

Predictors for the Social Adjustment of First Admitted Psychiatric Patients*

Volker Bell, Stefan Blumenthal, Norbert-Ulrich Neumann, Reinhold Schüttler, and Rüdiger Vogel

Bezirkskrankenhaus Günzburg, Sozialpsychiatrische Forschungsstelle, Universität Ulm, L. Heilmeyer-Strasse 2, D-8870 Günzburg, Federal Republic of Germany

Summary. In a prospectively designed follow-up study of 258 first admitted psychiatric patients, 1 year after discharge 224 patients and 175 significant others were asked about the social adjustment of these patients and some predictors for this aspect of outcome could be identified. The sample consisted of five different diagnostic groups: organically caused psychiatric diseases, schizophrenic psychoses, affective psychoses, neurotic or personality disorders and alcohol or drug dependency. The study shows that statements about the social adjustment of psychiatric patients largely depend on the diagnostic group, both with respect to degree of adjustment and the predictors. Schizophrenic patients were found to be less well socially adjusted than the other patients, with the exception of the alcohol- and drug-addicted patients. For schizophrenic patients, post-hospital social adjustment was primarily determined by indicators of mental illness, such as psychopathological symptoms and length of hospitalization. The social adjustment of addicted patients was primarily influenced by vocational variables. For the patients with organic psychiatric disorders, affective psychoses or neurotic/personality disorders, prediction by pre-hospital or hospital variables did not prove to be very useful.

Key words: Psychiatric patients – Follow-up – Social adjustment – Outcome prediction

Introduction

Thanks to the ever increasing medical and psychological knowledge about the development, course and outcome of mental diseases together with their therapeutic management, it has been possible to continuously reduce the average hospitalization periods for psychiatric patients. Brown (1960) demonstrated on the basis of 16 studies of the length of hospital stays of schizophrenic patients between 1900 and 1960 that the average hospital stay was constantly decreasing. This tendency has continued over the past few years to an even larger extent. In fact, the average hospital stay at our psychiatric clinic fell from 314 days in 1971 to only 123 days in 1983. This development was, however, accompanied by a rise in repeated hospitalizations. Over the same period, the number of repeated admissions to our clinic doubled.

Offprint requests to: V. Bell at the above address

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In coping with this generally appreciated problem, psychiatric care on an out-patient basis has been considered a particularly promising approach. The development described above, however, has not yet been turned around. One possible reason is that we do not yet have enough insight into the process of re-integration following hospitalization to effectively encourage this process by intervening therapeutically. An essential part of this re-integration process is the individual's ability to function in social roles (Weissman and Paykel 1974), i.e. social adjustment.

There are two basic questions arising in this respect:

- (1) What are the major features of social adjustment of psychiatric patients following hospitalization?
- (2) What are the predictors for successful vs unsuccessful social re-integration?

In Anglo-American countries a large number of studies into these problems have been conducted, among them Michaux et al. (1969), Weissman et al. (1978), Platt et al. (1980) and Strauss and Carpenter (1972, 1974, 1978). The German-speaking countries have only recently begun to study this subject more intensively but only for patients with a schizophrenic psychosis (Möller et al. 1982, 1984; Biehl and Schubart 1984). After shifting the literature cited above, we came to the conclusion that the following empirical approach would be the most promising in answering these questions.

- (1) Psychiatric patients should be examined prospectively to include all admitted patients and to ensure that every patient's data file is as complete as possible.
- (2) A wide diagnostic spectrum of psychiatric patients should be included, since this is the only way to obtain a differential picture of psychiatric hospital care.
- (3) The patients should have been hospitalized for the first time in order to exclude any interference with previous hospital stays and the influence of “patient careers” of varying length.
- (4) Since social adjustment is defined by the patient's relationship to his or her social environment, it seems necessary to include a “significant other” as an additional source of information (Platt 1981; Hogarty 1975).

Methods

The analysis deals with probands, who were included in a follow-up study concerned with questions of the vocational integration and re-integration of patients undergoing their first psychiatric in-patient therapy. The sample comprised all

patients who were first treated in the district hospital of Günzburg (Bavaria) between 1 January and 31 December 1979. These patients were examined at the time of discharge from the hospital and re-examined at the end of the following year. At this time their significant others were also interviewed. Not included were those patients who had never been employed in a profession or whose employment dated more than 5 years prior to when they were referred to hospital, because it was not possible to find parameters for pre-hospital vocational integration which were equally meaningful for these patients and for patients who worked before admission. Patients to whom the question of professional re-integration could not (or only with great methodical difficulties) be applied were also excluded. Therefore, the sample did not contain any probands over 60 years of age, apprentices or "mere housewives", no persons of foreign nationality and no patients with a diagnosis of "intellectual deficit".

Instruments

At time of discharge and 1 year later the patients and their significant others were examined with structured and semi-structured interviews and questionnaires. The interview lasted between 2 and 3.5 h and on both occasions the same interviewer was involved. A short description of the main instruments follows. The aspect of vocational integration and re-integration was recorded with a structured interview and the individual professional variables were combined to a total index of vocational integration. These individual professional variables were the employment status (employed vs unemployed), number of jobs, increasing job qualification and the amount of time worked over the total time.

To classify each patient according to social class, we used a procedure which was based on the prestige of each job (Treiman 1979; Welz and Klug 1980). With this instrument it was possible to classify each patient for the time of the first job, for the time of first hospitalization and 1 year after discharge.

The 9th version of the Present State Examination (PSE) by Wing et al. (1978) was used for the assessment of psychopathological symptoms. This instrument allows a relatively reliable and valid documentation and classification of psychiatric symptoms and is well suited for measuring changes over time (Wing et al. 1982). The PSE was carried out both at the time of the discharge and 1 year later.

At the time of discharge we asked each patient, the treating hospital psychiatrist and a nurse to give a vocational prognosis. Each score ranged from 1 (good prognosis) to 3 (bad prognosis).

To quantify social adjustment 1 year after discharge, we developed a structured questionnaire, which is named the Günzburg Social Adjustment Scale (GSAS). The questionnaire picks out the aspects of socially expected activities and free-time activities as central themes and is presented both to the patient and an informant, who lives closely to him. They received identical questionnaires to describe the present behaviour of the patient. Additionally the significant other was asked to rate how much he expected these activities from the patient. The general design of the questionnaire is orientated on the Katz Adjustment Scale (Katz and Lyerly 1963; Michaux et al. 1969). The instrument was pre-tested with a separate sample of patients. The item-selection was made out of 37 items. The final questionnaires contained 17 items which are

rated on a 4-point scale, with scores theoretically ranging from 0 to 51. To make them comparable each questionnaire consisted of the same items. According to Katz and Lyerly (1963) we used no expert-rating because "the expertness of clinical raters varies greatly and it is always difficult to know the level attained in any given study. Further, the opportunity for observation by the clinical rater is usually very restricted, so that judgements would be based on rather limited evidence. Finally, expert clinicians vary so widely with regard to their concepts of adjustment that they very likely use different evidence in arriving at judgments". Meanwhile the rating of social adjustment by patients and its significant others is of widespread use (Weisman and Sholomskas 1982).

Sample

At the time of discharge we interviewed 258 patients. At the same time the treating psychiatrist made the diagnosis according to the International Classification of Diseases (8th version). For our study we chose five relatively homogeneous categories. This procedure increases the validity of the diagnosis (McGuire 1973). Distribution of the diagnoses revealed 8% (21) patients with organically caused psychiatric diseases, 13% (33) patients with schizophrenic psychoses, 9% (23) patients with affective psychoses, 31% (81) patients with neurotic, psychosomatic or personality disorders and 39% (100) patients with a diagnosis of alcoholism or drug addiction.

With regard to socio-demographic and clinical features, our sample was characterized as follows. Our population consisted of 64% (165) male and 36% (93) female patients. Their mean age was 35.9 years at the time of admission, ranging from 17 to 59 years. Of the patients 49% (128) were married, 37% (95) unmarried and 14% (35) divorced, living separately from their partners or widowed, respectively. The mean length of hospitalization was 65 days.

We re-examined 230 (90%) patients (8 died, 7 could not be found and 13 refused to be interviewed) 1 year later and 179 significant others were questioned. Unfortunately only 224 patients and 175 (174 for the expectation scale) significant others answered our GSAS (the others were not able or willing to do this). So in the following Tables the number of cases are not completely identical. Despite a drop-out rate of 22% for the significant others sample, this sample does not differ significantly from the total random sample with regard to central patient examination variables like diagnosis, sex, length of hospitalization etc. The only exception was the marital status of the patients (married patients were over-represented in the significant others sample). Of the significant others interviewed 50% were spouses, every fifth person questioned was a parent. Almost all significant others lived in the same house as the patient (91%).

Results

Social Adjustment as Judged by the Various Populations Involved 1 Year after Discharge

Table 1 shows the means of the sum scores of the various questionnaires. This clearly demonstrates that the various diagnostic groups differed in their self-assessments of the extent of social adjustment. When compared with the other

Table 1. Means of social adjustment (GSAS) rated by patient and significant other in the 5 populations 1 year after discharge

Social adjustment	Populations									
	Organic disorders		Schizophrenic psychoses		Affective psychoses		Neurotics and personality disorders		Alcohol and drug abuse	
	<i>n</i>	\bar{X}	<i>n</i>	\bar{X}	<i>n</i>	\bar{X}	<i>n</i>	\bar{X}	<i>n</i>	\bar{X}
Patient behaviour	20	22.35	29	24.28	17	20.53	73	21.81	85	21.94
Significant other behaviour	17	20.47	25	18.64	16	20.88	53	21.98	64	19.11
Significant other expectations	17	26.00	25	24.36	16	25.56	52	27.73	64	27.22
									174	26.69

Table 2. Predictors of social adjustment (GSAS) rated by significant other in the 5 populations 1 year after discharge

Predictors	Populations					
	Organic disorders	Schizophrenic psychoses	Affective psychoses	Neurotic and personality disorders	Addicts	Total
Length of first hospitalization		**	*			***
Social class at time of first job		**	***			***
Social class at time of 1st hospitalization				*		**
Social class 1 year after discharge	*					**
Vocational prognosis made by patient				*		**
Vocational prognosis made by hospital psychiatrist					***	***
Vocational prognosis made by nurse				**	*	***
Vocational integration before 1st hospitalization					*	**
Vocational integration 1 year after discharge	*				**	***
Psycho-pathological symptoms at time of discharge		*				
Psycho-pathological symptoms at time of discharge (only psychotic symptoms)		**				
Psycho-pathological symptoms 1 year after discharge		**	*	***		***
Length of re-hospitalization after discharge	*	**		*	*	***

Probabilities, Mann-Whitney test, two-sided:

** = $P \leq 0.10$

** = $P \leq 0.05$

*** = $P < 0.01$

diagnostic groups, the patients suffering from schizophrenic psychosis assessed themselves significantly ($P = 0.07$)¹ socially more active. The assessment by the significant others yielded quite the opposite result. Significant others of schizophrenic psychosis patients judged them to be less active than significant others of patients of the other diagnostic groups. Only alcohol and drug-addicted patients were similarly assessed by their significant others (these two diagnostic groups compared to the other patients $P = 0.01$). Neurotic patients and those suffering from personality disorders were regarded as socially most active (as compared to schizophrenic patients $P = 0.03$; addicts $P = 0.01$).

The significant others of schizophrenic patients rated them as least active, but they also significantly ($P = 0.04$) expected the least of these patients. Addicts, neurotic patients and those suffering from personality disorders were expected by their significant others to demonstrate the highest degree of activity.

Michaux et al. (1969) interpreted the difference between the behaviour the significant other expected and what he or she actually observed as the degree of satisfaction at the patient's social adjustment. Now, do the significant others expect the patients to be more or less active than they actually observe?

¹ The following probabilities are based on two-sided *t*-tests

Two-way analysis of variance provided clues to this question. The significant others significantly expected ($P < 0.001$) more activities from their patients than they observed. This effect was seen in all diagnostic groups, but was significantly ($P = 0.02$) greater for addicts than for the other diagnostic groups.

Is there a difference in the assessment of the degree of the patient's social activities as seen by the significant others and the patient's self-assessment? Two-way analysis of variance showed that the patients judged themselves to be significantly ($P = 0.001$) more active. The interaction effect suggested that this was not the case for all diagnostic groups. Only for the patients suffering from schizophrenic psychosis and the addicts was there a significant ($P = 0.002$ and 0.01 respectively) difference between self-assessment and outside assessment. The patients regarded themselves as socially more active than did their significant others.

Predictors for Social Adjustment 1 Year after Discharge

What are the appropriate predictors for social adjustment of patients 1 year after discharge and what are the variables in relation to social adjustment at this time?

As will be explained in the Discussion, we chose assessment by the significant other as the most valid indicator for the degree of social adjustment. For these analyses, the entire

sample was divided into a group with poor social adjustment and one with medium to good social adjustment. Patients whose means of all GSAS items were in the lower half of the items range were considered socially poorly adjusted. This was the case for one-third of the entire random sampling.

Table 2 summarizes the possible predictors and variables related to social adjustment. Medical variables such as psycho-pathological symptoms and hospital stay, occupational variables such as prognoses by the patients themselves and outside prognoses, objective appreciation of occupational integration and re-integration and the patient's social class were essential factors in predicting the behaviour of the entire random sampling. This Table furthermore demonstrates that this was not the case for all diagnostic groups. Only the event of being readmitted to a psychiatric clinic and the length of hospitalization (exception: affective psychoses) was significantly related to poor social adjustment in nearly all diagnostic groups (detailed description of aftercare and re-admission see Bell et al. 1983, 1984, 1985c; Blumenthal et al. 1985).

For patients suffering from an organic psychiatric disorder, only poor occupational re-integration and low social class in addition to re-hospitalization mentioned above were significantly related to poor social adjustment.

For patients suffering from schizophrenic psychosis, predictions as to the good or poor social adjustment were most readily made when based on medical variables. The longer the patients were hospitalized during their first psychiatric hospital stay, the poorer was social adjustment following discharge. Psycho-pathological symptoms, especially psychotic symptoms, at the time of discharge impaired the patient's social re-integration. The relation between symptoms and social adjustment became still more evident in the psycho-pathology prepared 1 year later (detailed description of psycho-pathological symptoms see Bell et al. 1985a, b). Only the social class at the time of entry into working life was of predictive value apart from the medical variables. The lower the social class, the poorer the social re-integration.

For patients with affective psychoses, this relationship was observed along with the relationship between hospitalization and social adjustment. Symptoms at discharge were of no predictive value in this patient group. It is, however, safe to conclude that it was significantly related to the psycho-pathological status 1 year after discharge. The same result was obtained for neurotic patients and those suffering from personality disorders. Furthermore low social class at the time of admission to the psychiatric clinic and poor occupational self-prognosis by the patient and by medical staff also related to poor social re-integration of these patients.

Poorly socially adjusted addictive patients were given a rather poor prognosis for their occupational re-integration by the treating psychiatrists and the medical staff at the time of discharge. In fact, these patients were occupationally more poorly integrated prior to their first psychiatric treatment and indeed had more difficulties re-integrating themselves into their jobs following this treatment than the socially well-adjusted patients of the same diagnostic group.

Discussion and Summary

The most remarkable result of the description of social adjustment following patient discharge is the fact that there were great differences between the various diagnostic groups.

The groups of schizophrenic and addictive patients were especially striking in this respect.

Patients suffering from schizophrenic psychoses judged themselves to be most active of all diagnostic groups; they were, however, regarded as socially least active by their significant others. This discrepancy between self-assessment and outside evaluation was confirmed by Michaux et al. (1969). Apart from possible dissimulation, the most probable explanation for this phenomenon is the fact that patients and significant others differed in the valuation of the same behavioural patterns. In other words they used a different "yard-stick". The assertion that schizophrenic patients should behave socially more actively than all other diagnostic groups during the year following discharge is contradictory to all clinical experiences. The patients seem to have difficulties assessing themselves realistically as regards behaviour.

Whether the same approach may be taken for the explanation of the discrepancy between self-assessment by alcoholic patients and the assessment by their significant others seems questionable. The clinical picture of this patient group is rather characterized by dissimulation and omnipotent self-characterization. A possible explanation could therefore possibly be as follows.

The significant others of schizophrenic patients judged them to be socially less active, but they also expected them to be so. This was not the case for addicts. In these patients, the discrepancy between expectation and behaviour assessment was especially large and may represent a special problem in the relationship between the significant other and the patient.

On account of the above-mentioned reservations regarding self-assessment by the addictive and schizophrenic patients, we decided to consider outside assessment by the significant other to be the more valid instrument in the quantification of social adjustment of the patient. Behaviour assessment by the significant other was therefore the crucial factor in the analysis of the predictors. For the entire group, both medical variables and occupational variables proved to be important. Diagnosis-specific particulars were, however, also crucial in this respect.

For patients suffering from organic psychiatric disorders, the only relationships found were those between social adjustment and variables covering the period following the first hospitalization. Those patients who showed poorer social adjustment also had greater difficulty re-integrating themselves into their jobs and, following hospitalization, their social class was lower than those patients showing good social adjustment.

For schizophrenic patients, pre-hospitalization and hospitalization variables were relevant to social re-integration. Medical variables such as symptoms and length of hospitalization were of major importance, which are also direct indicators of severity of the disease. The social class to which a patient belonged at the time of entry into working life was also of predictive value.

The last holds true for patients suffering from affective psychoses; but the length of the first psychiatric hospitalization also had negative effects on social re-integration. In this patient group, poor social re-integration indeed seemed to have a negative effect on psycho-pathological status, i.e. interaction occurs.

For patients suffering from neuroses or personality disorders, an interaction between symptoms and social adjustment may also be assumed, whilst low social class and poor vocational self-prognosis have negative effects on social adjustment.

For the social re-integration of addictive patients, medical variables were only of minor importance; occupational variables were more decisive. Patients showing poor social re-integration had been more poorly integrated in their working lives before hospitalization; on discharge, these patients were given poor occupational prognoses by their psychiatrists and medical staff, and they were indeed less successful in re-integrating themselves occupationally than their socially better adjusted counterparts.

Summary. Statements about the social adjustment of psychiatric patients in the year following their discharge largely depended on the diagnostic group, both with respect to degree of adjustment and the predictors. The discrepancies between self-assessment and outside assessment of social adjustment highlighted the necessity to include not only the patient as an information source but also a significant other. It was also shown that there are medical and vocational predictors for the social adjustment of psychiatric patients in the year following discharge.

However the importance of these predictors was different in the various diagnostic groups. For schizophrenic patients the post-hospital social adjustment was primarily determined by indicators for mental illness. These were length of first hospitalization, length of re-hospitalization after first admission and psycho-pathological symptoms at the time of discharge and 1 year later. For addict patients social adjustment was primarily influenced by vocational variables such as pre- and post-hospital vocational integration. The importance of vocational factors for these patients was seen by the hospital psychiatrists and nurses. Their prognosis of vocational integration corresponded with later social adjustment.

For the other diagnostic groups of organic psychiatric disorders, affective psychoses and the neurotic or personality disorders prediction by early variables was not very useful. Here poor social adjustment corresponded with poor vocational integration and psycho-pathological status measured at the same time.

References

- Bell V, Aschoff-Pluta R, Blumenthal ST, Lungershausen E, Vogel R (1983) Das Nachsorgeverhalten ersteingewiesener psychiatrischer Patienten im Jahr nach ihrer Entlassung. *Psychiatr Prax* 10:24–27
- Bell V, Aschoff-Pluta R, Blumenthal ST, Lungershausen E, Vogel R (1984) Die ambulante und stationäre Nachbehandlung ersteingewiesener depressiver Patienten. In: Wolfersdorf M, Straub R, Hole G (Hrsg) *Der depressiv Kranke in der psychiatrischen Klinik*. Roderer Verlag, Regensburg, S 104–111
- Bell V, Aschoff-Pluta R, Blumenthal ST, Lungershausen E, Vogel R (1985a) The prognostic value of psychopathological symptoms for vocational and social reintegration. In: Pichot P, Berner P, Wolf R, Thau K (eds) *Psychiatry: The state of the art*, vol 7. Plenum Press, New York London, pp 591–596
- Bell V, Aschoff-Pluta R, Blumenthal ST, Lungershausen E, Vogel R (1985b) Zur Behinderung durch die psychopathologische Symptomatik bei erstmals stationär behandelten psychiatrischen Patienten. In: Berufsverband Deutscher Psychologen (Hrsg) *Psychologische Hilfen für Behinderte*, Bd 2. Weissenhof-Verlag, Weinsberg, S 135–145
- Bell V, Blumenthal ST, Neumann N-U, Schüttler R, Vogel R (1985c) Problemdarstellung und Ergebnisse einer Kontinuitätsentschätzung in der posthospitalen Versorgung ersteingewiesener psychiatrischer Patienten. *ZUMA-Nachrichten* 16:4–15
- Biehl H, Schubart C (1984) Werden die Weichen früh gestellt? Zur Entwicklung von Behinderung bei neuerkrankten schizophrenen Patienten – Definition, Meßmethode und Verlauf über 2 Jahre. *Spektrum* 4:172–180
- Blumenthal ST, Aschoff-Pluta R, Bell V, Lungershausen E, Vogel R (1985) The problem of readmission. In: Pichot P, Berner P, Wolf R, Thau K (eds) *Psychiatry: The state of the art*, vol 7. Plenum Press, New York, pp 597–602
- Brown GW (1960) Length of hospital stay and schizophrenia: A review of statistical studies. *Acta Psychiatr Neurol Scand* 35:414–430
- Hogarty G (1975) Informant ratings of community adjustment. In: Waskow I, Parloff M (eds) *Psychotherapy change measures*. DHEW Pub. No. (ADM) 74–120, Rockville, Maryland
- Katz M, Lyerly SB (1963) Methods of measuring adjustment and social behavior in the community. *Psychol Rep* 13:503–535
- McGuire RJ (1973) Classification and the problem of diagnosis. In: Eysenck HJ (ed) *Handbook of abnormal psychology*. Pitman, London
- Michaux WW, Katz MM, Kurland AA, Gansereit KH (1969) *The first year out*. The Johns Hopkins Press, Baltimore
- Möller HJ, Werner-Eilert K, Zerssen D v, Wünschner-Stockheim M (1982) Relevante Merkmale für die 5-Jahres-Prognose von Patienten mit schizophrenen und verwandten paranoiden Psychosen. *Arch Psychiatr Nervenkr* 213:305–322
- Möller HJ, Scharl W, Zerssen D v (1984) Störungen der prämorbid sozialen Adaptation als Prädiktor für die Fünfjahresprognose schizophrener Psychosen. *Nervenarzt* 55:358–364
- Platt S, Weyman A, Hirsch S, Hewitt S (1980) The social behaviour assessment schedule (SBAS): Rationale, contents, scoring and reliability of a new interview schedule. *Soc Psychiatry* 15:43–55
- Platt S (1981) Social adjustment as a criterion of treatment success – just what are we measuring. *Psychiatry* 44:95–112
- Strauss JS, Carpenter WT (1972) The prediction of outcome in schizophrenia. I. Characteristics of outcome. *Arch Gen Psychiatry* 27:739–746
- Strauss JS, Carpenter WT (1974) The prediction of outcome in schizophrenia: II. Relationships between predictor and outcome variables: A report from the WHO International Pilot Study of Schizophrenia. *Arch Gen Psychiatry* 31:37–42
- Strauss JS, Carpenter WT (1978) The prognosis of schizophrenia: Rationale for multidimensional concept. *Schizophr Bull* 4:56–67
- Treiman DJ (1979) Probleme der Begriffsbildung und Operationalisierung in der international vergleichenden Mobilitätsforschung. In: Pappi FU (Hrsg) *Sozialstrukturanalysen mit Umfragedaten*. ZUMA, Athenäum Verlag, Königstein
- Weissman MM, Paykel ES (1974) *The depressed woman: A study of social relationships*. University of Chicago Press, Chicago
- Weissman MM, Prusoff BA, Thompson WD, Harding PS, Myers JK (1978) Social adjustment by self-report in a community sample and in psychiatric outpatients. *J Nerv Ment Dis* 166:317–326
- Weissman MM, Sholomskas D (1982) The assessment of social adjustment by the clinician, the patient, and the family. In: Burdock EI, Sudilovska A, Gershon S (eds) *The behavior of psychiatric patients quantitative techniques for evaluation*. Marcel Dekker, Basel
- Welz R, Klug J (1980) Soziale Schicht und Berufsprestige als Skalierungsproblem in der psychiatrischen Epidemiologie. In: Heinrich H, Rüker K (Hrsg) *Psychiatrische Soziologie*. Beltz, Weinheim
- Wing JK, Cooper JE, Sartorius N (1978) *Present State Examination*. (Deutsche Bearbeitung: M v Cranach) Beltz, Weinheim
- Wing JK, Cooper JE, Sartorius N (1982) *Die Erfassung und Klassifikation psychiatrischer Symptome. Beschreibung und Glossar des PSE*. Beltz, Weinheim

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