

PSYCHOSOMATIC COMPLAINTS THROUGH THE RECESSION IN SOME WESTERN NATIONS

Marijke Mootz

Chapter 7: In: Ruut Veenhoven & Aldi Hagenaars (eds) 'Did the Crisis really hurt? Effects of the 1980 – 1982 economic recession on satisfaction, mental health and mortality'. Universitaire Pers Rotterdam, 1989, The Netherlands. ISBN nr. 90 237 2279 5 , pp. 114-132.

SUMMARY

This chapter takes stock of the survey data on psychosomatic complaints in Western countries that are available in time series and cover the years before and after the 1980/82 economic recession. Requests for information were sent to centers for QOL research in 14 countries. Data were available in only five countries (Denmark, West Germany, Japan, the Netherlands, USA). These data show a rise of worries about economic matters during the recession and a decrease of these worries in the years after. However, general psychosomatic complaints, such as depression and loneliness, do not vary through the recession.

1 INTRODUCTION

The goal of this chapter is to consider the effects of the economic recession in the years 1981-1982, in some Western countries, on mental disturbances, especially psychosomatic complaints, in some Western countries. It is based on an inventory of survey data in six nations. In the first section, some theoretical notes are mentioned. The second section reports a (comprehensive) summary of the inventory: which countries have been selected and what material could they provide? In the next section, the results of the inventory are shown: different indicators of mental disturbances and their comparability are discussed. In section four psychosomatic complaints in specific social categories are discussed and compared through time. Section five discusses some methodological issues.

Some preliminary notes

The issue at stake here is the effect of the economic crisis on mental disturbances. This question contains at least three concepts which have to be discussed in more detail: What are the recession's effects for the individual? What are 'mental disturbances'? What is the relation between these phenomena?

In the introductory chapter much has been said about possible effects of the economic crisis on people's lives. This will not be repeated here in detail. Let us go on to the question about what is meant by mental disturbances. The focus of this study is on self-reported psychosomatic complaints. To a certain extent these complaints can be compared to 'nervous functional disorders' which have been described in chapter 6 by van der Velden. However, there is an important difference here: the nervous functional disorders Van der Velden refers to were defined as such by general practitioners, whereas the data of this chapter draw on answers to survey questions such as: 'do you feel tired' or 'do you often have headaches'? There are many measures and scales which indicate psychosomatic complaints in this way. A well-known

example is the General Health Questionnaire (Goldberg, 1981) or the Nottingham Health Profile (Hunt, 1986).

The main purpose of this contribution is to provide an overview of changes in reported psychosomatic complaints through time in some Western countries.

Finally, the relation between 'economic crisis' and 'psychosomatic complaints': The dependent variable in this research is an individual characteristic. The independent variable however, originates in social economic or macro phenomena. So, the possible relation between the two is at least an indirect one (Dooley and Catalano, 1986). It can either derive from a more general social and cultural climate which might induce uncertainty, anxieties and worries accompanying the economic recession, or it can derive from certain life events on the individual level: becoming unemployed or suffering a sudden fall of income. In both cases, the process which leads from economic development to psychosomatic complaints is very complicated.

The best way to investigate the effects of macro-economic change on individual well-being is to follow individuals through time. Such a longitudinal design allows a.o. the identification of time laps. This contribution is based on a more simple research-design. It is based on the supposition that if the economic recession has any negative influence on mental health, then psychosomatic complaints as assessed in surveys, will rise. This starting hypothesis is very weak because it is irreversible: if one finds a rise in such scores, this does not mean that it is caused by effects of the economic crisis. Actually, psychosomatic complaints are generally influenced by phenomena other than economic ones (see for instance: Ormel, 1980). So the comparison on this issue through time and especially between countries, can only be very rough. It has to be based on population averages and global measures. The way in which these were gathered is described below.

2 GATHERING AVAILABLE DATA

Representatives of fourteen countries were asked for survey data about mental disturbances. The **appendix** contains an overview of the selection procedures and of the response to our call. The respondents were asked for "any kind of indicator on mental health based on national population based surveys". This global definition was probably the reason that all the representatives who answered our question actually sent us some data. Two of them however, could only provide figures on the use of psychiatric institutions, which fell outside the scope of our research on population based surveys. **Table 1** shows the final results of the investigation.

Only six countries provided appropriate data. These were the United States, the Federal Republic of Germany, Denmark, Australia, Japan and the Netherlands. In these countries data were available in more or less comparable time series. Four other countries provided indicators of mental disturbances which have been collected only once. As one might expect, many different indicators are used. In the next section, an overview is presented.

3 RESULTS OF THE INVENTORY

United States

The most detailed and advanced data have been delivered by the National Institute of Mental Health in Rockville, Maryland. Three indicators based on surveys were selected for our purpose. First, an indicator

is chosen from the (Hispanic) Health and Nutrition Examination Survey (1971-75 and 1982-84). The findings are based on the responses of examinees who were given the Center for Epidemiologic Studies-Depression Scale (CES-D). The other two measures indicate major depressions based on a highly structured psychiatric interview. It contains a Diagnostic Interview Schedule (DIS), an instrument which can be standardized to the criteria of the Diagnostic and Statistical Manual, third edition (DSM III). 20,000 adults aged 18 and over were interviewed in different areas. As is shown in [tables 2 and 3](#), the outcomes of both indicators differed at one point in time according to area and composition of the sample.

Therefore it is not easy to compare the figures through time and to draw any conclusions about the possible impact of economic recession in the years 1981-82. The only tentative conclusion one can derive from the two tables is the tendency of a slightly rise on the CES-D-score.

Federal Republic of Germany

Indicators of psychosomatic complaints of Germans are summarized in [table 4](#). They are based on two Health Interview Surveys and on three 'Wohlfahrtssurveys'. The data of the Wohlfahrtssurvey are presented in more detail in the contribution of Habich in this volume (chapter 5).

Changes in these indicators are not very striking. In fact one must conclude that mental disturbances indicated in the way showing in [table 4](#) stayed at a constant level between 1978 and 1984.

Denmark

Danish figures are derived from the studies in political-psychological development from 1982 to 1986 carried out and described in chapter 4 of this book by Eggert Petersen (Petersen c.s., 1987). These studies contain some indicators of psycho-physiological stress which are summarized in [table 5](#).

For the conclusion, the author of the study itself can be cited: "The table shows that there is no significant change in stress from 1982 to 1986 and suggests a decline from 1976 through 1982 to 1986" (see chapter 4 of this book).

Australia

The Australian Bureau of Statistics organized Health Interview Surveys in 1977/78 and another one in 1983. It should be pointed out that reported health problems which caused symptoms of ill health in the two weeks before the interview were classified into ICD-diagnoses. As this was done in both surveys, one can expect the results to be comparable. However, in 1977/78 all experienced complaints were counted, whereas in 1983 only those conditions were registered that prompted health-related action. The number of recent mental disorders (ICD diagnoses Mental Disorders V) experienced per 1000 of the population therefore differed: it was 282.5 in 1977/78 and 36.6 in 1983.

It is obvious that these data cannot be used for our purpose. They show that only a slight change in definition, methodology or classification in survey design can lead to complete incomparability.

Japan

In Japan, responses to Health Survey questions are also classified into ICD-diagnoses. Unfortunately, we do not know much about the survey methods, but the results presented as 'morbidity per 1000 of the population, ICD-code 290-319' seem to be comparable through time ([table 6](#)).

The rate was almost the same between 1970 and 1980. After that it rose: according to these results, the Japanese experienced almost twice as many mental disturbances in 1985 compared to 1980. Whether this result can be interpreted in relation to the economic crisis in Japan is not certain, of course.

The Netherlands

The Netherlands Central Bureau of Statistics has undertaken a populationbased 'Level of Living Survey' every three years ever since 1974. This survey contains indicators of psychosomatic complaints derived from the Questionnaire Research on Perceived Health Status by J.M. Dirken (Dirken, 1969). It is a sum-score based on a list of thirteen items such as 'do you often feel tired?', 'do you often have headaches?'

Table 7 makes clear that these indicators did not change at all during the period between 1980 and 1986.

Much more interesting for the subject of this chapter, however, are indicators of fears and anxieties, which are collected in research named "Cultural Changes in the Netherlands" (SCP, 1976). They are comparable to the German indicators based on the "Wohlfahrtssurvey" (cf. **table 4**). We now have data for six different years, starting in 1975. The latest survey containing these indicators of fears and anxieties was undertaken in 1986. **Figures 1 to 9** show the developments of those indicators during that period.

Two lines seem to indicate rather constant feelings: 'satisfaction with health' and the idea that 'life is aimless' do not change through time. Three other lines (often 'fearful', great 'anxieties' and sometimes feel 'lonely') seem to have risen in the early eighties, but the first two indicators were almost as high in 1975 as they were in 1983. Moreover, the differences between the separate observations are very small and - except 'often fearful' - statistically insignificant.

The other indicators, however, did rise between 1979 and 1986: 'anxiety about financial affairs', 'chances of becoming unemployed' and 'confidence in the future in general'. Only the question 'do you feel under pressure?' is not directly related to economic decline.

In sum: complaints about matters related to the economy rose during the recession but more general complaints did not.

4 DIFFERENCES BETWEEN SPECIFIC SOCIAL CATEGORIES

Mental disturbances are not equally distributed. Usually, less well educated and sometimes also older and single persons have more mental disturbances than others (Kosa, 1975). Therefore it is important to know whether possible effects of the economic crisis increased or decreased inequalities in well-being. For instance, did the less well educated categories show relatively more (serious) mental disturbances during or shortly after the crisis than other categories? Only two of our datasets allow a comparison through time between social categories: these are the sets of the Federal Republic of Germany and the Netherlands. These are discussed separately.

Federal Republic of Germany

Out of the German material we chose three indicators. First, the 'perceived chance of employed people to find another job' (a job which is equivalent to the job the respondent has at the moment). This indicator is analyzed by occupational status. Therefore only (still) employed people are included in the analysis. The second indicator is the 'satisfaction with household income'. This indicator will be compared between income brackets. The third is 'feelings of loneliness'. These feelings are analyzed separately for people with different levels of education.

All the indicators are based on the German "Wohlfahrtssurveys" 1978, 1980 and 1984, reported by Wolfgang Zapf c.s. (Zapf, 1987). The last one is derived from additional material which was kindly submitted to us by the Wissenschaftszentrum in Berlin. The answers to the first two questions do not, of course, indicate mental disturbances nor psychosomatic complaints. A perceived small chance of finding a comparable job and a low satisfaction with income can only under certain circumstances contribute to mental problems. Only the third subject - loneliness - can be treated as a possible indicator of psychosomatic (mainly psychological in this case) complaints, which might be effected by consequences of the economic crisis: loss of income and loss of employment may imply less opportunities for participation in social life. Therefore feelings of loneliness can become stronger. The three indicators will be used to analyze possible changes in social inequalities.

During the period under review the overall perception that it is easy to find an equivalent job declined strongly: in 1978 40% considered it easy, while in 1984 this percentage is only 23%. This reflects some effects of the economic crisis in the Federal Republic of Germany. Habich discusses this in detail in his contribution to this book (chapter 5).

What can be said about social differences between people who still have a job? As one can expect, people with less qualified jobs perceive their chance of finding a comparable job smaller than highly skilled people. The differences between two extreme observations - foremen and unskilled workers - are 19% in 1978, 10% in 1980 and 11% in 1984 (table 8).

The changes in perceived job opportunity between 1978 and 1984 are greatest within the group of foremen and higher employees, people with a relatively high occupational status. They evaluated their chances of finding a comparable job in 1984 as much smaller than they did in 1978. The groups with the lowest initial evaluation, civil servants and unskilled workers, perceived relatively less loss of job opportunities than people with a high occupational status. So social differences for this particular indicator have declined between 1978 and 1984. But, as Habich illustrates, it is important to realise here that the gap between unemployed and still employed people widened during the crisis. If one only studies employed people it is not surprising that the few respondents with a low occupational status who succeeded in keeping their job even in 1984 despite the effects of the economic recession do indeed perceive their chances of losing their job at this stage to be quite low. On the other hand, people who in 1978 thought that the economic crisis could not harm them because they had a job with a high status, changed their minds drastically during the crisis when they saw many people losing their job despite its high status.

The second indicator is analyzed by income level (table 9). Possibly as an effect of the economic crisis, satisfaction with income declined between 1978 and 1984 in Germany. The differences between the lowest and the highest income quintile increased during that period from 2.1 to 2.7: people with small incomes became less satisfied than people with high incomes.

A similar result is found by studying the development of feelings of loneliness between 1978 and 1984 by education. Data on this phenomenon were available for 1988, too (table 10).

The changes in these feelings are not very great but the table shows a tendency of polarization: people with a low educational level became more lonely between 1974 and 1988 whereas better educated people felt less lonely during that period.

The Netherlands

Differences between less and more educated respondents in the indicators which were presented in section 2 for the Netherlands are shown in figure 10 to 13. We selected the indicators 'psychosomatic complaints', 'often fearful', 'feeling that life is aimless' and 'feeling lonely', because these data indicate general psycho(somatic) complaints.

There is only one indicator which shows greater differences between educational groups in 1986 than in 1975: less educated people are even more often anxious than better educated in 1986. The lines of 'Feeling that life is aimless' are not very clear between 1980 and 1983. After that the difference between the groups are again greater than in 1975, but this time people with medium educational levels have even fewer problems with life than the well educated. The other two indicators allow no clear conclusions about the development of social differences. Especially the number of psychosomatic complaints stay rather stable through time for each group separately, as it did for the whole population (cf. [table 7](#)).

5 DISCUSSION

First of all it is important to discuss the validity of the indicators which are presented here. The inventory of indicators for mental disturbances in fourteen countries made clear that only a few countries could provide indicators on psychosomatic complaints as laid down in the title of this contribution. As mentioned in the preliminary notes, we decided to work with a broad definition and asked for any indicator of mental disturbances which was based on population surveys. So the validity problem was in the first place to be solved by the respondents. In the next place we had to decide whether to work with the received indicators or not. Since the result of the inventory was rather poor, our final selection contains indicators which often in an indirect way indicated mental disturbances.

Furthermore, the way in which the indicators were operationalized, selected and coded in the different countries is not always clear, even if comprehensive explications were available. This implies that the indicators presented are not comparable. Therefore no information can be derived on the basis of these indicators as to whether inhabitants of a country which suffered very much from the economic crisis report more psychosomatic complaints than do inhabitants of other countries. This was possible, however, from answers to questions about life or life-domain satisfactions, from mortality figures on causes of death, suicide included, and to a certain extent from the use of psychotropic drugs.

If one is particularly keen to draw conclusions from the presentation, these will at best be rough and preliminary. This study produces broad and global estimates which have to be handled with caution and only as a contribution to the overall question of the symposium.

A second problem was the desire to compare the indicators through time. If one wants to describe trends and possibly changes within it, two measurements are not sufficient. The more data available about different points in time, the more reliable the results will be of course. But the indicators here had to be based on population surveys and these surveys are expensive. Three comparable measurements in one country is a luxury. Compared to the long time series of mortality rates and even of satisfaction measurements it makes a poor impression however.

Comparability through time is especially difficult where one is comparing phenomena which are not very concrete. The answers to questions about fears and anxieties are interesting in the light of our symposium theme, but they are influenced by the general and personal events the respondent experiences. The interpretation of the results as trends can rather quickly be disturbed by a new measurement in the following year.

Taking all this into account, what can be said about the effects of the economic crisis on mental disturbances, especially on psychosomatic complaints? The inventory provided us with an impressive mixture of indicators, varying from ICD-classified mental disturbances on the one hand to indirect indicators which in the most positive case effect mental disturbances but do not indicate them on the other hand. To summarize the results, two rough categories of indicators can be distinguished: general indicators, which reflect mental disturbances on a scale of psychosomatic complaints and specific ones which consist of answers to questions related to economic issues. These questions relate to worries about losing one's job or about money. The final table ([table 11](#)) provides the summary.

The material presented shows that general psychosomatic complaints measured by questionnaires cannot be said to have risen as a result of the economic crisis. If questions are formulated in terms of concrete worries about economic issues then changes were observed which probably were caused by the recession.

Another question this chapter poses is related to possible effects of the economic crisis on particular social groups. The answer to this question is not clear. It is obvious that people with a low socio-economic status have more mental disturbances and also more psychosomatic complaints than others. But it is not clear whether these differences change over time, nor whether a possible change can be ascribed to effects of the economic crisis.

REFERENCES

Australian Bureau of Statistics, (1977-78 and 1983)
Australian Health Survey

Dirken, J.M., (1969)
Arbeid en Stress
Groningen

Dooley, D. and R. Catalano, (1986)
Do economic variables generate psychological problems? Different methods, different answers,
In: A.J. and Y.H.W. MacFadyen (ed.)
Elseviers Science Publishers B.V.

German Federal Statistical Office, (1978 and 1982)
Gesundheitswesen, Fragen zur Gesundheit
Fachserie 12, Reihe S.3

Goldberg, D.P., (1971)
The Detection of Psychiatric Illness by Questionnaire
Oxford University Press, London

Hinkle, L.E. jr., (1987)
Stress and disease: the Concept after 50 Years
Social Science and medicine Vol. 25 no. 6, p. 561-566

Hunt, S. et al., (1986)
Measuring Health Status
Croom Helm, London

Karno, M. et al., (1987)
Lifetime Prevalence of Specific Psychiatric Disorders Among Mexican Americans and Non-Hispanic Whites in Los Angeles
Arch Gen Psychiatry, Vol. 44, p. 697, table 2

Kosa, J. and I.K. Zola, eds. (1975)
Poverty and Health
Cambridge, Mass.

Michalos, A.C. (ed.), (1987)
Social Indicators Research, Vol. 19 nr. 1, tables 2.1, 2.3 and 2.4

Moscicki, E.K. et al., (1987)
The Hispanic Health and Nutrition Examination Survey: Depression among Mexican Americans, Cuban Americans, and Puerto Ricans
Simon Bolivar Research Monograph no.1, table 3

Netherlands Central Bureau for Statistics, (1974-1987)
Level of Living Survey
(calculations by Social and Cultural Planning Office).

Ormel, J., (1980)

Moeite met leven of een moeilijk leven?

Konstapel, Groningen,.

Petersen, E. et al., (1987)

The life of the Danes during the crisis in 'Understanding economic behaviour',

paper presented at the 12th Annual Colloquium of IAREP, The International Association for Research in Economic Psychology, Ebeloft, Handelshojskolen, Aarhus,.

Robins, L.N. et al., (1984)

Lifetime Prevalence of Specific Psychiatric Disorders Among Mexican Americans and Non-Hispanic Whites in Three Sites,

Arch Gen Psychiatry, Vol. 41 p. 952, table 1

Social and Cultural Planning Office, (1988)

Social and Cultural Report 1988, table 3.8

Samson, Alphen aan den Rijn

Social and Cultural Planning Office, (1976)

Social and Cultural Report 1976

Den Haag.

U.S. Department of Health, Education and Welfare, (1974-1975)

Basis Data on Depressive Symptomatology, United States

Vital and Health Statistics Series 11, no. 216, table 1

Wohlfahrtssurvey (1987)

1978, 1980, 1874

In: Social Indicators Research, vol. 19, nr. 1, Febr., p. 43

Zapf, W. et al., (1987)

Individualisierung und Sicherheit

Verlag C.H. Beck, München

Table 1

Results of an inventory of data on mental disturbances in some Western countries

	number of countries
asked for data	14
responses to request	12
survey data available	11
comparable indicators for at least two measurements	6

Table 2

CES-D Depression Scale Scores of adults 25-74 (United States, 1974-75) and 20-74 (Mexican and Cuban Americans and Puerto Ricans, 1982-1984) years of age

	1974-75 ^a		1982-84 ^b	
	United States (3059)	Mexican Americans (3555)	Cuban Americans (902)	Puerto Ricans (1343)
no. in sample:				
CES-D Caseness	8.7	13.2	9.5	27.9

^a U.S. Department of Health (1974-75), unstandardized.

^b Moscicki, Eve K. et al. (1987), standardized.

Table 3.

Lifetime Prevalence Rates of DIS/DSMIII disorders, three areas, 1980-1981 and 1983-1984

	1980-1981 ^a			1983-1984 ^b	
	New Haven	Baltimore	St.Louis	Mexican Americans	Non-Hispanic whites
no. in sample:	(3058)	(3481)	(3004)	(1243)	(1309)
any disorder covered	28.8	38.0	31.0	39.5	36.5
major depressive episode	6.7	3.7	5.5	3.8	6.2

^a Robins, Lee N. et al. (1984)

^b Karno, Marvin et al. (1987)

Table 4.

Five indicators of mental disturbances, FRG, 1978-1984

	1978	1980	1982	1984
percentage of population illness: ICD V ^a	0.7		0.7	
percentage of population with any symptom of anxieties	59			57
percentage of population that feels life is meaningless ^b		15		14
percentage of population that feels lonely ^b	9	8		7
satisfaction with life (mean score, 1-5) ^b	7.8	7.7	7.7	

^a German Federal Statistical Office (1978 and 1982)

^b Wohlfahrtssurveys 1978 (N=2002), 1980 (N=2396) and 1984 (N=2067) published in: Michalos, A.C. (ed.) (1987)

Table 5.

Stress in 1976, 1982 and 1986 (percentages of 'yes' answers)

Do you often suffer from	1976	1982	1986
extreme tiredness	23	25	21
insomnia	16	13	13
weak nerves	11	9	8
attacks of fear	6	5	4
low spirits ^a	3	3	3

^a the question here was: Are you almost always in low spirits?

Source: Petersen, E. et al. (1987).

Table 6.

Morbidity per 1000 of the population, ICD 290-319, Japan Health Interview Survey, 1970-1985

1970	1.1
1975	0.9
1980	0.9
1985	1.7

Source: Ministry of Health and Human Services, Tokyo, Japan (copies)

Table 7.

Mean number of psychosomatic complaints(VOEG-score) 1974-1986

	1974	1977	1980	1983	1986
n	4806	3905	2780	3987	4040
score	2.5	2.8	2.6	2.6	2.6

Source: CBS, Level of Living Survey 1974-1986, calculation: SCP

Table 8.

Perceived job opportunities by occupational status, FRG (percentage 'it is easy to find a comparable job if one becomes unemployed')

	1978	1980	1984
civil servants	32	30	21
lower employees	36	40	21
higher employees	49	43	22
foremen	53	49	27
unskilled workers	34	39	16

Source: Zapf, W. et al. (1987) p. 55.

Table 9.

Satisfaction with household income by income level 1978-1984, FRG

	1978	1980	1984
1 (low)	6.0	5.8	5.1
2	6.8	6.4	6.5
3	7.4	7.2	6.8
4	7.6	7.4	7.5
5 (high) 8.1	8.2	7.8	
Total	7.2	7.0	6.7

Source: Wohlfahrtssurvey 1978, 1980, 1984. In: Social Indicators Research (1987) p. 43.

Table 10.

Feelings of loneliness by level of education, percentages

	1974	1978	1984	1988
low	17	18	18	20
medium	20	17	15	11
high	13	13	15	10

Source: Wissenschaftszentrum Berlin, Tabellenband der Wohlfahrtssurveys 1978-1988.

Table 11.

Summary: Psychosomatic complains in six Western countries

country	number of indicators used in this study	years of measurement	type of indicators*	results
USA	3	2 between 1974 and 1984	general (3)	not clear, tendency of one indicator to rise
Federal Republic of Germany	7	3 or 4 between 1978 and 1984	general (2) specific (3)	general: constant, specific: rising tendency after 1980
Denmark	5	3 between 1976 and 1986	general but no scale	decline between 1976 and 1982, constant thereafter
Australia	1	2: 1977/78 and 1983	general (ICD V)	not comparable
Japan	1	4: every five year between 1970 and 1985	general (ICD V)	constant till 1980, rising between 1980 and 1985
the Netherlands	10	6 between 1975 and 1986	general (7) specific (3)	general: relatively constant, specific: rising tendency after 1979 resp. 1980

* general = mental disturbances in general
 specific = concrete worries about economic issues (income, unemployment, future).

FIGURES 1-9 Fears and anxieties 1975-1986

FIGURE 1

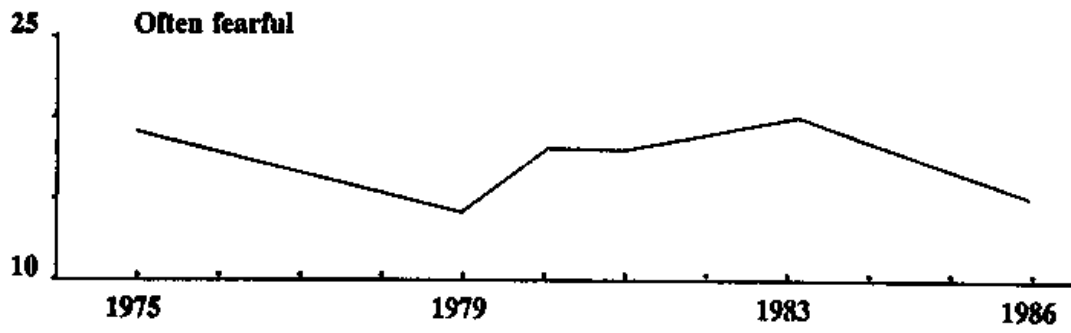


FIGURE 2

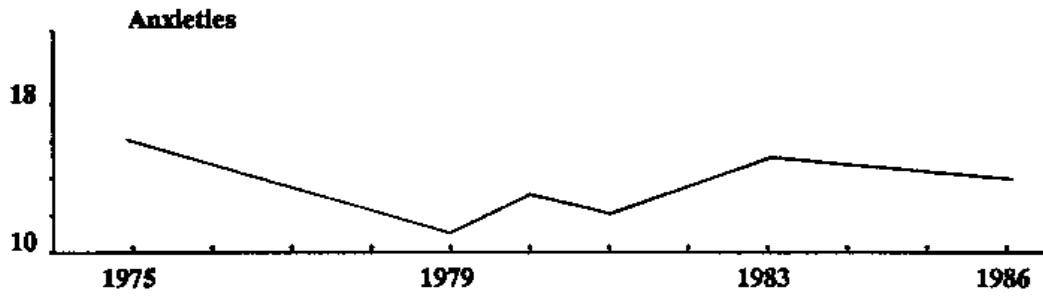


FIGURE 3

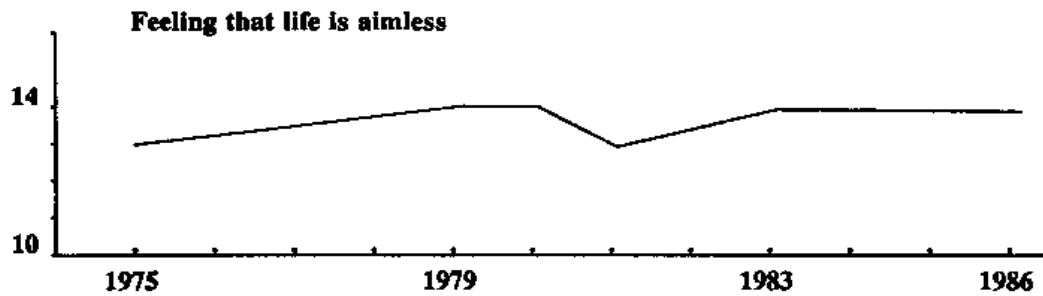


FIGURE 4

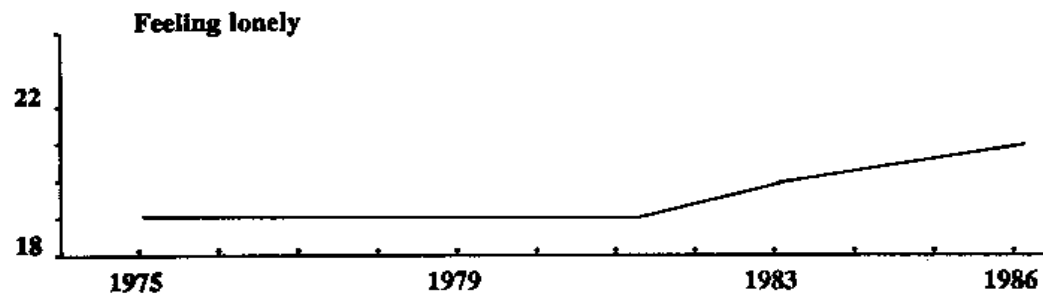


FIGURE 5

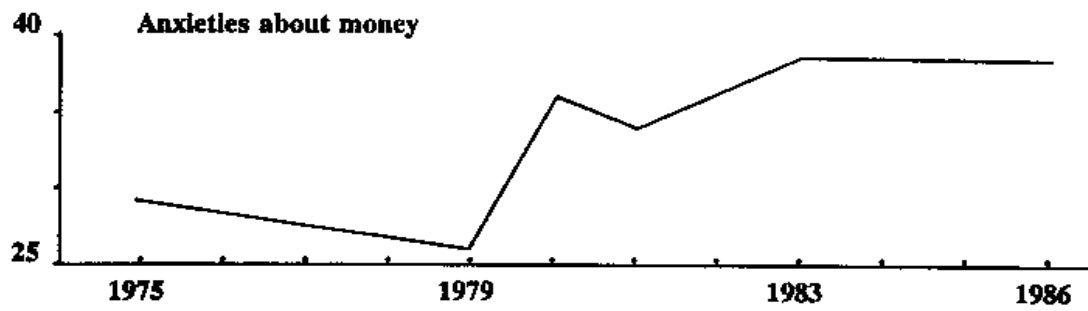


FIGURE 6

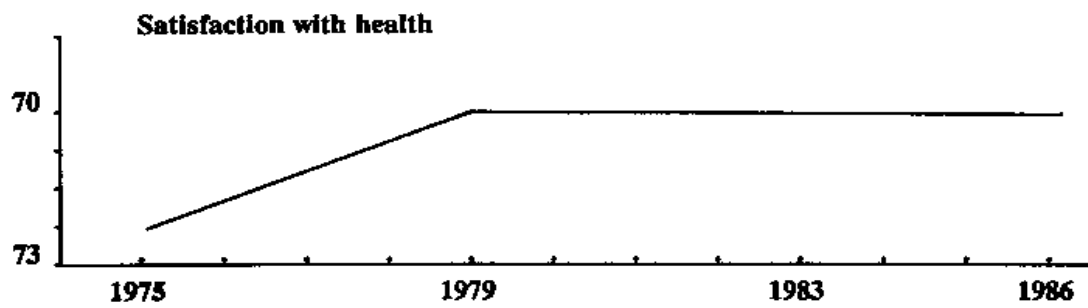


FIGURE 7

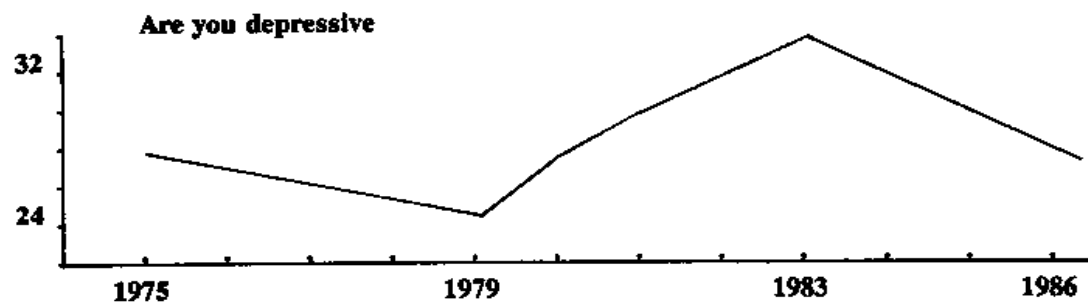


FIGURE 8

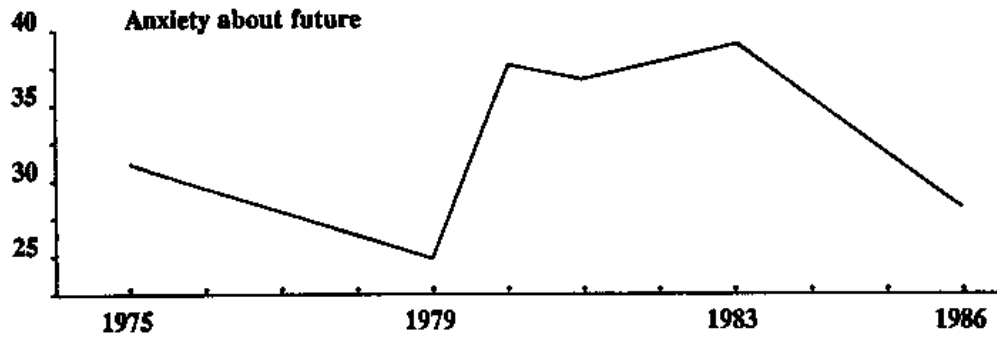


FIGURE 9



Source: Social and Cultural Planning Office, Cultural Changes in the Netherlands 1968-1987

FIGURES 10-13 Fears and anxieties 1975-1986, by level of education

FIGURE 10

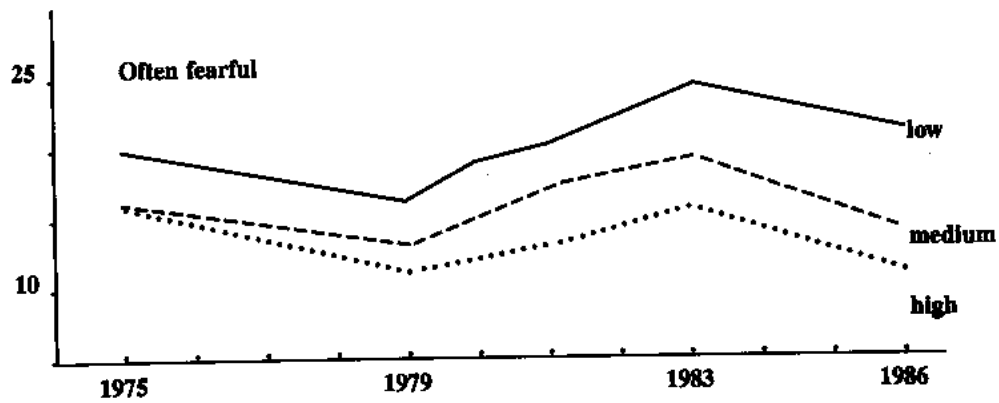


FIGURE 11

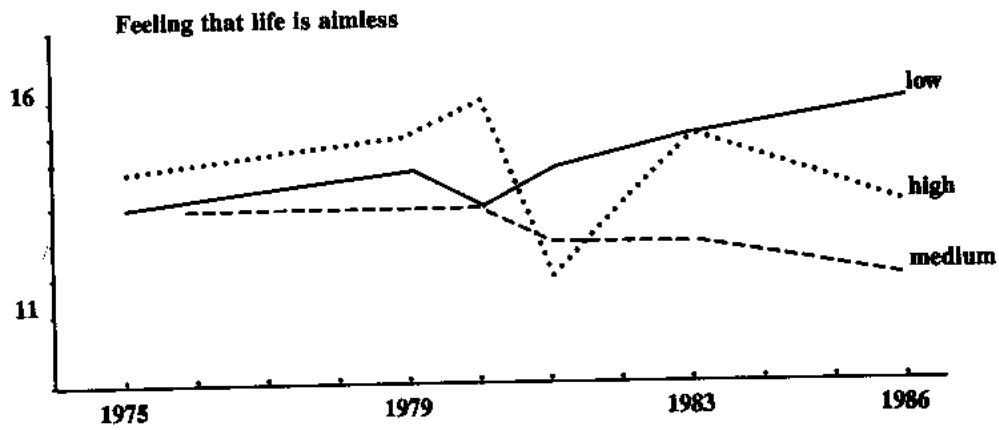


FIGURE 12

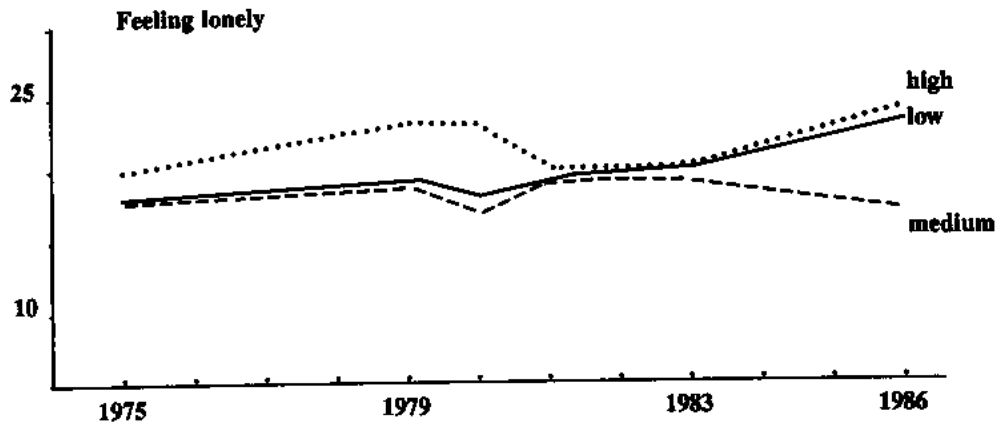
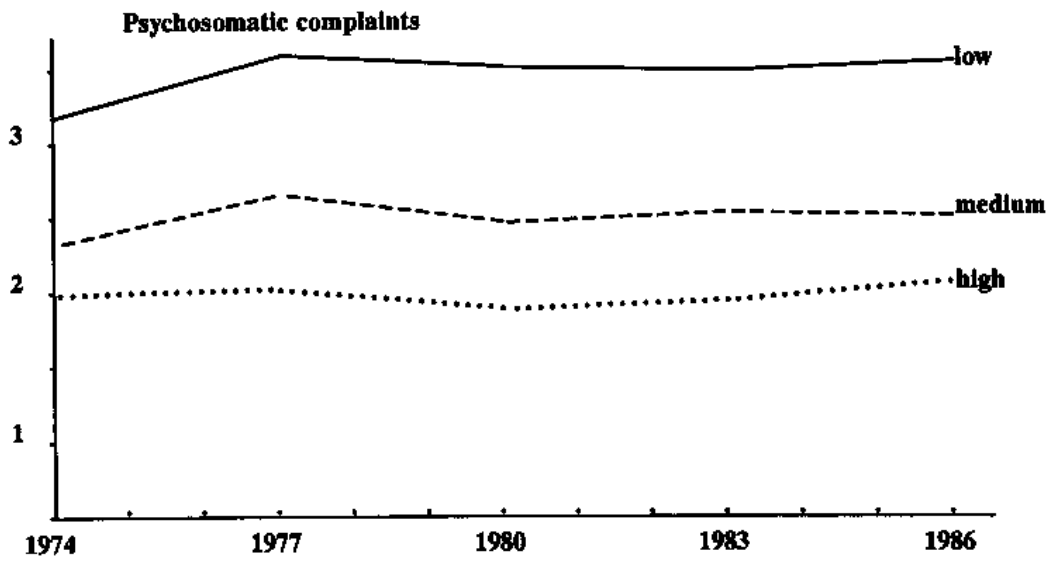


FIGURE 13



Source: Social and Cultural Planning Office, Cultural Changes in the Netherlands 1958 - 1987

APPENDIX

Overview of selection procedures for the inventory

Starting point of the selection was the list of OECD countries which was delivered by the organization of the symposium as background material. From this list were eliminated those countries from which it was known that no suitable material is available, for example because no health interview surveys are undertaken or because only one level of living survey was conducted. We decided to include the following countries in the inventory: United States, Japan, Federal Republic of Germany, France, United Kingdom, Canada, Austria, Denmark, Finland, the Netherlands, Norway, Sweden, Switzerland and Australia.

Three selection criteria for respondents were used. First we used the International Health Data Reference Guide 1987 published by the International Statistics Staff, Office of Planning and Extramural Programs of the U.S. National Centre for Health Statistics. This guide contains a list of agencies and contact persons concerned with health interview surveys. The second criterion was a list of participants of a WHO working group on Methods and Instruments for Health Interview Surveys, which met at the Netherlands Statistical Bureau in June 1988. Representatives of ten countries participated in that meeting. And finally some personal contacts have been included into the inventory.

In **table 1** of this chapter, the results of the inventory are summarized. The fourteen countries which were asked for assistance are mentioned above. Two of them, Sweden and Finland, did not answer our request at all. Two other countries could not provide population based survey-data, these were France and Austria. The representatives of these countries sent us data about patients in hospitals for mental care. These figures were not included in our paper. Finally in six countries population based surveys had been carried out, in which indicators of mental disturbances are included. These are mentioned in the paper. The other four countries: United Kingdom, Canada, Norway and Switzerland could not provide comparable data through time, however.

At the end of 1988 the results of the inventory are therefore restricted to data about the United States of America, Australia, Japan, Federal Republic of Germany, Denmark and the Netherlands.