

The Causes of Functional Psychoses as Seen by Patients and Their Relatives

I. The Patients' Point of View

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Summary. Patients' concepts of the causes of their functional psychoses were investigated by means of an open-ended question and a 30-item checklist. While patients, like professional experts, endorsed a multifactorial aetiological concept, they clearly favoured psychosocial explanations over biological ones. There was some variation according to diagnosis, with schizophrenic patients tending to attribute the development of their illness more often to esoteric influences or to their family environment and patients with affective psychoses assuming biological factors or psychosocial stress to be the cause of their illness. The aetiological concepts did not vary with the duration of illness. Our findings do not support the "psychological mindedness" hypothesis, which postulates that there is a greater inclination to adopt psychological explanations among women, younger people, the better educated or people from urban areas as compared with men, older people, the less educated or people from rural areas.

Key words: Functional psychoses – Patients' concepts of aetiology

Introduction

Inquiries into the opinions of patients and their relatives regarding the causes of psychiatric illness have

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in the past concentrated on two main lines of research. The first was concerned with deficiencies in and distortions of knowledge about psychiatric illness and its development. The ideas of non-professionals were compared with those of psychiatric experts to see how far they diverged. The assumption was that the differences found would adversely affect the acceptance of the psychiatric treatment offered (Foulks et al. 1986; Linden 1982). Another line of inquiry was research into "expressed emotion", which suggests that the attitudes of the relatives to the illness influence their feelings toward the patient (Vaughn and Leff 1981). Intervention programs were consequently devised to try to close the gaps in knowledge and to correct the distorted ideas regarding the causes of the illness. It was hoped that this would produce a change in attitude towards the patient and reduce the risk of relapse (Anderson et al. 1980; McGill et al. 1983; Berkowitz et al. 1984; Smith and Birchwood 1987).

Medical sociologists in particular have emphasized the importance of the patients' construction of their own aetiological models in their attempt to deal with their illness. "Such models, even if based on scientifically false premises, can have an internal logic and coherence and should be taken seriously by the clinician, as they are the patients' way of trying to make sense of, and deal with, their ill health in terms of their own reality" (Helman 1981, p. 549). Bard and Dyk (1956) emphasize that "when confronted with serious illness, individuals must establish a belief explaining the event. The more serious the disease (threat), the more necessary the belief which has as its purpose the preservation of emotional integrity or the prevention of emotional disorganization" (p. 159). Family therapy and work with relatives have shown that when relatives think about the causes of the illness they are immediately confronted with their own guilt feelings, so that their ideas are necessarily influ-

enced by their wish to relieve themselves of such feelings.

In our study we have adopted a view different from the two just described. We have looked at lay concepts of causation essentially from a sociology of knowledge point of view. The central issue for us concerns the ideas patients and their relatives living in a large German city in the mid-1980s hold with regard to the causation of functional psychoses.

There are four main sources from which lay people obtain knowledge and experience of aetiological relevance:

1. In the course of their socialization all individuals, usually without personal experience of psychiatric illness, build up in their own mind a stereotype of a mentally ill person, which contains more or less explicitly assumptions about the possible causes of mental illness. This also applies, of course, to patients who also carry in their minds vague images of what it means to be mentally disturbed or crazy, passed on to them earlier in life.

2. Further, ideas about causation are influenced by the *zeitgeist*, the sociocultural climate existing at the time (Pflanz 1958). In modern postindustrial societies there is an increasing tendency to see both individual and collective problems in psychological terms (Gross 1978; Wyss 1981). Psychological explanations are more popular than they have ever been before. This is shown particularly impressively by a recent opinion survey conducted in the Federal Republic of Germany (*Hamburger Abendblatt*, 22 April 1987). According to this, half the women between 18 and 25 years of age are convinced that all illnesses – not just psychiatric ones – have their origin in the mind. In recent years there has been a rapid increase in psychological explanations and methods of treatment offered to the public, constituting what is generally known as the “psychoboom” (Angermeyer and Kühn 1985).

3. The individual patient is also much influenced by his own personal experiences, particularly when, for instance, the onset of the illness was directly preceded by a decisive life event or when another member of the family has suffered from a psychiatric illness (Weinstein and Brill 1971).

4. As a result of the illness the patient and his relatives learn of the ideas currently accepted by the psychiatric profession as to the causation of functional psychosis. This can happen through direct contact with experts who either speak directly about the theories they personally favour or reveal them indirectly through their approach; for instance, in the emphasis they lay on various types of treatment. Knowledge can also be gained from books about the subject, whether textbooks or books for popular con-

sumption (Majcher 1980). Müller (1980) investigated the views of Swiss psychiatrists on the causation of schizophrenia. Almost two-thirds (63%) were of the opinion that two factors, a hereditary biological anomaly of the central nervous system and the life history showing disturbed patterns of interaction and communication in the family, played an important part in the causation of the illness. Only 16%, on the other hand, held that the first of these causal factors alone was of importance and only 12% the second. Nine per cent said that it was pointless to ask about the cause of schizophrenia, since practically nothing certain was known about it. We cannot, of course, assume that the same result would be found in the Federal Republic of Germany, but it is perhaps just plausible to suppose that here the situation would be similar. We should note, however, that there is an increasing tendency to favor a biological cause. An ad hoc opinion survey amongst those attending the annual meeting of the American Psychiatric Association in Chicago in 1987 revealed that 63% of the participants questioned predicted that 25 years later the diagnosis of schizophrenia “would be replaced by a specific biologically defined disease category”.

The information assimilated by the individual from these four sources is not necessarily compatible. Idiosyncrasies or unresolved contradictions may be present. It is reasonable to assume that the information and experience gained are selected and worked through by means of a complicated mental process determined by personality factors (e.g. character structure in a psychoanalytical sense, attributional style, locus of control), the nature of the illness, the relationship between patient and relatives, and situational demands (Bard and Dyk 1956).

In the first part of this paper we wish to consider the following questions:

1. What conceptions do patients with functional psychoses hold about the cause of their illness?
2. Are there differences between patients with schizophrenia, schizoaffective psychosis and affective psychoses?
3. Is there a relationship between the duration of illness and these conceptions?
4. Do the patients prefer a monocausal or a multifactorial aetiological model?
5. Do our results support the suppositions of the “psychological mindedness” hypothesis?

Subjects and Methods

In our study we included all patients aged between 18 and 60 years who were admitted to the three large psychiatric hospi-

tals in Hamburg from May 1985 onwards and who fulfilled the RDC criteria for schizophrenia, schizoaffective psychosis or affective psychoses. Only those patients were selected who had spent less than 12 months altogether in a psychiatric hospital in the previous 3 years and who lived in a private household in Hamburg. The numbers of patients contributed by the hospitals corresponded proportionally with the shares in the total psychiatric care of the population provided by the hospitals (Klusmann et al. 1984). Our aim was to include 100 patients with schizophrenia, 50 with schizoaffective and 50 with affective psychoses. The response rate of the patients selected was 83%.

Of the 198 patients we interviewed, 60% were men, 40% were under 30, 30% between 30 and 40, and the rest over 40 years old; 61% were single, 18% married and 18% divorced or separated; 42% had 9 years of education or less; 50% suffered from schizophrenia, 23% from a schizoaffective psychosis and 27% from affective psychoses; 23% were first admissions, 45% had had one to three previous admissions.

Instrument. Towards the end of their hospital admission we interviewed the patients at length to assess their social situation and their previous patient career. During this interview we asked the patients in a form of an open-ended question what they thought had caused their illness. Then we gave each patient a checklist in the Likert format with 30 items with the following answers to choose from: "no", "possible", "likely" and "very likely" cause.

In the construction of the questionnaire we took into account the aetiological theories common in psychiatric circles as well as those held by non-professionals (e.g. vitamin deficiency, magic influences). Five separate areas were distinguished: family, recent psychosocial situation, personality, biological or genetic make-up, and esoteric or magic influences. We then formulated six items for each of these categories expressing scientific concepts as far as possible in common language. These 30 items are listed in Table 2.

The answers to the open-ended question were noted by the interviewer and two raters later assigned them independently and blindly to the five categories. The inter-rater reliability was checked using a sample of 40 patients. Cohen's kappa showed a value of 0.78, indicating a high degree of agreement between the two raters (Fleiss 1981).

Results

Opinions of Psychotic Patients About the Cause of Their Illness

In reply to the open-ended question 35% of the patients mentioned problems arising from their recent life situation that were not connected with their family of origin (e.g. "no work, no money, loneliness") and this was the most frequent response. Next came difficulties arising from the patient's own personality (e.g. "I am basically unstable, and easily influenced"). Then followed causes associated with the family (e.g. "I felt rejected from the start"). Biological factors occupied the fourth place (e.g. "It runs in the family; it is inherited"). Only two of the 198 patients gave explanations which could be allotted to the category of the esoteric or magical causes (e.g. "It is caused by spiritual radiation"). Almost a quarter

Table 1. Responses of patients with functional psychoses to the open-ended question. For comparison the responses to the 30-item checklist, grouped in the same categories, are also shown

	Open question (%)	Possible cause (%)	Likely/very likely cause (%)
Recent psychosocial factors	34.5	93.8	88.0
Personality	26.3	88.6	70.7
Family	18.6	81.9	63.6
Biology	16.0	61.7	31.5
Esoteric causes	1.0	54.9	22.3
Not ill	4.1		
Do not know	22.2		

22%) of the patients gave no answer to the question. Eight patients did not regard themselves as ill at all (Table 1).

In Table 2 the 30 items of the checklist are ranked according to the frequency with which they were selected as a likely or very likely cause of the illness. The right-hand column shows how many patients considered each factor to be a possible cause. As can be seen, patients clearly favoured explanations which traced the cause to the recent life situation. Nearly half of the patients considered it likely, and two-thirds possible, that loneliness or stressful life events were responsible for their illness. Forty per cent mentioned problems in marriage or with partners, and 33% permanent strain at work or in school as likely or very likely causes. Next in order appeared items referring to personality factors and the family. It is not until we reach the 16th rank that we find an item in the biological category. Fifteen per cent considered it at least possible (and 39% likely) that hereditary factors play a part in the causation. All other items indicating an organic aetiology and all the items in the esoteric category are thought likely by less than 10% of the patients.

It is interesting to note that the answers to the open-ended question and the response to the 30 items in the checklist both place the five categories in the same order of precedence. Table 1 also shows for each category the percentage of patients giving at least one item in that category as likely or very likely, as well as the percentage giving at least one item as possible. Whatever method is used, recent psychosocial factors occupy the first place, followed by personality factors, family, biological factors, and, in the last position, esoteric factors.

Patterns of Aetiological Attributions

Did the patients tend to endorse a monocausal model, i.e. did they pick out items belonging to only

Table 2. Responses of patients with functional psychoses to the 30-item checklist

Scales		Items	Likely/very likely cause %	Possible Cause %
I	II			
SOC	INC	Loneliness	49.0	68.1
SOC	STR	Stressful life events	47.4	68.0
SOC	STR	Troubles in marriage/Partnership	40.2	54.1
SOC	STR	Constant strain in school/job	33.0	56.6
PER	INC	Avoidance of problems of everyday life	32.5	56.7
FAM		Broken home	30.9	49.5
PER	STR	Too ambitious	24.2	43.3
SOC		Society	24.2	38.1
FAM	PAR	Lack of parents' love	22.7	44.3
FAM		Overprotective mother	22.2	42.3
PER	INF	Drug/alcohol abuse	21.6	40.2
FAM	PAR	Father too severe	19.7	33.7
PER	INC	Lack of willpower	19.1	42.3
FAM	PAR	Too high expectations of parents	19.1	37.7
FAM	PAR	Hostile – rejecting attitude of parents	16.5	27.8
BIO	BIO	Hereditary factors	14.9	39.1
SOC		Influence of bad friends	14.4	31.9
PER	INF	Too bright or too intelligent	13.4	33.5
BIO	BIO	Disturbance of brain biochemistry	9.9	29.8
PER	INC	Failure in life	9.8	26.8
ESO	INF	Environmental pollution	9.8	22.7
BIO	BIO	Organic disease outside brain	9.4	18.3
ESO		Lack of vitamins	5.2	27.6
ESO		Unfavourable horoscope	5.2	13.4
BIO	BIO	Birth trauma	4.7	14.5
ESO		Punishment by God	3.6	20.0
ESO		Radiation	3.6	9.8
ESO	INF	Possession by evil spirits	3.1	10.9
BIO		Infectious brain disease	1.5	6.1
BIO		Brain injury	1.5	7.2

SOC = Recent social factors; PER = personality; FAM = family; BIO = biology; ESO = esoteric cause; STR = stress; INC = social incompetence; PAR = parents; BIO = biology; INF = under influence; scale I = intuitively formulated aetiological categories; scale II = aetiological dimensions based on factor analysis

one category or did they prefer, as psychiatrists usually do, a multifactorial model, recognizing the combined effects of biological, psychological and social factors as important in the development of functional psychosis? In order to answer this question we devised a new measure. If a patient had responded to at least one of the six items in a category as a likely or very likely cause, this category was counted as having been chosen by him or her. Thus the etiological concept of each patient was represented by a set of five dichotomous variables (causal attribution in a given category present or not present). In Table 3 the five patterns most frequently observed are recorded according to diagnosis, showing that most patients tended to choose a combination of two or more cate-

gories. Thus far their views agree with the opinion generally held by psychiatrists, that is that the development of functional psychosis cannot be attributed to a single cause. Unlike the psychiatrists, however, they tended to regard the cause of the illness as mainly psychological and social and with no biological aspects. Patients with affective psychoses were more ready to accept biological factors as causative than patients with other diagnoses.

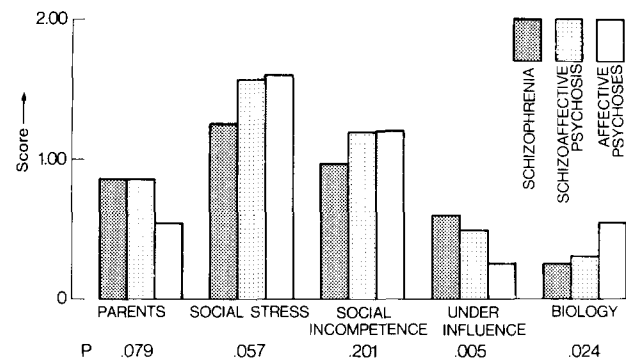
Variation of Aetiological Attributions According to Diagnosis

In order to investigate this and the following questions we used a two-fold strategy in our analysis of

Table 3. Configurations of patients' aetiological concepts broken down by diagnosis

Schizophrenia (<i>n</i> = 97)						%
Family	Social	Person	—	—		21.6
—	—	—	—	—		11.3
—	Social	—	—	—		10.3
Family	Social	Person	Biology	—		8.2
—	Social	Person	—	—		7.2
Schizoaffective psychosis (<i>n</i> = 47)						%
Family	Social	Person	—	—		29.8
—	Social	Person	—	—		14.9
Family	Social	Person	Biology	Esoteric		10.6
—	Social	—	—	—		8.5
Family	Social	Person	—	Esoteric		8.5
Affective psychoses (<i>n</i> = 54)						%
Family	Social	Person	—	—		18.5
Family	Social	Person	Biology	—		11.1
—	Social	Person	—	—		9.3
—	—	—	Biology	—		7.4
Family	Social	—	—	—		7.4

the data. First we carried out a factor analysis on the 30 items of the checklist. As the graph of eigenvalues gave no clear indication of the number of factors to be chosen, we tried to reach a sensible compromise between differentiation and unification of concepts by consideration of content. We chose a five-factor solution, which explained 45% of the total variance. Each factor included four items which attained a factor loading of 0.50 at minimum. Of the dimensions arrived at empirically, two were in many respects identical to our ad hoc categories ("family", "biological factors"); three items which had to do with the recent life situation ("stressful life events", "troubles in marriage/partnership", "constant strain in school or at work") together with the item "too ambitious" made up the dimension "stress". Three items from the category "personality factors" ("avoidance of problems of everyday life", "lack of willpower", "failure in life") together with the item "loneliness" form the dimension "social incompetence". Four items were grouped together in the fifth dimension, items which at first seem very different — "drug/alcohol abuse", "too bright or too intelligent", "environmental pollution", "possession by evil spirits". All of these are "influences" (a label chosen by us) which the individual feels more or less at the mercy of (Table 1). Using the four items grouped in each dimension we constructed five additive scales, of which all but one showed an acceptable level of internal consistency (Cronbach's alpha for "family" 0.71, for "stress" 0.68, for "influences" 0.64, and for "social incompetence" 0.60).

**Fig. 1.** Comparison of aetiological concepts between diagnostic groups of functional psychoses based on the five empirically derived scales (mean scores). Analysis of variance with sex, age and education as covariates

With an alpha of 0.45 the "biology" scale showed the lowest internal consistency, which is not surprising in view of the unlikelihood of someone who blames for instance birth trauma for his illness giving a metabolic disturbance as an additional factor. Patients probably name a biological cause after this has been suggested by relatives or experts and not because they carry in their minds an internal dimension "biological causation", which would lead them to check any item which expresses this dimension.

In our analysis of the data we also adopted a second procedure based on the five ad hoc designed aetiological categories. As with the open-ended question, a category was regarded as having been chosen by a patient if at least one of the items belonging to it was considered by him or her to be a likely or very likely cause of the illness. The data were then analysed using a statistical procedure suitable for the analysis of qualitative data (logit analysis). As both procedures lead to practically identical or analogous results, only those arrived at by means of the first procedure in which the individual items were condensed to Likert scales will be reported here.

In order to see whether the three diagnostic groups differed with regard to the relative importance given to various aetiological factors, we carried out an analysis of variance with sex, age, and duration of illness as covariates. As Fig. 1 shows, schizophrenic patients rated "influences" considerably more important than patients with schizoaffective or affective psychoses. Biological factors have been mentioned most frequently by patients suffering from affective psychoses. While schizophrenic patients and those with schizoaffective psychosis tended to blame their parents for their illness, they considered stress as less important than did patients with schizoaffective or affective psychosis.

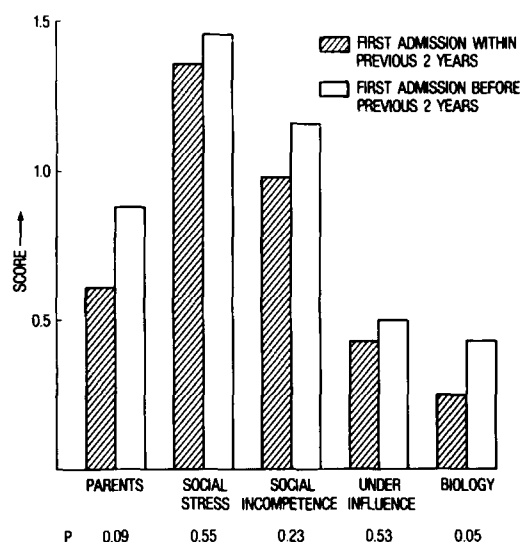


Fig. 2. Relationship between duration of illness and aetiological concepts adopted by patients with functional psychoses (mean scores). Analysis of variance with sex, age and education as covariates

Effect of Duration of Illness on Patients' Causal Attributions

We started with the assumption that patients' theories would tend to resemble those of the psychiatric professionals more, the longer the illness had lasted. This would result in patients who had been ill for a longer time placing less emphasis on "influences" than those admitted for the first time within the last 2 years. We could find no empirical support for this hypothesis. Both groups chose this explanation for their illness with equal frequency. The two groups also failed with one exception to show significant differences on the other scales. This difference indicated that patients with a longer duration of illness were more prepared to attribute the cause of their illness to biological factors. Our most interesting finding, however, was that the longer the patient is ill, the readier he is to choose causal factors from the checklist (Fig. 2).

The "psychological Mindedness"-Hypothesis

Medical sociologists have pointed out that certain types of people particularly tend to attribute subjective difficulties and problems to psychological causes. Women, for instance, seem to be more inclined to adopt psychological explanations than men (Mechanic 1978). The same probably applies to young people, as the results of the survey referred to in the introduction suggested. In this case two factors work together. On the one hand young people are in general more open to new or "enlightening" ideas; on the

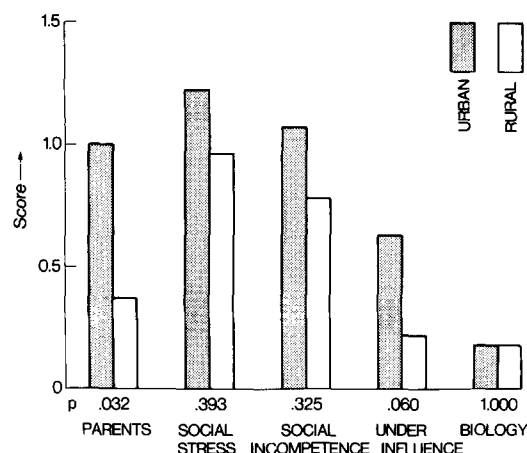


Fig. 3. Comparison between aetiological concepts of schizophrenic patients from urban and rural areas (mean scores); *t*-test (two-tailed)

other, they have grown up in an age in which psychological explanations are very popular. The more highly educated amongst them can be expected to be more affected by the *zeitgeist* and react more sensitively to changes in the social and cultural climate than the less highly educated. The same would be expected to apply to city people compared with country people (Pflanz 1958).

Our hypothesis is therefore that women will tend to favour a psychosocial causation more than men, younger patients more than older ones, the more highly educated more than the less highly educated, and those living in Hamburg more than those living in a small town or in the country. To test the first three subhypotheses we carried out a three-factor analysis of variance with sex, age and level of education as independent variables and each of the three relevant aetiological scales ("family", "stress", "biology") as dependent variables. Diagnosis and duration of illness were included in the analysis as covariates. Contrary to our expectations we found no significant interaction between the variables sex, age and level of education. Significant differences emerged only in the attributions of aetiological importance to the family. Age had a marked effect ($p(F) = 0.004$) and for sex a trend could be shown ($p(F) = 0.061$). A qualification of these findings is, however, necessary since young people are naturally in closer contact with their parental home and therefore it is more salient as a causal factor.

Comparison of city and country dwellers was made possible by the interviews which were carried out with 27 schizophrenic patients admitted to the state hospital in Heiligenhafen (Schleswig-Holstein). All of these lived in a village or in a small town. Each was matched for sex, age and level of education with

the schizophrenic patients in our series of patients from Hamburg. Comparison between the two groups using the *t*-test showed that the city patients blamed their parents for their becoming ill considerably more frequently than the country patients did. The two groups were not notably different in their assessment of the importance of stress or biological factors. It was interesting that the mean scores of the Hamburg patients were higher on all scales except "biology" than those of the country patients (Fig. 3). We had the impression that the city dwellers were more eager to look for explanations or, alternatively, they were less able or willing to tolerate uncertainty.

Discussion

We would first like to emphasize that the vast majority of the patients had at least some idea about what might have contributed to their illness: 74% answered the open-ended question about the cause of their illness and 93% considered one or more of the 30 items in the checklist as a likely or more than likely cause.

The patients appeared to differ from the experts in that they favoured psychosocial causation – 82% named psychosocial factors of recent origin with or without other factors as a likely or very likely cause of psychosis, while 66% assigned responsibility to personal factors and 59% to the parental home. Biological factors, on the other hand, were mentioned by 29%, hardly more than those who blamed esoteric factors.

Our findings are in agreement with those of other studies carried out with patients suffering from functional psychoses. Soskis and Bowers (1969) found that schizophrenic patients whose last admission had taken place several years previously blamed themselves, external events and their family, in that order, for their illness. Patients who saw the cause in themselves showed a more positive attitude to their illness than other patients, managing to integrate it more successfully in the rest of their lives and showing a greater degree of social adaptation. McGill et al. (1983) reported that 20% of the schizophrenic patients who were asked about their ideas regarding the causes of the illness named stress or environmental factors, and 11% named metabolic disturbances in the brain. Drugs and hereditary factors were each named by one patient only. In all, 31% said that they did not know the cause of their illness. According to Bender (1988) schizophrenic patients tended to reject hereditary factors as the cause of their illness more often than patients with other psychiatric disorders. In contrast, patients with endogenous depression were more inclined to favour a multicausal concept encompassing unfavourable hereditary influences, lack of willpower and personal problems.

The tendency to attribute the cause of the illness to the social environment is not limited to patients with functional psychoses. As will be shown in the second part of our paper (Angermeyer et al. 1988), a similar phenomenon can be observed among the relatives of these patients (see also Alivisatos and Lyketsos 1964; Dewald 1979; Hohl 1983; McGill et al. 1983). In general, patients with psychiatric disorders seem to be inclined to locate the causes of their illness in their current/recent social situation (Manis et al. 1963; Bender 1988). However, patients with psychosomatic disorders and even those with 'purely' somatic diseases (as well as their relatives) also often seek the cause for the manifestation of the illness in environmental factors (Ahrens and Elsner 1981; Pollock 1988). At present, the stress concept seems to be the most widely accepted aetiological paradigm (Pollock 1988). In this context, another finding seems of interest. When we asked our patients about the relationship between various sociodemographic factors and the incidence of psychiatric disorders, about two-thirds contended that psychiatric disorders are more frequent in urban areas and in industrialized countries (where the level of stress is assumed to be higher) than in rural areas and developing countries.

It would certainly be interesting to find out in what ways the knowledge and experience reflected here had been acquired. We should particularly like to know what the relative influence of the determinants of these theories is (socialization, mass communication, professional opinion, personal experience). Unfortunately, however, the data at present available to us do not enable us to give answers to these questions. We can only say that those allegedly more prone to adopt psychosocial interpretations, i.e. the young, better educated, city dwellers as well as women, did not differ in their aetiological concepts from those who are supposed to be less "psychologically minded".

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