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# The Operationalized Psychodynamic Diagnostics System: Clinical Relevance, Reliability and Validity

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## Key Words

Operationalized psychodynamic diagnostics · Psychoanalytic constructs · Diagnostic reliability

## Abstract

In this paper, we present a multi-axial system for psychodynamic diagnosis, which has attained wide usage in Germany in the last 10 years. First we will discuss the 4 operationalized psychodynamic diagnostics (OPD) axes: illness experience and treatment assumptions, relationships, mental conflicts, and structure, then clinical applications will be outlined. Focus psychodynamic formulations can be employed both with inpatients and with outpatients. Studies show good reliability in a research context and acceptable reliability for clinical purposes. Validity will be separately summarized as content, criterion, and construct validity. Validity studies indicate good validity for the individual axes. Numerous studies on the OPD indicate areas of possible improvement, for example for clinical purposes the OPD should be more practically formulated.

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## Operationalization of Psychoanalytic Constructs

Classification schemes have been employed internationally to diagnose mental illness since 1980. The Diagnostic and Statistical Manuals (DSM) of the American Psychiatric Association and the International Classification of Mental and Behavioral Disorders (ICD) of the World Health Organization have attained wide usage. Thus, communication among diagnosticians worldwide has been simplified because areas of agreement and difference have been transparent. Psychodynamic psychotherapists who see conflict and relationship problems as causative for patients' symptoms regret, however, the lack of relevance of the phenomenological and symptom-centered diagnoses of ICD and DSM. These therapists, such as the Group for the Advancement of Psychiatry in its statement in the *American Journal of Psychiatry*, call for a multidimensional perspective of human problems in the classification of mental disorders. In addition to the assessment of symptoms, a psychodynamic formulation is needed to explain the key developments of the patient on the basis of intrapsychic and interpersonal mechanisms.

A further motive for the development of an additional operationalized psychodynamic diagnosis system emerged from the dissatisfaction of psychiatrists with the divergence of psychoanalytic theory. Freud began to understand personality with the help of drive theory, ego, id, and superego and thus created the basis of psychoanalytic classification. In case conceptualization, drive theo-

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ry, ego psychology and object relations theory are still used to differentiate personality. In the initial interview and in history taking, psychotherapists use a multitude of (meta)-psychological categories to describe mental functions and their disorders. Many of these metapsychological theories were formulated in such an abstract way that they are more or less detached from clinical phenomena and cannot be applied. This development doubtlessly leads to theory heterogeneity and to confusion of concepts in psychoanalysis.

There is already experience of psychotherapy researchers in the operationalization of relevant psychoanalytic constructs. Bellak and Hurvich [1] already attempted to operationalize ego function and developed rating scales to enable judgment of the ego function as observed in clinical interviews. A series of research instruments assume that behavior patterns are not only represented with others but above all in the therapeutic relationship and thus the empirical assessment of transference relationships is possible [2–4]. In psychotherapy research, operationalization of conflict [5, 6] and of defense mechanisms [7] has also been attempted.

Weinryb and Rössel developed a more comprehensive approach to achieve a psychodynamic profile based on operationalized psychoanalytic constructs [8]. The 18 subscales of the Karolinska Psychodynamic Profile were formulated with the goal of comprehensively assessing mental function and personality traits as they are reflected in a patient's perception of himself and his relationships with others. The subscales are formulated on different levels of abstraction, and the interpretation required for each subscale also varies. It is clear that psychodynamic operationalization cannot remain at the behavioral level, but interpretation contributes to the judgment, since mental/intra-psychic conflict cannot be directly observed.

### **The Operationalized Psychodynamic Diagnostics System**

The Operationalized Psychodynamic Diagnostics (OPD) system is intended as an empirical and theory-independent instrument which promotes communication within psychoanalysis and with related disciplines. An important aspect, therefore, was the agreement in the OPD group regarding the extent to which indirect conclusion, for example unconscious components, are permitted in the clinical evaluation of behavior patterns. A working group: Operationalized Psychodynamic Diagnosis, consisting of psychoanalysts, specialists in psychosomatic

medicine, and psychiatrists, was founded in 1990 in Germany. The goal was to broaden the ICD-10 classification, which is oriented to symptoms and descriptions, to include fundamental psychodynamic dimensions. This working party developed a diagnostic inventory as well as a handbook [9] for experienced therapists for training and clinical purposes. The OPD system is based on 4 psychodynamically relevant diagnostic axes with appropriate categories to complement ICD classification:

Axis I: Experience of illness and prerequisites for treatment

Axis II: Interpersonal relations

Axis III: Conflicts

Axis IV: Structure

Axis V: Syndromal, according to chapter V (F) of ICD-10

During an initial 1- to 2-hour patient examination, the clinician (or external observer) evaluates the patient's psychodynamics and fills this in on the OPD evaluation sheet. There are interview guidelines to ensure the relevant information is obtained. These are flexible enough for the interview to be conducted as an open psychodynamic interview.

### **Brief Discussion of the Axes**

#### *Axis I: Experience of Illness and Prerequisites for Treatment*

Items relating to this axis concern the patient's motivation and the indications for psychodynamic psychotherapy. Items are judged on a scale – absent (0), low (1), medium (2), high (3). There is also a category unassessable. The individual diagnostic dimensions are filled into a glossary. Anchor examples are used with the intention to improve diagnostic reliability.

- 1 Severity of somatic illness
- 2 Severity of mental illness
- 3 Patient's subjective suffering
- 4 Impairment of self-experience
- 5 Secondary benefit illness
- 6 Extent of physical impairment/disability
- 7 Comprehending and accepting psychodynamic and psychosomatic associations
- 8 Comprehending and accepting psychodynamic somatopsychic associations
- 9 Evaluation of appropriate treatment (psychotherapy)
- 10 Evaluation of appropriate treatment (medical treatment)
- 11 Motivation for psychotherapy

- 12 Motivation for physical treatment
- 13 Compliance
- 14 Presentation of symptoms
- 15 – somatic symptoms to the fore
- 16 – mental symptoms to the fore
- 17 Psychosocial integration
- 18 Personal resources
- 19 Social support
- 20 Appropriateness of subjective impairment related to the severity of the illness.

This axis illustrates the experience that illness course is not only determined by syndrome and symptoms but by the subjective and social context of the affected person. Social support and personal understanding of the illness have a great influence on the course, especially with regard to the psychotherapeutic treatment options.

#### *Axis II: Interpersonal Relations*

Mental disorders are ‘relationship disorders’, thus traditional interpersonal behavior is central for the genesis and maintenance of mental disorders. Representation of dysfunctional or maladaptive behavior has therefore become the focus of psychodynamic and psychotherapeutic research in recent years [3, 4, 10]. Lifelong ‘accumulation’ of relationship experience in the form of cognitive affective schemata [11, 12] is therefore the foundation for what in psychoanalysis is conceptualized as transference and countertransference.

The basic structure of the OPD relationship axis depicts the circular or the transactional character of human interaction (interchange of subjective experience and response to the environment). A framework was developed which encapsulates subjective experience concerning self and others on the initial level. On a second level, it is possible to represent the experience of this other person (significant other, interviewer): how is the patient experienced by his objects or the interviewer and which impulses does he generate in them? The construction of the OPD instrument is achieved from the following two perspectives: how does the patient experience himself in relationships? The interviewer judges behavior patterns as experienced by the patient vis-à-vis others. How does the patient experience the behavior of others?

The therapist also evaluates transference and countertransference from these two perspectives: how does the therapist experience the initiation of the relationship through the patient? How does the therapist experience himself in the relationship to the patient?

Items of the OPD relationship axis help to define the variety of behaviors seen in relationships.

The categories come from the tradition of the interpersonal circle model, and depict relationships regarding affection and control [10, 13–15].

Diagnostic integration of various experience perspectives enables the description of habitual behavior patterns, although emphasis is on dysfunctional patterns, as is commonly the focus in psychotherapies.

#### *Axis III: Conflicts*

OPD distinguishes seven mental conflicts and has a category for limited conflict perception:

- 1 Dependence vs. autonomy
- 2 Submission vs. control
- 3 Desire for care vs. autarchy
- 4 Conflicts of self-value
- 5 Guilt conflicts
- 6 Oedipal sexual conflicts
- 7 Identity conflicts
- 8 Limited perception of conflicts and feelings

These seven basic conflicts and the last category (e.g. with somatizing patients) are judged on the basis of ideal-type descriptions according to presence (dimensional evaluation from ‘not present’ to ‘present and not significant’ to ‘present and significant’ to ‘present and very significant’). Furthermore, for each patient the two main areas of conflict (category value) is given. Description of the basic conflicts and their method of processing occurs in the OPD system in connection with central life areas such as relationship to partner, family of origin, profession, ownership, behavior in groups and illness experience. Not only lasting conflicts but also other major conflict can arise in response to acute life-changing stressors. If such stressors cause the conflict, there is an appropriate category and long-lasting conflicts should not be rated.

Conflict can be judged in history-taking on the basis of perceived behavior and experience ways (scene, transference, countertransference) and manifest themselves on subject and object level (inner mental) and in interaction with others. Conflicts are often connected to prominent affect (e.g. anger in narcissistic disorders). There is a glossary for the conflicts in various forms (active or passive) in different life areas as well as a checklist.

The OPD conflict definitions are illustrated on the basis of the passive modality of desire for care vs. autarchy:

In the passive mode, the patient is strongly bound to other people and expresses wishes concerning security and care. Separation and rejection are responded to with depressive mood and/or fear. The patient is very dependent and needy. In the countertransference, the therapist experiences worry, blackmail and helplessness. Intimate

relationships are organized that separation appears impossible (e.g. financial linkage) and can be characterized by claustrophobic closeness. Grasping tendencies are reactively defended by frequently changing relationships. Need to be looked after means that the patient remains long and excessively loyally in the family of origin. In professional life, the patient seeks accomplices and helpers, professional demands are understood as withdrawal of support and responded to with depression. In social situations, the patient seeks caring relationships, and is regarded as demanding and tiring by others due to his wishes and demands. In times of illness, the patient shows a passive, grasping expectant approach to the doctor and is difficult to rehabilitate.

#### *Axis IV: Structure*

OPD differentiates four levels of structure (well integrated, moderately integrated, low, disintegrated). Good integration means that an autonomous self possesses a mental internal space in which mental conflicts can be carried out. Moderate integration implies lower availability of regulating function and a weaker differentiation of mental substructures. With low integration, the mental inner space and substructures are less developed, thus conflicts are barely mentally worked out, but are mainly worked out in the interpersonal sphere. Disintegration is characterized by fragmentation and psychotic restitution of structure.

Operationalization of structure is based on 6 structural categories:

- 1 Self-perception
- 2 Self-regulation
- 3 Defense
- 4 Object perception
- 5 Communication
- 6 Bonding

For each structural category, the manual allows determination of the level of integration. Finally the structural profile as well as the total structural level can be determined. Additionally there is a checklist for each item and every subcategory for the rating [16].

#### **Relations between the Axes**

In a study on 81 patients [17] the relations between axes II–IV were investigated. The following correlations between the overall score of the level of structure and a given conflict could be shown: oedipal conflict,  $r = 0.45$  ( $p < 0.01$ ); submission vs. control,  $r = 0.37$  ( $p < 0.01$ ); de-

sire for care vs. autarchy,  $r = 0.24$  ( $p < 0.05$ ); guilt conflict,  $r = 0.19$  (n.s.); self- vs. object value,  $r = -0.23$  ( $p < 0.05$ ); dependence vs. autonomy,  $r = -0.61$  ( $p < 0.01$ ). This means that the dependence vs. autonomy conflict is very frequently associated with a lower level of structure. With regard to the correlations between the axes relationship and structure, two groups with low and high levels of structure were tested according to the clustering of the relationship items within different octants of the interpersonal circumplex model. The results show significant correlations between the lower level of integration and modes of devaluation and isolation, whereas in the higher-level group modes of protection and clinging were found significantly more frequent. The relations between the axes conflict and relation are complex and specific for each conflict.

#### **Status or Process Diagnosis: Focus Possibilities**

OPD diagnostics can be used as status diagnostics in personality or psychotherapy research. The individual OPD axes are judged concerning the dysfunctional pattern of the relationship (axis I), the life-determining conflicts (axis II), and the integration of the personality structure (axis IV). These psychodynamic dimensions complete the ICD-10 syndromal description (axis V). Axis I is especially suitable for patient populations concerning their subjective experience and their suitability for psychotherapy. Status diagnostics on the individual OPD axes or with the full OPD system are especially useful where a standardized psychodynamic point of view from individual patients or samples and, for example, with personality diagnostics should be coupled with other approaches.

Apart from research-oriented status diagnostics, the most important goal of the OPD system is in the clinical therapeutic area. The OPD findings can supply the clinician with information to aid in deciding on differential therapy indication and treatment planning [18]. Axis I can help clarify the patient's basic assumptions regarding eventual psychotherapy. Judgments of structure level (axis IV) are decisive for the choice of suitable psychotherapy methods above all regarding the alternative between more supportive structural or meaning-uncovering processes, as well as in particular circumstances for deciding between in- or outpatient psychotherapy. OPD findings can also indicate the topics to be worked on in psychotherapy: dysfunctional relationship patterns (axis II) in the sense of pathogenic beliefs require special ther-

apeutic attention and interventions so that therapy does not fail due to complications in the therapeutic relationship. By stressing the most prominent conflicts (axis III) and/or the most prominent structural deficiencies which illuminate vulnerability and available resources to be taken into account, therapy goals can be identified and therapeutic planning can be derived on the basis of the assessment.

The psychotherapeutic consequences of OPD diagnostics are especially concrete in the logic of focus formulation and the formulation of therapy goals related to this. In clinical research projects such as the Practice Study of Analytic Longtime Therapy [19–22], this process was used and evaluated in an outpatient setting. Determination of a dynamic relationship focus in the therapist group also allows team-centered behavior vis-à-vis the patient on the ward [23, 24].

On the basis of individual OPD diagnostics, therapeutic foci can be named. The causative characteristics which maintain the disorder and therefore play a decisive role in the psychodynamics of the clinical picture are the foci of therapy. It seems that 5 foci are enough [19, 20, 22, 25] to capture the different aspects of a disorder; it appears advantageous to choose one relationship focus and at least one conflict (the most prominent conflict assessed in axis III) and one structure focus (the most prominent structural deficiency assessed in axis IV). In the research projects, independent observers interviewed the patients at regular intervals to assess their development concerning the foci; in the practice projects, the therapists chose both foci and arranged treatment. In contrast to traditional psychoanalysis, which retrospectively describes often undesired developments of the patient (and emphasizes that these should be allowed to happen without therapeutic intervention), the OPD group employs the logic that the therapist and the patient determine together at the beginning of treatment the important psychodynamic foci for the particular problem and choose the suitable therapeutic approaches to restructure these foci.

The Heidelberg Structural Change Scale [26] was developed to differentiate therapeutic change in OPD findings above and beyond the simple dichotomy of present/not present. This scale is related to the Assimilation of Problematic Experiences Scales [27] and allows through its fine gradations a quantitative weighting of therapeutic change in each individual focus [28, 29]. Furthermore, a structure [16] and a conflict checklist [30] were developed which simplify the judgment of these two dimensions for the clinician. Use of these instruments especially allows a differentiated description of the therapeutic

process and success from a specific psychoanalytic point of view [31].

This logic is especially developed for the determination of the focus and therapy in axis IV, but there are also concrete recommendations for therapeutic work [31, 32], thus in a broader sense it is a therapy manual. Some research has already been done on the clinical implementation of an OPD axis II-based treatment approach in inpatient psychotherapy [33–35]. One study [33] aimed to explore the effects of a systematic focus conference and relationship-focused intervention in comparison to the ‘treatment as usual’. The modified relationship-focused treatment produces better improvements not in the symptomatic, but in the interpersonally oriented outcome measures (Inventory of Interpersonal Problems, IIP; GARF). Moreover, significant changes were achieved in shorter treatment duration.

### Reliability Measures (Axis I–IV)

In developing OPD, we tried to operationalize central concepts of psychodynamic diagnostics using empirical and simple criteria to enable objective and reliable judgment of patients, but not at the expense of essential content. The outcome was a diagnostic system which requires complex clinical judgments but which can be learned through intensive training. As experience shows, apart from training the quality of the data assessed as well as the clinical training and professional experience play an important role in the quality of the evaluations.

In a study [36] with 269 patients from 6 psychosomatic clinics, the reliability of OPD axes I–IV was investigated. Since rater conditions were different from clinic to clinic, it was also possible to determine which conditions improve or do not improve reliability. The measure used was weighted kappa [37]. For axes I, III and IV in the fixing of the weighting, equal distance was assumed between each of the 4 stages of the rating scales; in this way, a kappa value was obtained which can be similarly interpreted to a Pearson correlation coefficient [38]. A weighted kappa was also reckoned for axis II. In this case, this procedure corresponds to that described in the Structural Analysis of Social Behavior (SASB) [10]. The standard deviation weights are according to a procedure of circumplex models as described by Grawe-Gerber and Benjamin [39].

Interviews that were conducted for diagnostic purposes and video-recorded were independently rated and showed good reliability values. For axis II, these conditions were obtained for 2 of 6 clinics; kappa values were

**Table 1.** Empirical studies on reliability and validity

OPD Axes	Criterion validity	Concurrent/ concordant validity	Predictive validity	Construct validity	Clinical validity	Reliability
Axis I: Experience of illness and prerequisites for treatment	Franz et al., 2000 [47] Schneider et al., 1998 [46] Schneider et al., 2002 [18]		Franz et al., 2000 [47]	Franz et al., 2000 [47] von Wietersheim, 2000 [48]	Schneider et al., 2002 [18]	Cierpka et al., 2001 [36]
Axis II: Inter-personal relations	Schneider et al., 2002 [18]	Leising et al., 2000 [51]	Stasch and Cierpka, 2000 [54]	Grande et al., 1998 [17] Stasch et al., 2004 [50]	Grande et al., 2001 [29] Grande et al., 2003 [25] Grande et al., 2004 [20] Grünberger et al., 2001 [34] Rudolf et al., 2002 [22] Schneider et al., 2002 [18] Stasch et al., 2005 [33] Stasch, 2003 [23] Stasch, 2004a [24] Stasch, 2004b [35] Wilmers et al., 2005 [31]	Cierpka et al., 2001 [36] Rudolf et al., 1996 [61] Stasch et al., 2002 [40]
Axis III: Conflicts	Schneider et al., 2002 [18]	Grande et al., 2002 [63] Leising et al., 2000 [51] Müller, 1999 [59] Rudolf et al., 1996 [61] Schneider et al., 2002 [18] Zlatanovic, 2000 [60]	Strauss et al., 1997 [65] Rudolf et al., 1996 [61]	Grande et al., 1998 [17] Grande et al., 1998 [71]	Grande et al., 2001 [29] Grande et al., 2003 [25] Grande et al., 2004 [20] Rudolf et al., 2002 [22] Rudolf et al., 2004 [70] Schneider et al., 2002 [18] Wilmers et al., 2005 [31]	Cierpka et al., 2001 [36] Rudolf et al., 1996 [61]
Axis IV: Structure	Schneider et al., 2002 [18]	Grande et al., 2002 [63] Grütering and Schauenburg [in press] Nitzgen and Brünger, 2000 [66] Reymann et al., 2000 [67] Rudolf et al., 1996 [61] Schauenburg, 2000 [68]	Rudolf et al., 1996 [61]	Grande et al., 2000 [28] Grande et al., 1998 [17]	Grande et al., 2001 [29] Grande et al., 2003 [25] Grande et al., 2004 [20] Rudolf et al., 2002 [22] Rudolf et al., 2004 [70] Rudolf, 2004 [32] Schneider et al., 2002 [18] Wilmers et al., 2005 [31]	Cierpka et al., 2001 [36] Rudolf et al., 1996 [61]

from 0.62 to 0.56 [40]. The reliability of axis III was examined in a single clinic under these conditions. A mean value of 0.61 was achieved for all 9 conflicts of this axis; the range was 0.48–0.71. The reliability values for axis IV was the best. In 2 clinics for all 6 structure dimensions mean reliability, values of 0.71 (range 0.62–0.78) and 0.70 (range 0.60–0.81), respectively, were achieved. To date there have been no investigations of axis I based on recorded diagnostic interviews.

According to Fleiss [41] and Chicchetti [42], kappa values between 0.40 and 0.59 can be judged as fair and values between 0.60 and 0.74 as good. Higher values are deemed excellent. This corresponds approximately to the evaluations of Landis and Koch [43], although the latter set the value for excellent somewhat higher at 0.80. Thus, the reliability values for axis II and axis III are fair or good, for axis IV good or excellent.

In 2 of the 6 clinics, the interviews were conducted under the conditions of clinical routine. This means the interviews were conducted rather pragmatically with limited time resources. Ratings were performed by the interviewer and a second rater who was present in the interview.

In these 2 clinics, mean reliability values for all 4 axes between 0.30 and 0.50 were obtained. These values correspond approximately to the results of an earlier OPD practicability study by Michels et al. [44], which was also conducted under the conditions of clinical routine.

In another clinic, the ratings took place likewise on the basis of videotaped interviews; however, the raters were clinically inexperienced students. Here the mean values for axis II were 0.42, for the conflict axis 0.33 and for the structure axis 0.55. Since these students had undergone the standard training, it can be assumed that clinical inexperience is disadvantageous for the OPD rating. According to these studies at least 2–3 years clinical experience are necessary for an adequately reliable use of OPD.

In summary, the reliability for axis II and axis III are satisfactory and for axis IV good, when the judgment is based on interviews conducted under research conditions. Concerning the reliability in clinical routine, it should be noted that ICD-10 is also only moderately reliable in clinical day-to-day use [44].

## Validity

### *Axis I*

#### Criterion Validity

To assess criterion validity of the axes, only partial test methods with a related question are available which can serve as outside criteria. The 'Fragebogen zur Psychotherapiemotivation' [45] shows at least in part a content that is highly related to items or characteristics of axis I. There are good indications for the clinical validity of axis I from the results of different clinical disorders, treatment settings and age groups [46]. Axis I discriminates these groups according to the previously formulated expectations. Older patients or those from psychosomatic consultation-liaison service have less insight into psychodynamic and psychosomatic associations and less motivation for psychotherapy and higher motivation for physical treatments. Franz et al. [47] were able to determine that the psychosomatic and physical limitations as well as the difficulties in communication, as assessed by the OPD, are found in the SCL-90 R.

#### Predictive Validity

To investigate the predictive validity, psychotherapy inpatients were examined before and after treatment, and parallel to this SCR-90 R and IIP were determined. The best predictor of therapy success was the characteristic mental symptom presentation of axis I.

#### Construct Validity

Factor analyses were performed to test the construct validity of axis I [47]. A three-factor model with the components insight, resources and body-related items explained 54% of the variance. Another factor analysis [48] yielded five factors (break off criterion eigenvalue <1) which explained 68% of the variance. Factor I (somatic experience and illness processing) comprises severity of the somatic findings, extent of physical disability as well as the physical symptom expression and a rather physically oriented treatment motivation. Factor II (mental experience and illness processing) contains limitation through physical symptoms and self experience as well as motivation for psychotherapy. Factor III (capacity for insight) represents the insight capability of the patient for psychodynamic, psychosomatic and somatopsychic associations. The fourth factor (resources and support) comprises the items for psychosocial integration and support. The last factor (compliance) consists of compliance and secondary illness gain (negatively correlated). This factor analysis seems very plau-

sible and confirms the constructs on which the axes are based.

In summary, these results illustrate the high clinical relevance of axis I. They allow statements about capacity and readiness of the patient to engage in psychotherapeutic psychosomatic intervention. On this basis, specific interventions can be undertaken as required which serve to prepare the patient for psychotherapy in a narrower sense.

### *Axis II*

#### Concurrent Validity

The diagnostic window of the OPD relationship axis is related to dysfunctions in interpersonal areas. The IIP [49] and the SASB [10] are recognized as valid methods for this criterion area and were therefore introduced for the purposes of concurrent validity (in the sense of an internal criterion-related validity) [50]. The resultant validity coefficients are acceptable with a mean correlation of 0.21 for a comparison of a self- vs. observer-rated method. In another study [51], the question of how well the OPD relationship diagnosis and the independent results of the SASB are in accordance with the relationship episodes as represented in the OPD interviews was addressed. It was shown that in the OPD relationship diagnosis there was a higher than chance concordance with the SASB rating of the individual episodes. Furthermore, it can be deduced that the judgment of the experience perspective of the patient (perspective A) in OPD axis II is oriented to the way of behavior most commonly named by the patient.

#### Predictive Validity

For an interpersonal understanding of psychopathology, it is relevant of what quality relationship fantasies and treatment readiness are in the current interpersonal relationships of the patient. The wishes the patient brings to the relationship are notably less flexibly described than the reaction of the interaction partner [52]. Cierpka et al. [53] proved that the rigidity of the interpersonal wishes is positively associated with the degree of psychopathology. Assuming the circular variance of the behavior cluster pictured by the OPD circumplex model, 100 psychotherapy inpatients were examined regarding change in interpersonal flexibility [54]. Individual diagnostic subgroups were separately compared before and after examination and the correlations of interpersonal outcome were calculated. It was shown that for affectively disturbed persons ( $n = 28$ ) and patients with adjustment disorders ( $n = 13$ ) the increase in interpersonal flexibility is positively associated with symptomatic improvement.

For the subgroup of depressive patients, the Pearson correlation for a one-tailed  $p$  was 0.02 between symptomatic improvement (measured by the Global Severity Index GSI of the SCL-90 R) and change in interpersonal variability 0.39. The group with adjustment disorder had  $r = 0.57$  and  $p$  (one tailed) = 0.02; for those with anxiety disorders ( $n = 12$ ) there was, however, an opposite trend. In this group, the symptomatic improvement correlated negatively with an increase in variability ( $r = 0.42$ , one-tailed  $p = 0.08$ ). This means that patients with anxiety disorders benefit from increasing rigidity in interpersonal self-experience; a finding that can be explained through increasing self-expression and definition from the wishes of others. These results show that the OPD relationship diagnostics and the emerging measures thereof are capable of discriminating between different diagnostic groups concerning symptomatic outcomes.

#### Construct Validity

The OPD relationship diagnostic is based on the so-called circumplex model of interpersonal behavior [13, 15], which has a long tradition in personality, social and clinical psychology and has been accordingly validated. As various authors have shown [55, 56], the circumplex model is a good predictive model and represents a nomological network which can be used for construct validation. The construct validation was assumed on the basis of the German version of the IIP, the circumplex structure of which has been empirically proven [50]. The results relate to the sample described under Concordant Validity. It was shown that the majority of the OPD relationship axis clusters conform to the construct, i.e. are circular and possess specific interpersonal content. In a criterion-specific comparison between the relationship axis and IIP, some content differences were shown regarding some behavior and experience clusters.

#### Axis III

##### Concordant Validity

For the validation through other methods of the concordant validity of the unconscious conflicts described in the OPD, there was a basic problem: there are no other instruments which assess unconscious conflict in a generally approved way [57]. The bonding styles assessed in adults can be compared with individual conflicts, in particular with conflict I autonomy vs. dependence and conflict III care vs. autarchy. Both conflicts deal with the basic conflict topic of attachment; however, with different manifestations. According to the Attachment Prototype Rating [58] three main categories of secure attachment,

ambivalent attachment (increased dependence, impulsive-unstable and increased neediness) and avoidant attachment (anxious-avoidant, rational-controlled and increased striving for autonomy) can be distinguished. Fifty-five women with personality disorders were examined according to the OPD and the Attachment Prototype Rating [59]. The rater concordances for the autonomy dependence conflict as well as for the care vs. autarchy conflict ( $\kappa = 0.56$ ) could be judged as good. Since this was a sample of very sick patients, there were, as expected, no securely attached patients, 22% were ambivalent, 31% avoidant and 47% showed a mixed attachment pattern. The more ambivalent the attachment-style, the more prominent was the conflict care vs. autarchy; the more avoidant the attachment-style, the more prominent was the conflict autonomy vs. dependence and the less was the conflict care vs. autarchy. In the global rating of the security of the attachment, it was clear that the more secure the attachment was judged to be, the more the conflict care vs. autarchy was prominent, and the less secure the attachment, the more prominent the conflict autonomy vs. dependence. These results give initial indications for the validity of the conflict differentiation autonomy/dependence vs. care/autarchy. In a study from Ulm [60], there was good agreement of the OPD conflicts with the Core Conflictual Relationship Theme [3] in 44 psychotherapy inpatients. The investigations in Heidelberg and Münster [46, 61] showed predominance of conflicts I–IV. On the other hand, more of the conflict-limited perception of conflicts and feelings is associated with greater physical impairment; this finding also supports the description of the conflicts. To validate the concept of the typical leading affect as described in axis III, a study from Leising et al. [51] used the methods already described: on the basis of a clinical emotion list [62] a frequency profile of self-reported affective experience was produced. An independent rater had the task of comparing this profile with the information on the 2 most important conflicts and the mode. By chance, a further foreign emotion was included. In 13 attempts, correct allocation occurred 9 times ( $p = 0.087$ ). The authors conclude that the relationship between mental conflict and the predominance of certain leading affects is at least not as clear as assumed in the OPD manual. A further validation study [63] in a sample of 48 psychosomatic inpatients correlated estimations of conflict using the Scale of Psychological Capacities (SPC) from Wallerstein [64]. In contrast to the OPD, in the SPC apart from structural vulnerabilities which comprise the content of the OPD structure axis, habitual modes of conflict processing or defense formation are

also assessed and subsumed under the term 'structural capacity'. For these subscales of the SPC, significant associations with individual OPD conflicts were found, for example a correlation of  $r = 0.41$ ,  $p < 0.01$  between the SPC scale moralism and the conflict submission vs. control or a correlation of  $r = 0.37$ ,  $p < 0.05$  between the SPC scale attribution of responsibility and the conflict guilt. In total, 5 of 7 associations which were surmised on the basis of a conceptual comparison of the scales could be significantly proven.

#### Predictive Validity

In 30 psychotherapeutically treated in patients, there were no essential associations between prominent conflicts and treatment success, with the exception of the conflict category deficient conflict and feeling perception, which was obtained in none of the patients of the group with pronounced treatment success [65]. In the investigation of Rudolf et al. [61], the patients with predominant autonomy vs. dependence had less success. The conflicts oedipal/sexual conflicts and control vs. submission on the other hand showed a positive association with treatment success.

In conclusion, it can be determined that the scientific difficulties in the testing of the validity are great since for every conflict there are only external criteria or appropriate encircling test methods to assess whether unconscious conflicts are not present. The conflict systematics is practicable and useful for training and for clinical questions. To date, examined individual conflicts show good concordance and differentiation with related tests. Adequate connection between the defined operationalized conflicts and the construct dynamic conflict can therefore be assumed.

#### Axis IV

##### Concordant Validity

A number of studies dealt with the agreement between structure evaluation and other concurrently obtained data. Nitzgen and Brünger [66] examined 137 male patients with chronic substance abuse at the start of an inpatient admission and showed that these patients had the poorest values in the area of self-control (mean = 2.2; 2 corresponds to moderate, 3 to poorly integrated). This result was also theoretically expected since this structure area comprises among others the aspects tolerance of affect and impulse control. These findings are confirmed by a study of Reymann et al. [67] where structural weakness in self-control as well as in object perception was ascertained in 22 alcohol-dependent males on a detoxification ward. Further indications of validity were ob-

tained by the first mentioned study with respect to concordance with ICD-10 diagnoses. Patients who had ICD diagnoses of neuroses (mean = 1.97) showed themselves to be better structured than patients with personality disorders (mean = 2.37,  $p < 0.01$ ). Rudolf et al. [61] showed that a lower structural level is associated with longer duration of mental illness ( $-0.38$ ,  $p = 0.06$ ), which may be due to the structurally determined poorer regulation of these patients. To the second group of validation studies, which chose inner validity criteria, belongs a study of Schauenburg [68]. In this study, 49 consecutively admitted psychotherapy inpatients were examined. Secure attachment (Pilkonis attachment diagnosis;  $-0.30$ ,  $p = 0.05$ ) as well as excessive striving for independence ( $-0.29$ ,  $p = 0.06$ ) were associated with better structural level, whilst borderline traits ( $0.27$ ,  $p = 0.08$ ), excessive autonomy strivings ( $0.32$ ,  $p = 0.03$ ) and antisocial traits ( $0.55$ ,  $p = 0.00$ ) were associated with poorer structural level. In the same sample, Grütering and Schauenburg [69] compared with independent judgments the scales of the Karolinska Psychodynamic Profile with the dimensions of the structure axis and found expected correlations concerning content: the capacity of self-control was associated with the scales intimacy and tolerance of frustration. Likewise there was an association between higher integration and object perception or communication and the capacity to experience intimacy. In the study of Grande et al. [63], the SPCs were compared with the structural characteristics measured by the OPD. There were numerous associations which were to be expected on the basis of a conceptual comparison of the scales of both instruments e.g. a correlation of  $r = 0.30$ ,  $p < 0.05$  between the OPD scale drive and the dimension self-control. Furthermore there was a significant concordance between low structure level according to OPD and the SPC scales emotional blunting ( $r = 0.41$ ,  $p < 0.01$ ) and rarely able to rely on others ( $r = 0.43$ ,  $p < 0.01$ ). These two items relate more than other items of the SPC to the interpersonal capacity of a person and are therefore especially related to the theoretical concept of the OPD structure axis, which places the capabilities and vulnerabilities of the self in its relationship to others in the center of the structural analysis.

#### Predictive Validity

The already mentioned study of Rudolf et al. [61] addresses the predictive validity. The structure evaluation at the beginning of inpatient treatment was shown to be a very good predictor of the treatment success as judged by both the patient ( $0.30$ ) and the therapist ( $0.40$ ,  $p <$

0.05). The view of the individual structure dimensions indicates that bonding capability (patient, 0.42; therapist 0.46,  $p < 0.01$ ) is especially relevant for the prediction. Obviously, the capacity to imbue others with positive affect is a good guaranty for the success of the interpersonal therapeutic project.

### Construct Validity

Regarding construct validity, a Heidelberg study showed in a factor analysis (unpublished) that the items are weighted on a single main factor with a very high eigenvalue. The internal consistency of 0.87 for the structure dimension and 0.96 for the structure foci points in a similar direction. These results also indicate that structure concerns an essentially unidimensional construct and the various parts of structure act independently. Since according to theoretical and clinical understanding structural constitution represents a durable and stable personal characteristic, the construct validity of the structure axis is also supported by the fact that an inpatient comparison before and after a 12-week treatment showed stable structural values (for structure, in total a pre- and posttreatment concordance of 84.4% was found) [28].

In summary, the OPD structure axis according to current experience seems suitable to describe a psychodynamically conceptualized and interpersonal point of view in the sense of object relations theory personality structure [70, 71].

These studies on the validity of the OPD show that the OPD axes show no clear significant associations with the symptom diagnosis according to ICD-10. This corresponds to the function of the OPD as an additional psychodynamic-diagnostic level. The reliability of the individual axes as well as the validity studies underpin the empirical basis of the instrumentarium if used as a research instrument.

### Conclusion

Since the OPD manual was published in 1996, many psychotherapists have become acquainted with it and have used it. Various translations are available. In 2003, the German child and adolescent version was published [72]. More than 3,000 therapists have been trained in the different training centers in German-speaking countries. In various psychosomatic clinics, abuse clinics, university departments for psychotherapy and psychosomatics, the OPD is used in research projects, but also in the clinical day-to-day practice [18]. Current work on the further

development of the OPD system is directed towards improving focus formulation and the therapy goal definition and thus the clinical applicability, so the system can be more used in day-to-day practice. The new OPD-II version was published in spring 2006 [73].

An operationalization of psychodynamic diagnostics can overcome the boundaries of a purely descriptive psychiatric classification and use the advantages of an operationalization of empirical psychodynamic constructs in association with the phenomenological diagnostic. The OPD can:

- 1 Give clinical-diagnostic guidelines for clinical use, which because of relative openly formulated diagnostic criteria (guidelines) allow the user some freedom. The OPD contributes thus to greater transparency in the sense of quality assurance.
- 2 Be very useful for psychodynamic psychotherapy training, since the operationalized mental phenomena are empirically formulated so the psychodynamic and phenomenological classification can be practiced.
- 3 Be used as a research instrument, to contribute to more homogenization of trial samples through stricter diagnostic criteria.
- 4 Contribute to better communication within the scientific community (in a broader and a narrower sense) concerning psychodynamic constructs. Through clearly improved reliability, the OPD contributes to better communicability of psychodynamic formulations.

The richness but also the limitations of the OPD diagnostics are illustrated in the judgment of a videotaped case and discussion thereof. The OPD is aimed to be no more than a basic compendium of the relevant psychodynamic constructs, which are allocated to 4 axes. The OPD manual provides only the basis for the clinical discussion, which is highly valued, however, by many clinics. Psychotherapists with little experience have a basis for further training. More complex psychoanalytic theories and detailed psychoanalytic case conception can be built on the basis of the OPD.

Experience with the OPD system to date shows that the constructed axes are practicable and reliable for clinical use in very different treatment fields. The working group understands the operationalization of psychodynamic diagnostics as a process that should contribute to further clarification and differentiation of the underlying constructs both in practice and in research.

## References

- 1 Bellak L, Hurvich M: Systematic study of ego functions. *J Nerv Ment Dis* 1969;148:569–585.
- 2 Gill MM, Hoffmann IZ: A method for studying the analysis of aspects of the patient's experience in psychoanalysis and psychotherapy. *J Am Psychoanal Assoc* 1982;30:137–167.
- 3 Luborsky L, Crits-Christoph P: *Understanding Transference. The Core Conflictual Relationship Theme Method*, ed 2. New York, Basic Books, 1998.
- 4 Strupp HH, Binder JL: *Kurzpsychotherapie*. Stuttgart, Klett-Cotta, 1993.
- 5 Perry JC: Scientific progress in psychodynamic formulation. *Psychiatry* 1989;52:245–249.
- 6 Perry JC: *The Psychodynamic Conflict Rating Scales*. Cambridge, The Cambridge Hospital, 1990.
- 7 Perry JC, Cooper SH: An empirical study of defense mechanism. *Arch Gen Psychiatry* 1989;46:444–452.
- 8 Weinryb RM, Rössel RJ: Karolinska Psychodynamic Profile KAPP. *Acta Psychiatr Scand* 1991;83:1–23.
- 9 OPD Task-Force (eds): *Operationalized Psychodynamic Diagnostics (OPD). Foundations and Manual*. Kirkland, Hogrefe & Huber, 2001.
- 10 Benjamin LS: Structural analysis of social behavior. *Psychol Rev* 1974;81:392–425.
- 11 Horowitz MJ: *Person schemas and maladaptive interpersonal patterns*. Chicago, University of Chicago Press, 1991.
- 12 Piaget J: *Die Äquilibration der kognitiven Strukturen*. Stuttgart, Klett, 1978.
- 13 Kiesler DJ: The 1982 interpersonal circle: A taxonomy for complementarity in human transactions. *Psychol Rev* 1983;90:185–214.
- 14 Kiesler DJ: *Contemporary Interpersonal Theory and Research. Personality, Psychopathology, and Psychotherapy*. New York, Wiley, 1996.
- 15 Leary T: *Interpersonal Diagnosis of Personality*. New York, Ronald Press, 1957.
- 16 Rudolf G, Oberbracht C, Grande T: Die Struktur-Checkliste. Ein anwenderfreundliches Hilfsmittel für die Strukturdiagnostik nach OPD; in Schauenburg H, Freyberger H, Cierpka M, Buchheim P (eds): *OPD in der Praxis. Konzepte, Anwendungen, Ergebnisse der Operationalisierten Psychodynamischen Diagnostik*. Bern, Huber, 1998, pp 167–181.
- 17 Grande T, Oberbracht C, Rudolf G: Einige empirische Zusammenhänge zwischen den Achsen 'Beziehung', 'Konflikt' und 'Struktur'; in Schauenburg H, Freyberger H, Cierpka M, Buchheim P (eds): *OPD in der Praxis. Konzepte, Anwendungen, Ergebnisse der Operationalisierten Psychodynamischen Diagnostik*. Bern, Huber, 1998, pp 121–138.
- 18 Schneider G, Lange C, Heuft G: Operationalized Psychodynamic Diagnostics and differential therapy indication in routine diagnostics at a psychosomatic outpatient department. *Psychother Res* 2002;12:159–178.
- 19 Grande T, Rudolf G, Oberbracht C: Die Praxisstudie Analytische Langzeittherapie. Ein Projekt zur prospektiven Untersuchung struktureller Veränderungen in Psychoanalysen; in Leuzinger-Bohleber M, Stuhr U (eds): *Psychoanalysen im Rückblick*. Frankfurt a. M., Psychosozial-Verlag, 1997, pp 415–431.
- 20 Grande T, Rudolf G, Oberbracht C, Jakobsen T, Keller W: Investigating structural change in the process and outcome of psychoanalytic treatment: The Heidelberg-Berlin Study; in Richardson P, Kächele H, Renlund C (eds): *Research on Psychoanalytic Psychotherapy with Adults*. London, Karnac, 2004, pp 35–61.
- 21 Rudolf G, Grande T, Jakobsen T, Krawietz B, Langer M, Oberbracht C: Effektivität und Effizienz psychoanalytischer Langzeittherapie: Die Praxisstudie analytische Langzeitpsychotherapie; in Gerlach A, Schlösser AM, Springer A (eds): *Psychoanalyse des Glaubens*. Giessen, Psychosozial-Verlag, 2004, pp 515–528.
- 22 Rudolf G, Grande T, Dilg R, Jakobsen T, Keller W, Oberbracht C, et al: Structural changes in psychoanalytic therapies – the Heidelberg-Berlin Study on long-term psychoanalytic therapies (PAL); in Leuzinger-Bohleber M, Target M (eds): *Outcomes of Psychoanalytic Treatment. Perspectives for Therapists and Researchers*. London, Whurr Publishers, 2002, pp 201–222.
- 23 Stasch M: Interpersonal tuning in inpatient psychotherapy. A clinical approach based on the Operationalized Psychodynamic Diagnostics (OPD). 34th Annu Meet Soc Psychother Res, Weimar, June 2003.
- 24 Stasch M: Interpersonal diagnosis, treatment-focus and clinical implementation based on OPD Axis II. 35th Annu Meet Soc Psychother Res, Rome, June 2004a.
- 25 Grande T, Rudolf G, Oberbracht C, Pauli-Magnus C: Progressive changes in patients' lives after psychotherapy: which treatment effects support them? 2003;13:43–58.
- 26 Rudolf G, Grande T, Oberbracht C: Die Heidelberger Umstrukturierungsskala. Ein Modell der Veränderung in psychoanalytischen Therapien und seine Operationalisierung in einer Schätzskala. *Psychotherapeut* 2000;45:237–246.
- 27 Stiles WB, Meshot CM, Anderson TM, Sloan WW: Assimilation of problematic experiences: the case of John Jones. *Psychother Res* 1992;2:81–101.
- 28 Grande T, Rudolf G, Oberbracht C: Veränderungsmessung auf OPD-Basis: Schwierigkeiten und ein neues Konzept; in Schneider W, Freyberger H (eds): *Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik*. Bern, Huber, 2000, pp 148–161.
- 29 Grande T, Rudolf G, Oberbracht C, Jakobsen T: Therapeutische Veränderungen jenseits der Symptomatik. Wirkungen stationärer Psychotherapie im Licht der Heidelberger Umstrukturierungsskala. *Zeitschrift für psychosomatische Medizin und Psychotherapie* 2001;47:213–233.
- 30 Grande T, Oberbracht C: Die Konflikt-Checkliste. Ein anwenderfreundliches Hilfsmittel für die Konfliktdiagnostik nach OPD; in Schneider W, Freyberger H (eds): *Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik*. Bern, Huber, 2000, pp 74–102.
- 31 Wilmers F, Niklaus B, Donaubauber B, Grande T, Rosin U: A randomized study on the use of the OPD with psychosomatic inpatients. 36th Annu Meet Soc Psychother Res (SPR), Montreal, 2005.
- 32 Rudolf G: *Strukturbezogene Psychotherapie. Leitfaden zur psychodynamischen Therapie struktureller Störungen*. Stuttgart, Schattauer, 2004.
- 33 Stasch M, Schmal H, Gross S, Cierpka M, Hillenbrand E: The implementation of an OPD-based focus-conference in inpatient psychotherapy. Effects on outcome compared to 'treatment as usual'. 36th Annu Meet Soc Psychother Res (SPR), Montreal, 2005.
- 34 Grünberger U, Stasch M, De Cruppe W, Wilke S, Schwab M, Zipfel S, et al: Dysfunktionale Beziehungsmuster bei Patientinnen mit Essstörungen. *Psychother Psychosom Med Psychol* 2001;51:94.
- 35 Stasch M: Veränderungen im Erleben dysfunktionellen Beziehungsverhaltens nach stationärer Psychotherapie. Arbeitskreis Psychosomatik, Universitätsklinikum Heidelberg, September 2004b.
- 36 Cierpka M, Grande T, Stasch M, Oberbracht C, Schneider W, Schüssler G, et al: Zur Validität der Operationalisierten Psychodynamischen Diagnostik (OPD). *Psychotherapeut* 2001;46:122–133.
- 37 Cohen J: Weighted kappa: nominal scale agreement with provision for scaled disagreement or partial credit. *Psychol Bull* 1968;70:213–220.
- 38 Fleiss JL, Cohen J: The equivalence of weighted kappa and the intraclass correlation coefficient as measures of reliability. *Educ Psychol Meas* 1973;33:613–619.

- 39 Grawe-Gerber M, Benjamin L: Structural analysis of social behavior (SASB). Coding manual for psychotherapy research. Bern, Psychologisches Institut der Universität, 1989.
- 40 Stasch M, Cierpka M, Hillenbrand E, Schmal H: Assessing reenactment in inpatient psychodynamic therapy. *Psychother Res* 2002; 12:355–368.
- 41 Fleiss JL: *Statistical Methods for Rates and Proportions*, ed 2. New York, Wiley, 1981.
- 42 Cicchetti DV: Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychol Assess* 1994;6:284–290.
- 43 Landis JR, Koch GG: The measurement of observer agreement for categorical data. *Biometrics* 1977;33:159–174.
- 44 Michels R, Siebel U, Freyberger HJ, Schönell H, Dilling H: Evaluation of the multiaxial system of ICD-10 (preliminary draft): correlations between multiaxial assessment and clinical judgements of aetiology, treatment indication and prognosis. *Psychopathology* 2001;34:69–74.
- 45 Schneider W, Basler HD, Beisenherz B: Fragebogen zur Psychotherapiemotivation. Weinheim, Beltz, 1989.
- 46 Schneider W, Klauer T, Hake K: Prädiktive Validität der OPD-Achse I: Krankheitserleben und Behandlungsvoraussetzungen. 47. Jahrestagung des Deutschen Kollegiums für Psychosomatische Medizin (DKPM), Leipzig 1998.
- 47 Franz M, Dahlbender RW, Gündel H, Hake K, Klauer T, Kessler-Scheeler S, et al: Ergebnisse der Multizenterstudie zur OPD-Achse I (Krankheitserleben und Behandlungsvoraussetzungen) im Konsildienst; in Schneider W, Freyberger H (eds): Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik. Bern, Huber, 2000, pp 162–178.
- 48 von Wietersheim J: Entwicklung und Perspektiven der OPD-Achse I: Krankheitserleben und Behandlungsvoraussetzungen; in Schneider W, Freyberger H (eds): Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik. Bern, Huber, 2000, pp 57–59.
- 49 Horowitz LM, Strauss B, Kordy H: Manual zum Inventar zur Erfassung interpersonaler Probleme (IIP-D). Weinheim, Beltz, 1993.
- 50 Stasch M, Cierpka M, Dahlbender RW, Grande T, Hillenbrand E, Kraul A, et al: OPD und Repräsentation interpersonellen Beziehungsverhaltens: ein Ansatz zur Konstruktvalidierung; in Dahlbender RW, Buchheim P, Schüssler G (eds): Lernen an der Praxis. OPD und die Qualitätssicherung in der psychodynamischen Psychotherapie. Bern, Huber, 2004, pp 85–94.
- 51 Leising D, Stadler K, Grande T, Rudolf G: Lassen sich intrapsychische Konflikte anhand unterschiedlicher 'Leitaffekte' unterscheiden? Heidelberg, Psychosomatische Klinik des Universitätsklinikums, 2000.
- 52 Crits-Christoph P, Demorest A, Muenz LR, Baranackie K: Consistency of interpersonal themes for patients in psychotherapy. *J Pers* 1994;62:499–526.
- 53 Cierpka M, Strack M, Benninghoven D, Staats H, Dahlbender R, Pokorny D, et al: Stereotypical relationship patterns and psychopathology. *Psychother Psychosom* 1998; 67:241–248.
- 54 Stasch M, Cierpka M: Changes in patients' perceptions of their interpersonal behavior during inpatient psychotherapy. 31 Annu Meet Soc Psychother Res Chicago, June 2000.
- 55 Foa UG: Convergences in the analysis of the structure of interpersonal behavior. *Psychol Rev* 1961;68:341–353.
- 56 Guttman L: A new approach to factor analysis: the radex; in Lazarsfeld PF (ed): *Mathematical Thinking in the Social Sciences*. Glencoe, Free Press, 1954, pp 258–348.
- 57 Schüssler G: Innerpsychischer Konflikt und Struktur: Wo steht das Unbewusste heute? in Dahlbender RW, Buchheim P, Schüssler G (eds): Lernen an der Praxis. OPD und die Qualitätssicherung in der psychodynamischen Psychotherapie. Bern, Huber, 2004, pp 181–192.
- 58 Pilkonis PA: Personality prototypes among depressives: themes of dependency and autonomy. *J Pers Disord* 1988;2:144–152.
- 59 Müller E: Zusammenhänge zwischen inadäquaten Verarbeitungsformen unbewusster Konflikte und unsicheren Bindungsstilen. Eichstätt, Eichstätt Universität, 1999.
- 60 Zlatanovic B: Intrapsychische und interpersonelle Konflikte: Operationalisierte Psychodynamische Diagnostik versus Beziehungskonfliktthema. Ulm, Medizinische Fakultät, 2000.
- 61 Rudolf G, Grande T, Oberbracht C, Jakobsen T: Erste empirische Untersuchungen zu einem neuen diagnostischen System: die Operationalisierte Psychodynamische Diagnostik (OPD). *Z Psychosom Med Psychoanal* 1996;42:343–357.
- 62 Leising D: Die Klinische Emotionsliste. Ein Instrument zur Erfassung des selbstberichteten affektiven Erlebens. Heidelberg, Psychosomatische Universitätsklinik, 2000.
- 63 Grande T, Schauenburg H, Rudolf G: Zum Begriff der 'Struktur' in verschiedenen Operationalisierungen; in Rudolf G, Grande T, Henningsen P (eds): Die Struktur der Persönlichkeit. Vom theoretischen Verständnis zur therapeutischen Anwendung des psychodynamischen Strukturkonzepts. Stuttgart, Schattauer, 2002, pp 177–196.
- 64 Wallerstein RS: Assessment of structural change in psychoanalytical therapy and research. *J Am Psychoanal Assoc* 1988;36:241–261.
- 65 Strauss B, Hüttmann B, Schulz N: Kategorienhäufigkeit und prognostische Bedeutung einer operationalisierten psychodynamischen Diagnostik. Erste Erfahrungen mit der 'OPD-1' im stationären Rahmen. *Psychother Psychosom Med Psychol* 1997;47: 58–63.
- 66 Nitzgen D, Brünger M: Operationalisierte Psychodynamische Diagnostik in der Rehabilitationsklinik Birkenbuck: Einsatz und Befunde; in Schneider W, Freyberger H (eds): Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik. Bern, Huber, 2000, pp 238–252.
- 67 Reymann G, Zbikowski A, Martin K, Tetzlaff M, Janssen PL: Erfahrungen mit der Anwendung von Operationalisierter Psychodynamischer Diagnostik bei Alkoholkranken; in Schneider W, Freyberger H (eds): Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik. Bern, Huber, 2000, pp 229–237.
- 68 Schauenburg H: Zum Verhältnis zwischen Bindungsdiagnostik und psychodynamischer Diagnostik; in Schneider W, Freyberger H (eds): Was leistet die OPD? Empirische Befunde und klinische Erfahrungen mit der Operationalisierten Psychodynamischen Diagnostik. Bern, Huber, 2000, pp 196–217.
- 69 Grütering T, Schauenburg H: Die Erfassung psychodynamisch relevanter Persönlichkeitsmerkmale – Vergleich zweier klinisch relevanter Instrumente: Karolinska Psychodynamic Profile (KAPP) und OPD-Strukturachse; in Bassler M (ed): Leitlinien in der stationären Psychotherapie: Pro und Kontra. Giessen, Psychosozial-Verlag, in press.
- 70 Rudolf G, Grande T, Jakobsen T: Struktur und Konflikt: Gibt es strukturspezifische Konflikte? in Dahlbender RW, Buchheim P, Schüssler G (eds): Lernen an der Praxis. OPD und die Qualitätssicherung in der psychodynamischen Psychotherapie. Bern, Huber, 2004, pp 195–206.
- 71 Grande T, Rudolf G, Oberbracht C: Die Strukturachse der Operationalisierten Psychodynamischen Diagnostik (OPD) – Forschungsergebnisse zum Konzept und zur klinischen Anwendung. *PTT* 1998;2:173–182.
- 72 Arbeitskreis OPD-KJ (eds): Operationalisierte Psychodynamische Diagnostik im Kindes- und Jugendalter. Grundlagen und Manual. Bern, Huber, 2003.
- 73 Arbeitskreis OPD (eds): Operationalisierte Psychodynamische Diagnostik OPD-2. Das Manual für Diagnostik und Therapieplanung. Bern, Huber, 2006.