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The Concept of Major Depression

I. Descriptive Comparison of Six Competing Operational Definitions Including ICD-10 and DSM-III-R

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Summary. All operationalized diagnostic systems contain a diagnostic category, which corresponds to the concept of major depression. Yet, these corresponding definitions are not identical. Up to now, no comprehensive comparisons of the competing diagnoses have been published. We will therefore present a series of studies, describing six different operational definitions of major depression according to their content and construction and empirically comparing them in large inpatient and outpatient samples. This first paper presents a descriptive comparison of the definitions given in the Feighner Diagnostic Criteria, the Research Diagnostic Criteria, the Diagnostic and Statistical Manual of Mental Disorders, third edition and third edition, revised, and in two developmental drafts of the ICD-10 diagnostic criteria for research (draft April 1987-I87; draft April 1989-I89). The descriptive comparison will demonstrate that there are many similarities, especially concerning the symptom-criteria of major depression. Classificatory relevance could only be assumed for those differences found for cut-offs, for time criteria and especially for exclusion criteria. Whether these differences are negligible and whether patients classified by different diagnostic systems are really comparable will be examined in subsequent publications.

Key words: Major depression – Operational diagnosis – ICD-10 – DSM-III-R

Introduction

The concept of major depression has a firm position in many systematic attempts to operationalize psychiatric diagnoses. A number of diagnostic systems use almost the same set of cross-sectional symptoms for defining the syndrome of major depression. Yet there are differences with respect to the definition of single criteria, number of criteria requested, time requirements, and exclusion of other co-existing schizophrenic symptoms and pre-existing non-affective psychiatric disorders.

Up to now no comprehensive empirical analyses have been published which try to clear the relevance of these differences in the diagnostic rules for major depression. This fact has some important consequences: no standard is available for choosing the system according to which major depression should be diagnosed; the interpretation and comparison of empirical studies using different definitions of major depression are limited because it is not known to which degree the patient samples overlap; and for the judgement of new attempts of defining the concept of major depression no clear-cut yardstick exists for assessing its concurrent validity. This last problem is of special relevance when trying to assess the validity of newly developed diagnostic criteria like those of DSM-III-R and those of ICD-10 in development. Although the last two drafts of ICD-10 in development avoided the term "major depression", the concept of major depression is apparently operationalized: the April 1987 draft presents major depression under the term "mild depressive episode" (F 33.1), and the April 1989 draft contains major depression as "depressive episode", subdivided into three categories of different severity (F 32.0 "depressive episode, mild severity"; F 32.1 "depressive episode, moderate severity"; and F 32.2 + 3 "severe depressive episode"). An attempt to validate these new definitions, therefore, has to compare these diagnoses with all other competing diagnoses claiming to operationalize the same concept of major depression.

Within a major project to assess different aspects of validity of the ICD-10 Diagnostic Criteria for Research for affective, schizophrenic, and anxiety-related disorders, a polydiagnostic approach to conduct an empirical analysis of the different validity aspects of the diagnostic algorithms of ICD-10 and a variety of other competing diagnostic systems was used. Within this context, a com-

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Table 1. Six operational definitions for major depression

FDC	Feighner Diagnostic Criteria (Feighner et al. 1972): primary depression
RDC	Research Diagnostic Criteria (Spitzer et al. 1978): major depressive disorder
DSM	Diagnostic and Statistical Manual III (APA 1980): major depressive episode
DSR	Diagnostic and Statistical Manual III – Revised (APA 1987): major depressive episode
I87	International Classification of Diseases, draft April 1987 (WHO 1987): mild depressive episode
I89	International Classification of Diseases, draft April 1989 (WHO 1989): mild, moderate or severe depression

Table 2. FDC criteria for primary depression

A. Dysphoric mood characterized by symptoms such as the following: depressed, sad, blue, despondent, hopeless, "down in the dumps", irritable, fearful, worried, or discouraged

B. At least *five* of the following criteria are required for "definite" depression; four are required for "probable" depression
   (1) Poor appetite or weight loss (positive if 2 lb a week or 10 lb or more a year when not dieting)
   (2) Sleep difficulty (including insomnia or hypersomnia)
   (3) Loss of energy, e.g. fatigability, tiredness
   (4) Agitation or retardation
   (5) Loss of interest in usual activities, or decrease in sexual drive
   (6) Feelings of self-reproach or guilt (either may be delusional)
   (7) Complaints of or actually diminished ability to think or concentrate, such as slow thinking or mixed-up thoughts
   (8) Recurrent thoughts of death or suicide, including thoughts of wishing to be dead

C. A psychiatric illness lasting at least *1 month*

D. No pre-existing psychiatric conditions such as schizophrenia, anxiety neurosis, phobic neurosis, obsessive-compulsive neurosis, hysteria, alcoholism, drug dependency, antisocial personality, homosexuality and other sexual deviations, mental retardation, or organic brain syndrome

E.[a] No massive or peculiar alteration of perception and thinking as a major manifestation of the illness, which then would be classified as schizoaffective depression

[a] Additional exclusion criterion, formulated by Feighner in 1981

parison of six operational definitions of the concept of major depression (Table 1) was conducted. This is the first of a series of papers presenting different levels of descriptive and empirical comparisons of diagnostic algorithms, diagnostic base rates, amounts of overlap, concurrent validity for ICD-9 diagnoses of depression, and predictive validity for short-term and long-term prediction of the natural course of the disorder.

This first paper will display a descriptive comparison of the six competing diagnostic algorithms. Special emphasis will be laid on the differences in defining symptom criteria, differences in the number of syndrome criteria required, differences in time criteria, and differ-

Table 3. RDC criteria for major depressive disorder

A. One or more distinct periods with dysphoric mood or pervasive loss of interest or pleasure. The disturbance is characterized by symptoms such as the following: depressed, sad, blue, hopeless, low, down in the dumps, "don't care anymore", or irritable. The disturbance must be prominent and relatively persistent but not necessarily the most dominant symptom. It does not include momentary shifts from one dysphoric mood to another dysphoric mood, e.g. anxiety to depression to anger, such as are seen in states of acute psychotic turmoil

B. At least *five* of the following symptoms are required to have appeared as part of the episode for definite and four for probable (for past episodes, because of memory difficulty, one less symptom is required)
   (1) Poor appetite or weight loss or increased appetite or weight gain (change of 1 lb a week over several weeks or 10 lb a year when not dieting)
   (2) Sleep difficulty or sleeping too much
   (3) Loss of energy, fatigability, or tiredness
   (4) Psychomotor agitation or retardation (but not mere subjective feeling of restlessness or being slowed down)
   (5) Loss of interest or pleasure in usual activities, including social contact or sex (do not include if limited to a period when delusional or hallucinating) (The loss may or may not be pervasive)
   (6) Feelings of self-reproach or excessive or inappropriate guilt (either may be delusional)
   (7) Complaints or evidence of diminished ability to think or concentrate, such as slowed thinking or indecisiveness (do not include if associated with marked formal thought disorder)
   (8) Recurrent thoughts of death or suicide, or any suicidal behaviour

C. Duration of dysphoric features at least 1 week beginning with the first noticeable change in the subject's usual condition (definite if lasted more than *2 weeks*)

D. Sought or was referred for help from someone during the dysphoric period, took medication, or had impairment in funtioning with family, at home, at school, at work, or socially

E. None of the following which suggest schizophrenia is present:
   (1) Delusions of being controlled (or influenced), or of thought broadcasting, insertion, or withdrawal
   (2) Non-affective hallucinations in which either a voice keeps up a running commentary on the subject's behaviours or thoughts as they occur, or two or more voices converse with each other
   (4) At some time during the period of illness had more than 1 month when he exhibited no prominent depressive symptoms but had delusions or hallucinations (although typical depressive delusions such as delusions of guilt, sin, poverty, nihilism, or self-deprecation, or hallucinations with similar content are not included)
   (5) Preoccupation with a delusion of hallucination to the relative exclusion of other symptoms or concerns (other than typical depressive delusions of guilt, sin, poverty, nihilism, self-deprecation of hallucinations with similar content)
   (6) Definite instances of marked formal thought disorder (as defined in this manual), accompanied by either blunted or inappropriate affect, delusions or hallucinations of any type, or grossly disorganized behaviour

F. Does not meet the criteria for schizophrenia, residual subtype

Table 4. DSM criteria for major depressive episode (DSM-III)

A. Dysphoric mood or loss of interest or pleasure in all or almost all usual activities and pastimes. The dysphoric mood is characterized by symptoms such as the following: depressed, sad, blue, hopeless, low, "down in the dumps", irritable. The mood disturbance must be prominent and relatively persistent but not necessarily the most dominant symptom, and does not include momentary shifts from one dysphoric mood to another dysphoric mood, e.g. anxiety to depression to anger, such as are seen in states of acute psychotic turmoil

B. At least *four* of the following symptoms have each been present *nearly every day* for a period of at least *2 weeks*
   (1) Poor appetite or significant weight loss (when not dieting) or increased appetite or significant weight gain
   (2) Insomnia or hypersomnia
   (3) Psychomotor agitation or retardation (but not mere subjective feeling of restlessness or being slowed down)
   (4) Loss of interest or pleasure in usual activities, or decrease in sexual drive not limited to a period when delusional or hallucinating
   (5) Loss of energy; fatigue
   (6) Feelings of worthlessness, self-reproach or excessive or inappropriate guilt (either may be delusional)
   (7) Complaints or evidence of diminished ability to think or concentrate, such as slowed thinking or indecisiveness not associated with marked loosening of associations or incoherence
   (8) Recurrent thoughts of death, suicidal ideation, wishes to be dead, or suicide attempt

C. Neither of the following dominate the clinical picture when an affective syndrome (i.e. criteria A and B above) is not present, that is, before it developed or after it has remitted:
   (1) Preoccupation with a mood-incongruent delusion or hallucination
   (2) Bizarre behaviour

D. Not superimposed on either schizophrenia, schizophreniform disorder, or a paranoid disorder

E. Not due to any organic mental disorder or uncomplicated bereavement

Table 5. DSR criteria for major depressive disorder (DSM-III-R)

A. At least *five* of the following symptoms have been present during the same *2-week* period and represent a change from previous functioning; at least one of the symptoms is either
   (1) Depressed mood, or
   (2) Loss of interest or pleasure
   (Do not include symptoms that are clearly due to a physical condition, mood-incongruent delusions or hallucinations, incoherence, or marked loosening of associations)
   (1) Depressed mood most of the day, nearly every day, as indicated either by subjective account or observation by others
   (2) Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated either by subjective account or observation by others of apathy most of the time)
   (3) Significant weight loss or weight gain when not dieting (e.g. more than 5% of body weight in a month), or decrease or increase in appetite nearly every day
   (4) Insomnia or hypersomnia nearly every day
   (5) Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
   (6) Fatigue or loss of energy nearly every day
   (7) Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
   (8) Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
   (9) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

B. (1) It cannot be established that an organic factor initiated and maintained the disturbance
   (2) The disturbance is not a normal reaction to the death of a loved one (uncomplicated bereavement)

C. At no time during the disturbance have there been delusions or hallucinations for as long as 2 weeks in the absence of prominent mood symptoms (i.e. before the mood symptoms developed or after they have remitted)

D. Not superimposed on schizophrenia, schizophreniform disorder, or psychotic disorder not otherwise specified

ences in exclusion criteria, especially in demarcating major depression from schizoaffective depression and schizophrenia.

Four of the six definitions of major depression (Table 1) are officially introduced and have been applied for many years [Feighner Diagnostic Criteria (FDC), Research Diagnostic Criteria (RDC) and DSM-III] or at least during the last couple of years (DSM-III-R). The ICD-10 definition of April 1989 (in the following abbreviated to I89) reflects the current stage of development of ICD-10. Nevertheless, up to now, we do not know whether this version of defining major depression will further be modified before the final formulation of ICD-10 is hopefully accepted in 1992; too many changes have taken place during the past 5 years of developing ICD-10. Especially important are those changes which took place between the April 1987 draft and the April 1989 draft. Because so far there is no empirical data base on which these changes could be justified, we decided to include the last version from April 1987 (I87) in our analysis, in order to evaluate the consequences of these changes.

Six Diagnostic Systems and Their Definitions of Major Depression

The FDC of the St. Louis group (Feighner et al. 1972; Feighner 1981) constituted the first group of operationalized diagnostic criteria in psychiatric research and was the starting point for further classificatory developments which have taken place in the USA during the last 20 years. The FDC definition of major depression (Table 2) was developed from a first criterion-referenced definition, which had been published by Cassidy et al. in 1957. The very new aspect of the FDC definition was the demarcation of primary and secondary forms of depression; the term "major depression" had not yet been introduced at that time, nor did the FDC allow a subdivision into an endogenous and nonendogenous subtype of depression.

The RDC (Spitzer et al. 1978) were developed between 1975 and 1978 by psychiatrists who included sev-

Table 6. I87 criteria for mild depression (ICD-10, April 1987)

A.	A mood which is depressed, sad or irritable, abnormal for the person concerned *and* loss or impairment of the capacity for enjoyment, which are abnormal for the person concerned and persisting for at least *2 weeks*
B.	At least *five* of the following must be present most of the time for at least *2 weeks*: (1) Poor appetite or an otherwise unexplained weight loss, or increased appetite *and* corresponding weight gain (2) Insomnia or hypersomnia (3) Loss of energy, fatigability or constant tiredness (4) Psychomotor agitation or retardation (5) Loss of interest or pleasure in usual activities, including social contacts or sex (6) Feelings of self-reproach or excessive or inappropriate guilt (7) Complaints or evidence of diminished ability to think or concentrate such as slow thinking or indecisiveness (8) Recurrent thoughts of death or suicide, or any suicidal behaviour
C.	The subject does not simultaneously fulfil criteria for schizophrenia and the episode is not attributable to alcohol or drug abuse, endocrine disorder, drug treatment or any organic disorder
D.	Absence of manic symptoms sufficient to meet the criteria for manic episode (F 30) at any time in the subject's life

Table 7. I89 criteria for depressive episode (ICD-10, April 1989)

A.	Depressive episode, mild, severity (F 32.0): At least *two of the three* symptoms in A:
A.	Depressive episode, moderate severity (F 32.1): At least *two of the three* symptoms in A:
A.	Severe depressive episode (F 32.2): *All three* symptoms in A: (1) Depressed mood to a degree that is definitely abnormal for the subject, present for most of the day and almost every day, largely uninfluenced by circumstances, and sustained for at least *2 weeks* (2) Marked loss of interest or pleasure in activities which are normally pleasurable (3) Decreased energy and increased fatigability
B.	Depressive episode, mild severity (F 32.0): At least *two of the seven* symptoms in B:
B.	Depressive episode, moderate severity (F 32.1): At least *three of the seven* symptoms in B:
B.	Severe depressive episode (F 32.2): At least *three of the seven* symptoms in B: (1) Loss of confidence, and self-esteem (2) Unreasonable feelings of self-reproach or excessive and inappropriate guilt (3) Recurrent thoughts of death or suicide, or any suicidal behaviour (4) Complaints or evidence of diminished ability to think or concentrate, such as indecisiveness or vacillation (5) Change in psychomotor activity, with agitation or retardation (6) Sleep disturbance of any type (7) Change in appetite (decrease or increase) with corresponding weight change
C.	Depressive episode, mild severity (F 32.0): None of the symptoms from either group A or B should be of intense severity
C.	Depressive episode, moderate severity (F 32.1): At least *three* of the symptoms from either A or B should be present to a marked degree, *or*, a total of at *least seven* symptoms should be present at mild or moderate degree of severity
C.	Severe depressive episode (F 32.1): At least *two* the symptoms from either A or B should be severe, and others should be marked
D.	The depressive episode should last for at least *2 weeks*
E.	The episode is not attributable to alcohol or drug abuse, endocrine disorder, drug treatment or any organic mental disorder
F.	Absence of manic symptoms sufficient to meet the criteria for mania (F 30.1 + 2) at any time in the subject's life
G.[a]	The subject does not simultaneously fulfil the criteria for schizophrenia (F 20) or schizoaffective disorder, depressive type (F25.1)

[a] An explicite formulation of the exclusion of schizophrenia and schizoaffective disorder, depressed type, is only given for F 32.3 (severe depressive episode with psychotic symptoms); as a matter of fact, it must also be applied for all other types of depressive episode (F 32.0, F 32.1 and F 32.2)

eral of the St. Louis group; originally, the RDC served as diagnostic tools for several NIMH-sponsored projects, for example the Collaborative Study on the Psychobiology of Depression. The RDC were the first to introduce the term "major depression". At the same time, RDC major depressive disorder (Table 3) offered subdivisions by a variety of aspects, such as primary-secondary, single-recurrent, psychotic-nonpsychotic, inactivating-noninactivating, endogenous-nonendogenous, agitated-retarded, situative-nonsituative.

The RDC became the basis for the revision of DSM-II, the official classification manual of the American Psychiatric Association. DSM-III (DSM; American Psychiatric Association 1980) was the first official diagnostic manual which recommended operational diagnostic criteria for clinical use; a first revision (DSM-III-R) was issued in 1987 (DSR; American Psychiatric Association 1987). The definitions of major depression in DSM (Table 4) and DSR (Table 5) adopted term and diagnostic algorithms from RDC with only minor changes.

In the early 1980s, the WHO and the USA Alcohol and Drug Administration (ADAMHA) agreed to cooperate in coordinating the development of DSM-IV and ICD-10, which were both planned to come into operation in 1992. Therefore, the first draft of the ICD-10 research criteria, in development from August 1985; closely resembled DSM-III. This resemblance was still to be seen between DSM-III-R and I87. I89 includes major changes, especially in the area of depressive disorders, which reflect a greater distance from the U.S. American concepts laid down in DSM-III-R. The definition of major depression in I87 (Table 6) disguised its origin from the same concept by omitting the term "major depression" and calling this diagnostic category "mild depression"; the same is true for I89 (Table 7); yet, I89 introduced a new way of subdividing major depression according to severity, "guilt/worthlessness" into two: B2 "guilt" and B1 "loss of confidence and self-esteem); there are no criteria in the other diagnostic systems that correspond to the B1 criterion of I89.

Two items (B2 "sleep disturbance" and B4 "psychomotor chance") are completely identical in all six diagnoses; two others (B7 "cognitive impairment" and B8

Table 8. Content comparison of group A inclusion criteria

A1 Dysphoria	
FDC:	Depressed, sad, blue, despondent, hopeless, down in the dumps, irritable, fearful, worried, or discouraged
RDC:	Depressed, sad, blue, low, hopeless, down in the dumps, irritable, "don't care anymore"
DSM:	Depressed, sad, blue, low, hopeless, down in the dumps, irritable
DSR:	Depressed
I87:	Depressed, sad, irritable
I89:	Depressed
A2 Anhedonia	
FDC:	–
RDC:	Loss of interest or pleasure
DSM:	Loss of interest or pleasure
DSR:	Loss of interest or pleasure
I87:	Loss of pleasure (obligatory!)
I89:	Loss of interest or pleasure (obligatory for severe depression!)
A3 Low energy	
FDC:	–
RDC:	–
DSM:	–
DSR:	–
I87:	–
I89:	Loss of energy *and* fatigability (obligatory for severe depression!)

"suicidal ideation") are nearly identical. Relevant discrepancies are only seen in B1 ("appetite/weight change") for FDC, I87 and I89, in B3 ("low energy") for I89, in B5 ("anhedonia") for FDC, and in B6 ("guilt/worthlessness") for DSR and I89 (Table 9). The FDC do not use increase of appetite or weight as diagnostic criteria for major depression; all other diagnostic systems do. I89 requires a combined increase or decrease of appetite *and* weight; for all other systems (with the exception of increase in I87), either appetite *or* weight change is sufficient to meet this criterion. For item B3 ("low energy") it seems to be of minor importance that some diagnostic systems formulate "fatigability or tiredness" while others combine both items in the term "fatigue". More important, of course, is that all but one diagnosis requires only one of the two items "low energy" and "fatigue"; this is I89, which deviates by needing both items to be present to meet criterion A (3). Finally, the relatively greatest variations are found within item B6, "guilt/worthlessness". Guilt or self-reproach are formulated as alternative items in all but one diagnosis; DSR is the only one which does not accept the diagnostic dignity of the item "self-reproach". Worthlessness, on the other hand, is found to be of diagnostic relevance in DSR, as it is also in DSM; all other diagnostic systems do not accept worthlessness as a diagnostic criterion. It has already been mentioned that I89 additionally introduces loss of confidence and self-esteem as a criterion; no other diagnoses follow this line.

Additional differences are given in the quantitative definition of some of the items. A comparison of Tables 2–7 shows that different quantifications are made for weight change ("loss" and "change" in FDC, I87 and I89; "significant" change in DSM; exactly quantified change in RDC and DSR) and also for dysphoria, anhedonia and guilt. All other items (sleep disturbance, low energy, psychomotor change, cognitive impairment, suicidal ideation) are nearly consistent in being qualitatively defined in all but one diagnostic system. The exception is I89, which requires a nonoperationalized three-step quantification of every A and B criterion (mild, moderate or intense degree); together with the number of criteria fulfilled, this quantification of criteria is needed for subtyping the depressive episode according to its severity into mild, moderate and severe forms (see Table 7).

Comparison of the Syndrome Definitions

Table 10 compares the six definitions of major depression according to three aspects of their syndrome definition. As already mentioned, the mood requirements of criterion A are strictest in I87 and in I89 (severe depression), where both dysphoria and anhedonia are needed. The algorithm of the A criterion is most liberal in RDC, DSM and DSR, where dysphoria and anhedonia are allowed as alternatives.

Some greater variability is to be seen in the algorithm of the B criterion. The number of elegible symptom-criteria is different: for I89 only seven symptom-criteria are defined; for FDC, RDC, DSM and I87 the B criterion is based on eight symptom-criteria; finally in DSR the criteria constitute nine symptoms (Table 10). Even more impressive are the differences in the numbers of symptom-criteria required for fulfilling the algorithm of the depressive syndrome (Table 10): I89 has the lowest cut-off (2 out of 7 for mild and moderate depression, 3

Table 9. Content comparison of group B inclusion criteria

B1 Appetite/weight change

FDC: Decrease of appetite or weight loss
RDC: Decrease of appetite or weight loss or increase of appetite or weight gain
DSM: Decrease of appetite or weight loss or increase of appetite or weight gain
DSR: Decrease of appetite or weight loss or increase of appetite or weight gain
I87: Decrease of appetite or weight loss or (increase of appetite *and* weight gain)
I89: (Decrease of appetite *and* weight loss) or (increase of appetite *and* weight gain)

B2 Sleep disturbance

FDC: Insomnia or hypersomnia
RDC: Insomnia or hypersomnia
DSM: Insomnia or hypersomnia
DSR: Insomnia or hypersomnia
I87: Insomnia or hypersomnia
I89: Insomnia or hypersomnia

B3 Low energy

FDC: Loss of energy or fatigability or tiredness
RDC: Loss of energy or fatigability or tiredness
DSM: Loss of energy or fatigue
DSR: Loss of energy or fatigue
I87: Loss of energy or fatigability or tirednes
I89: (Loss of energy *and* fatigability

B4 Psychomotor change

FDC: Agitation or retardation
RDC: Agitation or retardation
DSM: Agitation or retardation
DSR: Agitation or retardation
I87: Agitation or retardation
I89: Agitation or retardation

B5 Anhedonia

FDC: Loss of interest or sexual drive
RDC: Loss of interest or pleasure or sexual drive
DSM: Loss of interest or pleasure or sexual drive
DSR: Loss of interest or pleasure
I87: Loss of interest or pleasure or sexual drive
I89: Loss of interest or pleasure

B6 Guilt/worthlessness

FDC: Guilt or self-reproach
RDC: Guilt or self-reproach
DSM: Guilt or self-reproach or worthlessness
DSR: Guilt or worthlessness
I87: Guilt or self-reproach
I89: a) Guilt or self-reproach in I89[a]
b) Loss of confidence and self-esteem[a]

B7 Cognitive impairment

FDC: Impaired thinking or impaired concentration
RDC: Impaired thinking or impaired concentration or indecisiveness
DSM: Impaired thinking or impaired concentration or indecisiveness
DSR: Impaired thinking or impaired concentration or indecisiveness
I87: Impaired thinking or impaired concentration or indecisiveness
I89: Impaired thinking or impaired concentration or indecisiveness

Table 9 (continued)

B8 Suicidal ideation

FDC: Thoughts of death or suicide
RDC: Thoughts of death or suicide or suicidal behaviour
DSM: Thoughts of death or suicide or suicidal behaviour
DSR: Thoughts of death or suicide or suicidal behaviour
I87: Thoughts of death or suicide or suicidal behaviour
I89: Thoughts of death or suicide or suicidal behaviour

[a] I89 splits a) and b) into two different criteria

Table 10. Comparison of the syndrome definitions

Structure of the algorithm	Presence in the diagnostic system					
	FDC	RDC	DSM	DSR	I87	I89
	Mood requirement of criterion A					
Dysphoria required	×					
Dysphoria *or* anhedonia required		×	×	×		×[a]
Dysphoria *and* anhedonia required					×	×[b]
	Number of A/B criteria required					
2 of 7 B criteria						×[a]
3 of 7 B criteria						×[b]
4 of 8 B criteria			×			
5 of 8 B criteria	×	×			×	
5 of 9 A criteria				×		
	Minimal time requirement					
Total episode ≧ 4 weeks	×					
Total episode ≧ 2 weeks		×				×
Each criterion ≧ 2 weeks			×	×	×	

[a] Applies to mild and moderate depressive episode
[b] Applies to severe depressive episode

for severe depression); FDC, RDC and I87 have the highest requirements (5 out of 8), while FDC (4 out of 8) and DSR (5 out of 9) are intermediate.

Time requirements differ in time frame and reference symptoms. The FDC require a minimum of 4 weeks; all other diagnoses define a minimum time frame of 2 weeks (RDC even offers the option of diagnosing a nondefinite major depression in patients depressed for only 1 week). In FDC, RDC and I89 the time criterion applies to the total depressive episode, thus allowing a shorter duration of the B criteria (Table 10). DSM, DSR and I87 are more strict by expanding the time criterion to each symptom. Furthermore, all symptoms have to be present nearly every day during the same 2-week period; in DSR dysphoria and anhedonia even have to be present for most of the day (Table 5).

Comparison of the Exclusion Criteria

All six diagnostic definitions share the exclusion of somatic disease, drug or alcohol as an origin of the depres-

Table 11. Comparison of the exclusion criteria[a]

Exclusion criteria	Presence in the diagnostic system					
	FDC	RDC	DSM	DSR	I87	I89
	Previous psychiatric disorders					
Manic episode					×	×
Nonaffective disorder	×					
	Co-existing schizophrenic symptoms					
Presence *simultaneous* with the depressive syndrome	×[b,c]	×[c]	[d]	[e]		×
Presence *after* the remission of the depressive syndrome			×	×		
Presence *before* development of the depressive syndrome			×	×	×	×

[a] Somatic diseases, drug or alcohol as origin of the depressive syndrome are excluded in all diagnostic systems

[b] Not originally included in the Feighner criteria; later introduced by Feighner in 1981

[c] Schizophrenic symptoms before or after remission of the depressive symptoms do only then exclude from major depression and qualify for schizoaffective depression, if there is a certain amount of overlap of simultaneously existence of both depressive and schizophrenic symptoms

[d] DSM-III defines no schizoaffective disorder; simultaneously existing schizophrenic symptoms classify the patient as MDE with mood incongruent psychotic features

[e] DSM-III-R does include the diagnosis of schizoaffective disorder; in contrast to RDC and FDC, only those schizophrenic symptoms qualify for this diagnosis, which are present in absence of prominent depressive symptoms for at least two weeks

sive syndrome. Differences are seen for pre-existing psychiatric disorders and coinciding schizophrenic symptoms (Table 11). I87 and I89 restrict the diagnosis of major depression to single or unipolar recurrent episodes; manic episodes in the history require the classification as bipolar depressive disorder. RDC, DSM and DSR also offer the diagnostic category of bipolar disorder; nevertheless, the present depressive episode can also be classified as major depression; this is not possible in FDC, I87 or I89; the FDC do not contain a diagnostic category for bipolar depression at all, whereas I87 and I89 exclude bipolar forms from the diagnosis of mild, moderate and severe depression. A history of nonaffective psychiatric disorders requires the diagnosis of secondary depression in the FDC; in the RDC, primary and secondary are only subtypes of major depression, while in all other diagnostic systems, no differentiation is made in primary and secondary forms of depression.

The demarcation lines between major depression and schizophrenia or schizoaffective disorder are not identical in the six competing diagnostic systems. The FDC did not originally exclude schizophrenic symptoms at all (Feighner et al. 1972); in exchanging the traditional hierarchical rule, schizophrenia was excluded in the presence of affective symptoms meeting the criteria of mania or depression. Only in 1981 did Feighner add rules for demarcating schizoaffective disorders (see also Berner et al. 1983); in analogy to the RDC, schizoaffective disorder is to be diagnosed when depressive and defined schizophrenic symptoms occur simultaneously; in this instance I89 gives the diagnosis of schizoaffective disorder or that of schizophrenia with marked affective features, depending on the relation of severity between the depressive and the schizophrenic syndrome.

In extreme contrast to this, the simultaneous existence of schizophrenic symptoms does not exclude major depression in DSM and DSR. Both diagnoses require that schizophrenic symptoms must have been present in the absence of depressive symptoms (i.e. before onset or after remission) for at least 2 weeks; in this case, DSM allocates the diagnosis of schizophrenic disorder and DSR that of schizoaffective or schizophrenic disorder, depending on the duration relation between the depressive and the psychotic syndrome.

I87 is least restrictive in excluding patients from the diagnosis of depression because of co-existing schizophrenic symptoms: only those schizophrenic symptoms are exclusive which occur *before* the onset of the depressive syndrome; as with DSR, the relation of length between the depressive and the psychotic syndrome decides whether the diagnosis of schizophrenia or that of schizoaffective depression is given. If depressive and schizophrenic symptoms are present simultaneously neither the diagnosis of schizophrenia nor that of schizoaffective disorder is made; the patients are still allocated to the diagnosis of depressive episode – even if the depressive syndrome is short in relation to the psychotic syndrome. As already mentioned, I89 allocates the diagnosis of schizoaffective depression or of schizophrenia with depressive symptoms when depressive and schizophrenic symptoms occur simultaneously; if the schizophrenic symptoms precede the onset of the depressive syndrome, schizophrenia is diagnosed.

The descriptive comparison of the diagnostic algorithms allows the following conclusions. The comparison of differences in construction by itself cannot allow a judgement to be made about the adequacy of the competing operational definitions for major depression. Yet some general statements can be made concerning the common features and the differences between these six definitions.

The ICD-10 introduction of a new term referring to the severity of depression disguises the fact that item pool and diagnostic algorithms refer to the same concept, for which RDC, DSM-III and DSM-III-R introduced the now internationally accepted term "major depression". The similarity especially of the item pools being used to define the depressive syndrome is so striking that it could be questioned whether new classificatory developments should take over identical definitions rather than making new mini-changes and creating new terms for old contents. Empirical research has to evaluate whether patient samples generated with RDC, DSM-III-R or ICD-10 will be sufficiently comparable. If this should really be true, depression research would really have a diagnostic instrument which creates the methodological predisposition for reproducing empirical research results; at the same time, this would be in positive con-

trast to the numerous operational definitions of endogenous depression, where differences in latent constructs, item pools and algorithms virtually inhibit the transfer of results from one diagnostic system to the other (Maier and Philipp 1986; Philipp and Maier 1985, 1987; Philipp et al. 1985).

Yet, if sufficient compatability cannot be assumed for the different definitions of major depression, decisions for choosing one of them should be based on empirical evidence of superior validity. Empirical data are also needed in order to evaluate the differential effects of the small differences of item pools and criteria cut-offs and the more pronounced differences in time criteria and exclusion criteria; this aspect is of special importance for further developments of the operational definition of major depression. The following papers in this series address this empirical evaluation.

Questions and Methods of Empirical Evaluation

The following questions will be addressed by the papers to be presented within this series:

1. The impact of differences in operational definition on diagnostic base rates and the amount of overlap between the competing definitions of major depression.
2. Comparison of concurrent validity of the competing definitions for the clinical ICD-9 diagnosis.
3. Evaluation of construct validity of the syndrome defining item pool using factor and cluster analysis.
4. Comparison of predictive validity of the competing definitions for the prospectively assessed 1- to 5-year long-term course.
5. Comparison of external validity of the competing definitions using family loading as validation criterion.
6. Empirical evaluation of the ICD-10 differentiation in mild, moderate and severe depression.

Finally comprehensive conclusions will be drawn to help to create a rank order of comparative validity and to draw the lines of future development of the concept of major depression. At the same time another series of papers will present data on the empirical evaluation of the endogenous subtyping of major depression.

All empirical evaluations to be presented will refer to three studies, which will be presented in detail within the context of the papers to come. Here these studies are only summarized according to patient sampling and rating procedures.

Study 1: 600 psychiatric inpatients with heterogeneous functional psychiatric disorders rated by means of the inpatient version of the Polydiagnostic Interview PODI (Philipp and Maier 1986).
Study 2: 500 outpatients from primary care practice settings with functional complaints rated by means of the outpatient version of the Polydiagnostic Interview PODI (Philipp and Delmo 1988).
Study 3: a cumulative total of about 500 inpatients and outpatients from three prospective follow-up studies, all patients being repeatedly rated over a period of 1–5 years by means of the Polydiagnostic Follow-up Interview PODI-F (Philipp and Frommberger 1985).

Postscript: In May 1990 a new draft of ICD-10 diagnostic criteria for research got available. Significant changes in classification of depression took place. This new draft will be used within international field trials. We will later on publish a comparison of the 1990 draft with those of 1987 and 1989.

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