

Michael Musalek · Oliver Scheibenbogen

## From categorical to dimensional diagnostics

### Deficiency-oriented versus person-centred diagnostics

**Abstract** The problem of inhomogeneous categories and the difficulty of drawing boundaries as well as individual progression of the severity of psychopathologic phenomena necessitate a change of paradigm from categorical to dimensional diagnostics. Not only pathogenetic factors but also disorder maintaining factors such as the stigmatization and the significance of the disorder for the patient must be factored into the diagnostic process to ensure therapy relevancy. In addition to this deficiency-oriented approach holistic person-centred diagnostics focuses on the integration of resources, i.e. the abilities and skills, talents and inclinations of the patient, in order to adequately help a patient to resume/live an autonomous life that is as happy as possible.

**Key words** dimensional diagnostics · categorical diagnostics · person-centred diagnostics · resource-oriented treatment · co-morbidities

The diagnostic and statistical manual of mental disorders (DSM-IV) [7] and International classification of disease, tenth revision (ICD-10) [14] systems used today to determine all diagnoses are primarily arranged according to categories of disorders. The ultimate aim of the diagnostic process is hence to correctly assign a particular clinical symptom complex to a pre-determined category of disorder listed in these manuals. As categories agreed upon by experts, they are neither theoretically nor directly empirically based constructs for explaining natural phenomena. Rather, as the interim end-products of processes

rooted in the history of psychiatry and in psychiatric and social policy, they are the result of agreements reached by commissions of experts [28]. Therefore the categories of disorders listed in the DSM-IV and the ICD-10 so familiar to us today do not, as some people may assume, exist in nature but are man-made. Nature obviously does not recognize our system for classifying diseases and hence does not adhere to the boundaries we have drawn. For this reason our categories of definition produce highly inhomogeneous groups, which in turn overlap with others in a multitude of ways, a phenomenon that has recently come to be termed “co-morbidity” [17].

Take, for example, the high co-morbidity between depression and anxiety disorders. Before the invention of an independent DSM or ICD category for anxiety disorders, they were considered to be rather typical characteristics of depressive disorders; nowadays, however, we are confronted with problems of overlap between two independently classified sets of symptoms [15]. The problems are very similar when it comes to the diagnosis of schizophrenia. Here, too, we find a highly diverse group of patients being lumped together, whereas in fact individual patients require quite different forms of treatment [9, 34]. Not to mention the numerous instances of co-morbidity we find in the diagnosis of symptoms associated with addictions [8, 11, 18, 23, 32].

A substance dependence disorder practically never appears in isolation, but is always associated with other manifestations of disease, most frequently with depression and anxiety disorders but also with personality disorders and with organic or functional psychoses [2, 33]. Often it is difficult, if not impossible, to find out whether a so-called “co-morbid disorder” is a secondary effect of a primary substance dependence disorder or whether it was the starting point for the addiction. In most cases we are concerned with circular processes involving the multiple interaction in a process of pathogenesis of “co-morbid disorders” both with one another and with the

Univ.-Prof. Prim. Dr. M. Musalek, General director (✉)  
Dr. O. Scheibenbogen, Clinical Psychologist and Health Psychologist  
Anton Proksch Institute  
Gräfin Zichy Strasse 6  
1230 Vienna, Austria  
E-Mail: zangerle@api.or.at

addiction disorder. With extremely rare exceptions, cases where a mental disorder develops parallel to an addiction involve, as the term co-morbidity in some ways implies, events occurring more or less independently and coincidentally, at any rate not regularly. It is certainly of paramount importance in clinical practice to precisely record co-morbidities, because these have a major impact on both the course of an addiction process and on its prognosis [19].

A further problem with categorical diagnostics is that the transition point between a “mental problem” or a “psychosocial crisis” and full-blown mental disorder is blurred. In addition the traditional categorical approach to diagnosis does not allow sufficient account to be taken of the pathoplasticity of mental disorders, in other words, changes in the severity of psychopathological phenomena in the course of a disease, in the prelude to mental disorder or during recession. Where does “depression” begin, where does “burn-out” syndrome end? Where in the ICD-10 classification system can a boundary be drawn between a raised tendency to paranoia, a delusional mood, an obsessive idea of persecution, a delusional conviction and real symptoms of insanity, which, in turn, in combination with other symptoms that may likewise represent endpoints along other continua, allows the diagnosis of schizophrenia?

Attempts were made in the late 1970s and early 1980s to address the problem of inhomogeneous categories and the difficulty of drawing boundaries by evolving subcategories or typologies. In the course of just over a decade more than fifty such typologies were developed for the diagnosis of addiction, for example. Attempts were also made to use subgroupings to get to grips with the inhomogeneity problem with respect to schizophrenic psychoses or affective psychoses [1, 3, 6]. The idea was to make the diagnosis categories more therapy-relevant. But here, too, clinicians came up against the same problem as they had encountered with global diagnosis: namely, that nature does not, of course, acknowledge man-made subcategories either. Hence, here too, the problem of overlap already discussed above (the vast majority of patients seemed to be so-called “mixed types”) meant that it was impossible to categorize individual patients in any meaningful, treatment-relevant fashion. Neither did the attempts to use mathematical algorithms to create artificial divisions, as is sometimes still done in scientific cohort studies even today, help in clinical practice. All it did, once again, was to produce a pseudo-precision in diagnosis that still did not allow individual patients to be assigned to a therapy-relevant subgroup of the basic category of illness in question [4, 13, 25, 30].

All these approaches to diagnosis failed because they came up against an inherent problem posed by any kind of categorical diagnostics, namely, that—as Nietzsche impressively brought home to us in his *Fröhliche Wissenschaft* (The Gay Science) [31]—since nature knows

no forms or concepts and hence no genres or categories, it cannot conform with man-made categories of diagnosis. By the end of the 1990s attempts to produce ever new sub-groupings of diseases had been abandoned in favour of trying to overcome the frustrating quest for categories pursued during the 1970s and 1980s by engaging in a paradigmatic shift from categorical to dimensional diagnostics [28]. Unlike categorical diagnostics, dimensional diagnostics does not expend its energy on correctly assigning symptoms of illness into predetermined categories, for it is not primarily disease-oriented, but instead symptom-, process- and pathogenesis-oriented. Dimensional diagnostics, as presented here, takes single phenomena as its starting point, inquiring into their origins and into the pathoplastic significance of the factors conditioning them, in order to find a basis for answering the question of how a malady conditioned by a single psychopathological phenomenon or by a convolution of pathological phenomena can be minimized or made to disappear altogether [27].

The central question of diagnosis is then no longer: What illness does the patient have? But instead: What is this person suffering from and how can he/she be systematically helped to find a way out of a state of suffering that limits his/her potential, so that he/she can return to an autonomous life that is as happy as possible?

In the diagnosis of schizophrenia, for example, this means that the criterion for diagnosis is no longer simply correctly assigning the symptoms to a predetermined category of schizophrenic disorders. Instead, the emphasis is on recording each of the phenomena, such as hallucinations, thought broadcasting, obsessive ideas, delusional ideas, tendency to paranoia, delusional mood, ambivalence, impaired concentration, motor blockages, etc. from which the individual patient is suffering—quite independently of whether a particular significance is accorded to these phenomena in the diagnosis of schizophrenia. In a further step an investigation is made of how these individual phenomena condition one another. In this context the diagnostic process must take into account not only susceptibility or triggering factors, but above all disorder maintaining factors, in other words those factors that only emerge in the course of a disease and play a major role in the continuation of the disorder, such as, for example, the dynamics intrinsic to the disease, secondary illnesses, concomitant disorders, etc. [10, 28].

In this collection of factors conditioning the prolongation of an illness the significance of the disorder (for the patient and for the people around him) occupies a central place, for every mental disorder has a significance that goes beyond the actual nature of the illness itself. Illness and the state of being ill are expressed on the one hand in the form of symptoms, but on the other in the narratives or myths surrounding it [24]. Having a stomach ulcer or contracting hepatitis

is not the same as suffering from chronic gastritis in the context of alcoholism or from alcoholic fatty liver disease. It makes a big difference whether a patient is suffering from heart disease or schizophrenia. In the first case the patient will get a great deal of sympathy; in the second, he or she is likely to encounter at best dismay, but in most cases rejection. Mental disorders carry a high degree of stigma. Therefore patients suffering from mental disorders suffer not only from inferior health but also, as Robert Musil put it so aptly in *Der Mann ohne Eigenschaften* (The Man without Properties), from feelings of inferiority as well [29]. Some patients suffering from a mental disorder even suffer far more from the implications of their illness and the stigma associated with it than from its actual symptoms; at any rate, the meaning of an illness is a fixed component in the complex of factors causing suffering to our patients.

Treatment-relevant dimensional diagnostics must therefore not only be pathogenesis- and process-oriented but also geared towards understanding a disease. Diagnosis must focus not just on symptoms but also on ascertaining the full significance of an illness for the individual and for the people in his environment in order to understand the interactions and secondary reactions that this produces and that, in turn, cause the pathological process to continue [26]. In this way a comprehensive diagnostic basis can be created that is essential, above all for psychotherapeutic measures. Here the diagnostic process is no longer directed at the disorder itself but at the person suffering from the implications and consequences of that disorder. This means above all that a patient's positive potential and strengths must be factored into the diagnostic process in order to provide a basis for treatment plans. This then allows better use to be made of the patient's own resources and of the positive characteristics and skills the patient shows in dealing with his illness and suffering [16].

A thorough dimensional approach to diagnostics must therefore not only be phenomenon-, pathogenesis-, process- and understanding-oriented: it is also essential that it is resource-oriented as well. The point here is not just precisely to identify and understand a patient's functional disabilities, but also to obtain a picture of the whole person with all his potential and limitations, to understand all a patient's functional disabilities and all his resources. In other words, it is no longer the pathological process and all that it implies that are at the centre of all diagnostic procedures, but the affected individual [20–22]. This kind of diagnostic approach is, of course, chiefly resource-oriented, but it does not ignore deficiencies either. A resource-oriented treatment based on resource-oriented diagnostics must follow a dual strategy: first of all, it must harness the patient's identified strengths and allow him to realize his potential; secondly, it must seek to turn individual weaknesses into strengths. Consequently, resource-oriented diagnos-

tics must factor in the limitations and problems of individual patients. In Child and Adolescent Psychiatry resource-oriented diagnostics have already become established in some places [5], but in adult psychiatry their role is either negligible or at best plays a subordinate role. Certainly, resource-oriented approaches to diagnosis have yet to find a place in traditional diagnosis systems.

The starting point of resource-oriented diagnostics is the whole person, for individual resources can be found in all the different domains of a person: the physical, the mental, the social and the spiritual. Of course, these are not really separate domains but simply different aspects and facets of one and the same person viewed from different perspectives.

The aim of the diagnostic process must therefore be to identify and understand an individual's physical, mental, social and spiritual resources and potential for personal growth in order to develop a comprehensive resource-oriented treatment program together with the patient. Nowadays, when one speaks of a person's resources, one usually means financial resources, employment situation and perhaps a more or less stable partnership. As a rule, however, people have far more resources than these. We are endowed with common sense, we have wishes and intentions, and we are capable of making decisions and of communicating and interacting with others. We are also sensitive and empathetic, we have the capacity to experience and we have an imagination, to mention just a few capabilities.

These resources offer opportunities that we may not even be aware of. Of course, the opportunities for personal development are not unlimited, and not everyone has the same potential. Our life history, our physical condition, the social structures in which we live all constrain our potential for personal growth. Becoming acquainted with the life circumstances of the individual patient is an essential precondition for a systematic treatment plan, otherwise treatment will inevitably demand either too much or too little of the patient or at least mean that potential scope for action remains unexploited. We are all aware of the constraints and the limitations imposed by our own circumstances and our own natures. In his important work *Sein und Zeit* (Being and Time) Martin Heidegger [12] described us aptly as a "thrown projection" (geworfener Entwurf). We are thrown into a world. This state of "being thrown" is evident in the conditions of our existence, in the fact that both our abilities and our deficiencies are limited. While we can influence or change some of these conditions, others are unalterable "givens," and the best thing we can do is to use them as supports. But we are certainly capable of "re-designing" ourselves within the given parameters of our lives.

For those concerned with diagnosing and treating mental illness, a central concern must be not only to record deficiencies, but also to discover and make the

patient aware of his abilities and to bring to light and mobilize a patient's potential to shape his own life in order to lay the foundations for an autonomous life that is as happy as possible. Helping patients to shape their lives should be understood not simply as a new form of psycho-education in which one person is expected to follow another's instructions for how to live properly. In other words, it is not a question of a therapist issuing guidelines. Resource-oriented treatment aimed at helping a patient to reshape his life is not a missionary task. The conditions for an autonomous and happy life can only be achieved in a dialogue between the patient and the therapist. Only once all the deficiencies and resources of a patient plagued by mental illness have been identified and understood is there a chance of reaching the real goal of therapy, namely an autonomous life that is as happy as possible.

Since the fundamental preconditions are not evenly distributed among all patients—one person's strength is another's weakness—the job and indeed the skill of a therapist lies in discovering, tracing, and sounding out all the abilities and inabilities of the individual, in order then to be able to devise together with the patient a resource-oriented treatment plan to be carried out in a therapeutic atmosphere of human warmth based on unreserved respect for the patient.

■ **Conflict of interest statement** The authors declare that there are no conflicts of interest.

## References

- Andreasen NC (2007) DSM and the death of phenomenology in America: an example of unintended consequences. *Schizophr Bull* 33(1):108–112
- Angst J, Cassano G (2006) The mood spectrum: improving the diagnosis of bipolar disorder. *Bipolar Disord* 2(Suppl. 4):4–12
- Angst J, Gamma A, Endrass J, Rössler W, Ajdacic-Gross V, Eich D, Herrel R, Merikangas K (2005) Is the association of alcohol use disorders with major depressive disorder a consequence of undiagnosed bipolar-II disorder? *Eur Arch Psychiatry Neurol Sci* 256:452–457
- Bates ME (2000) Integrating person-centered and variable-centered approaches in the study of developmental courses and transitions in alcohol use: introduction to the special section. *Alcohol Clin Exp Res* 24(6):878–888
- Coenen M, Indlekofer W, Kufner H (2006) PREDI–Psychosoziale Ressourcen-orientierte Diagnostik. Dusteri, München
- Cohen AS, Junginger J (2006) A three-dimensional typology of delusions. *Schizophr Res* 83:293–295
- Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (1994) American Psychiatric Association
- Eriksson A, Tengström A, Hodgins S (2007) Typologies of Alcohol use disorders among men with schizophrenic disorders. *Addict Behav* 32:1146–1163
- Fabisch K, Fabisch H, Langs G, Mascheiner H, Fitz W, Hönlgl D (2001) Basic symptoms and their contribution to the differential typology of acute schizophrenic and schizoaffective disorders. *Psychopathology* 34:15–22
- Gaebel W (2004) Course typologies, treatment principles, and research concepts. *Pharmacopsychiatry* 37(2):90–97
- Hasin DS, Grant BF (2002) Major depression in 6050 former drinkers: association with past alcohol dependence. *Arch Gen Psychiatry* 59:794–800
- Heidegger M (1927/1977) *Sein und Zeit*. Gesamtausgabe, Bd. II. Frankfurt/Main
- Horn JL (2000) Comments on integrating person-centered and variable-centered research on problems associated with the use of alcohol. *Alcohol Clin Exp Res* 24(6):924–930
- Internationale Klassifikation psychischer Störungen, ICD-10 (1993). Hans Huber, Bern
- Kasper S (2001) Depression and anxiety—separate or continuum. *World J Biol Psychiatry* 2:162–163
- Kufner H, Vogt M (1996) Die Entwicklung des psychosozialen ressourcen-orientierten Diagnosesystems (PREDI). In: Nickolai G, Kawamura Krell W & Reindl R (Hrsg) *Straffällig. Lebenslagen und Lebenshilfen*. Lambertus Freiburg, pp 155–169
- Lecrubier Y (2008) Refinement of diagnosis and disease classification in psychiatry. *Eur Arch Psychiatry Neurol Sci* 258(suppl 1):6–11
- Maser JD, Cloninger CR (1990) Comorbidity of mood and anxiety disorders. American Psychiatric Press, Washington, DC
- McLellan AT, Luborsky L, Woody GE et al (1983) Co-morbidity complicates treatment, often leading to increased hospitalisation and treatment cost, decreased compliance, and poor response. *Arch Gen Psychiatry* 40:620–625
- Mezzich JE, Salloum IM (2007) On person-centered integrative diagnosis. *Die Psychiatrie* 4:262–265
- Mezzich JE, Salloum IM (2007) Towards innovative international classification and diagnostic system: ICD-11 and person-centered integrative diagnosis. *Acta Psychiatr Scand* 116:1–5
- Mezzich JE, Salloum IM (2008) Clinical complexity and person-centered integrative diagnosis. *World Psychiatry* 7:1–2
- Moggi F (2002) Doppeldiagnosen. Komorbidität psychischer Störungen und Sucht. Hans Huber, Bern
- Musalek M (2003) Meaning and causes of delusions. In: Fulford B, Sadler J, Stanghellini G, Morris K (eds) *Nature and narrative. International perspectives in philosophy and psychiatry*. Oxford University Press, NY
- Musalek M (2004) Die Diagnose Sucht. Entwicklung des Suchtbegriffes, Diagnose, Kriterien. In: R.Brosch. R.Mader (Hrsg.) *Sucht-Problematik und Behandlung in Österreich*. LexisNexis, pp 3–15
- Musalek M (2005) Die unterschiedliche Herkunft von Schizophrenien und ihre philosophischen Grundlagen. *Fortschritte Neurol Psychiat* 73(S1):16–24
- Musalek M (2005b) Unser therapeutisches Handeln im Spannungsfeld zwischen Warum und Wozu. Krankheitskonzepte und ihre Auswirkungen auf die tägliche Praxis. *Wiener Zeitschrift für Suchtforschung* 28/3 & 4:5–22
- Musalek M (2007) Alkoholkrankheit–State of the Art. *Österreichische Ärztezeitung* 9:39–46
- Musil R (1978) *Der Mann ohne Eigenschaften*. Rowohlt, Lübeck
- Muthén B, Muthén LK (2000) Integrating person-centered and variable-centered analyses: growth mixture modeling with latent trajectory classes. *Alcohol Clin Exp Res* 24(6):882–891
- Nietzsche F (1882/1988) *Die fröhliche Wissenschaft*. In: Colli G, Montanari M (eds) *Friedrich Nietzsche Sämtliche Werke. Kritische Studienausgabe*. De Gruyter
- Regier DA, Farmer ME, Rae DS et al (1990) Comorbidity of mental disorders with alcohol and other drug abuse. Results from the epidemiologic catchment area (ECA) Study. *JAMA* 264:2511–2518
- Scheibenbogen O, Feselmayer S (2008) Über die Bedeutung der Epidemiologie komorbider Störungen in der Suchtbehandlung. *Spektrum Psychiatrie* 1:48–50
- Sham P, Castle DJ, Wessely S, Farmer AE, Murray RM (1995) Further exploration of latent class typology of schizophrenia. *Schizophr Res* 20:105–115