	75	6.12	1

and V). The reversals of association observed in a few subgroups can still be regarded as results of sampling errors, and in figure 4 may be due to combination of age groups in the graph, whereas the test was applied to the full set of 75 groups.

Thus, there is evidence that an especially pronounced desire for a child as well as fear of further pregnancies can be observed in psychically maladapted women, if special constellations of personal history and family situations are taken into account. Both these observations as well as the higher frequencies of contraceptive practice and sexual intercourse in women complaining about psychosomatic symptoms cannot be explained

Table 1 (continued)

Variables		
3	4	5
age of mother 5 classes ($\leq 20 - \geq 35$)	previous abortions (yes, no)	previous births (0, 1, ≥ 2)
years of married life (< 2 , $2 - < 5$, ≥ 5)	previous abortions (yes, no)	previous births (0, 1, ≥ 2)
age of mother 5 classes ($\leq 20 - \geq 35$)	previous abortions (yes, no)	previous births (0, 1, ≥ 2)
years of married life (< 2 , $2 - < 5$, ≥ 5)	previous abortions (yes, no)	previous births (0, 1, ≥ 2)
age of mother 5 classes ($\leq 20 - \geq 35$)	years of married life	social class of husband (fig. 4)

by background factors only, but seem to be genuine characteristics of these women's personality structures. Their psychodynamic significance, however, can only be explained after collection of additional specific information.

Summary

The relationship between psychosomatic complaints as indicators of psychic instability and desire or rejection of pregnancy was studied in 6,117 pregnant women from a collaborative investigation. There was evidence that the rate of wanted pregnancies and of two related variables, previous use of contraceptives and frequency of sexual intercourse, was increased among women reporting psychosomatic complaints. Desire of pregnancy, however, was modified by factors like age and obstetric history in certain subgroups, as could be demonstrated by multivariate analyses of contingency tables. All the associations reported seem to represent genuine attributes of psychosomatic maladaptation and cannot be explained as due to background factors.

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