2.

The assessment of personality disorders: implications for cognitive and behaviour therapy*

Abstract
This article reviews the comorbidity of personality disorders and Axis I disorders and discusses implications for assessment and treatment. Pro and cons of various assessment methods are discussed. The co-occurrence of personality disorders with Axis I disorders is considerable, roughly about half of patients with anxiety disorders, depressive disorders and eating disorders received a personality disorder diagnosis. Comorbidity models are discussed and implications for assessment and treatment are provided. Regarding the impact of personality disorders on cognitive-behavioural treatment outcome for Axis I disorders, conflicting results are found due to differences in assessment methods, treatment strategies, and patient samples. It is argued that additional Axis I pathology should be taken into account when studying the impact of personality disorders on treatment outcome for the target Axis I disorders. Finally, it is argued that the interpersonal behaviour of the patient and the therapeutic relationship deserve more attention in the assessment and treatment of patients with personality disorders.

Introduction

Personality disorders have been neglected in the behavioural literature until recently. In the 1960's and 1970's hardly any study on behaviour therapy referred to the personality disorders. At this time personality disorder had a vague psychodynamic connotation and behaviour therapists were inclined to ignore the personality disorder part of the patients problems. Since the introduction of DSM-III (APA, 1980) in which the personality disorders were described atheoretically and separated from the Axis I disorders, it was increasingly acknowledged by many behaviour therapists and cognitive therapists, who had by now entered the scene, that many patients were actually suffering from a personality disorder or had one or more personality disorders as a co-morbid condition. For example, in Foa & Emmelkamp's (1983) volume on failures in behaviour therapy a number of contributors admitted, albeit reluctantly, that personality problems could impede the success of behaviour therapy in a number of disorders or could lead to dropping out of treatment. Other influential handbooks at that time devoted chapters to the behavioural treatment of personality disorders (e.g. Marshall & Barbaree, 1984; Turkat & Maisto, 1985; Turner & Hersen, 1981). Personality disorders were now conceptualized as maladaptive behavioural interaction patterns and the aetiology was interpreted in term of social learning processes. Although clinical behaviour therapists now gradually accepted the concept of personality disorder, this concept was still not acceptable in some academic circles. For example, in the early 1980's a presenter at a behavioural convention avoided the term personality disorder out of fear of being criticized by the audience (Pretzer, 1994).

Given this state of affairs it is not surprising that research into the behaviour and cognitive therapy of personality disorders is just beginning. Very few outcome studies have been conducted, evaluating the effects of behaviour and cognitive therapy in patients with a personality disorder, most of which were uncontrolled. In the few controlled studies that have been conducted encouraging results have been achieved with behaviour therapy in chronically suicidal borderline patients (Linehan, Amstrong, Suarez, Allmon & Heard, 1991) and in patients with an avoidant personality disorder (Alden, 1989; Renneberg, Goldstein, Phillips & Chambless, 1990; Stravinsky, Marks & Yule, 1982) and with cognitive therapy in patients with an anti-social personality disorder (Woody, McLellan, Luborsky, & O'Brien, 1985).

The aim of this essay is to point out the relevance of the assessment of personality disorders for cognitive-behaviour therapy. While the necessity of assessing personality disorders is obvious when the main complaint of the patient is a personality disorder, we argue that assessment of personality disorders is also needed when personality disorders co-occur with Axis I disorders. After discussing some problems with the categorical concept of personality disorders, models concerning the comorbidity of Axis I disorders and personality disorders will be outlined, and assessment strategies will be discussed. Given the high prevalence rate of personality disorders as a co-morbid condition accompanying anxiety disorders,
eating disorders and depression, the impact of a comorbid personality disorders on treatment of these Axis I disorders is discussed. Further, some therapeutic guidelines will be provided for dealing with patients with a co-morbid personality disorder in order to enhance the treatment efficacy, with special attention for the therapeutic relationship.

**Personality disorders: a categorical or dimensional concept**

The validity of the construct of personality disorder has been discussed in detail elsewhere (e.g. Livesley, Schroeder, Jackson, & Jang, 1994). The DSM-III(-R) personality disorder categories and criteria are based on face validity, rather than on empirical research, and the validation of both the personality disorder categories and criteria is still in progress. With the development of DSM-IV, empirical data that have been gathered over the years were used to clarify criteria sets (APA, 1994). Although the basic features of the specific personality disorders have not been changed from DSM-III-R to DSM-IV, the number of personality disorder categories and the criteria that define the specific personality disorder categories have been slightly revised. One of the major revisions concerns the passive-aggressive personality disorder: In DSM-III-R included in the personality disorder section (cluster C), but being removed to the appendix in DSM-IV. In addition, the depressive personality disorder has been added to the appendix in order to be further investigated. Other revisions in the personality disorder section from DSM-III-R to DSM-IV are:

1) In some categories criteria have been removed (anti-social, avoidant, dependent, obsessive-compulsive) or replaced by other criteria (histrionic, narcissistic);
2) The number of criteria that have to be fulfilled has been changed in some categories [histrionic (one more), anti-social and obsessive-compulsive (one less)].

These revisions may affect both the number of personality disorder diagnoses as well as the phenomenology of personality disorders.

One of the most debated issues concerns the categorical versus dimensional classification of personality disorders. Those in favour of the categorical classification argue that this classification is easier in conceptualization and communication, more familiar to clinicians and also more consistent with clinical decision making (Widiger & Frances, 1994). However, there are a number of problems associated with the categorical classification. First, the high prevalence rate of personality disorder-NOS - by some called the mixed personality disorder - is a case in point. When the personality disorder-NOS is assessed in studies, it appears to be one of the most frequently assessed categories (e.g. Gasperini, Battaglia, Diaferia, & Bellodi, 1990; Marin, Kocsis, Frances & Klerman, 1993). Second, prevalence studies show that comorbidity among personality disorders is not a rare phenomenon: The mean number of personality disorder diagnoses in patients with at least one personality disorder varied between 1.3 and 5.6 (Dolan,
Evans & Norton, 1995). DSM-IV provides no guidelines or hierarchical rules how to deal with these multiple personality disorders and personality disorder-NOS diagnoses. Further, the categorical system assumes that a clear distinction between normal and abnormal personality exists; however, there is hardly any evidence supporting this assumption. Recently, studies are emerging in which the personality disorder categories are being related to personality dimensions. A promising dimensional model is the Five-Factor Model of personality (e.g. Costa & McCrae, 1992), describing higher order factors of personality, which has been widely accepted among personality psychologists (Costa & McCrae, 1992). This model includes five personality factors: Neuroticism, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience. Several measures are available for the assessment of these personality traits, with the NEO personality inventory (Costa & McCrae, 1992) being the most widely used in clinical practice. These five factors were related to the personality disorder categories in several studies (e.g. Costa & Widiger, 1994).

Comorbidity models
There is a considerable overlap between Axis I disorders and personality disorders, which has implications for assessment and treatment decisions. In anxiety disorders, the median prevalence rates of any personality disorder with panic disorder with or without agoraphobia, social phobia, generalized anxiety disorder and obsessive-compulsive disorder varied between 50-60% (see Chapter 1). Avoidant personality disorder was the most prevalent personality disorder. The dependent and obsessive-compulsive personality disorders were the next most prevalent personality disorder diagnoses in all four anxiety disorders.

Shea, Widiger and Klein (1992) reviewed the comorbidity of personality disorders and depressive disorders and found prevalence rates between 23 to 87% (most studies reported at least 30 to 40%) in samples with non-bipolar depression. The types of personality disorders that were most frequently found were borderline and histrionic personality disorders in inpatients samples and obsessive-compulsive, avoidant and dependent personality disorders in the outpatient samples.

Skodol, Oldham, Hyler, Kellman, Doidge and Davies (1993) summarized the studies on the co-occurrence of personality disorders with eating disorders. The prevalence rate of one or more personality disorder is 59%, varying from 27 to 93%. The overall rate among inpatients is 74% and among outpatients 54%. Bulimia nervosa appeared to be associated with personality disorders from cluster B and specifically with borderline personality disorder. In the anorexia nervosa samples, predominantly cluster C personality disorders were found, specifically obsessive-compulsive personality disorder. Overall, anorexics tend to receive fewer personality disorder diagnoses compared with the bulimics; bulimic anorexics appeared to have to the most pervasive personality disorder pathology (Skodol, et al., 1993; Vitousek & Manke, 1994).
In sum, the above reported prevalence rates vary enormously, not only across different disorders but also among samples with the same disorder. However, looking at the average figures, it can be concluded that roughly about half of the patients with an anxiety, depressive or eating disorder also have a comorbid personality disorder. Given these figures, the relationship between Axis I disorders and personality disorders deserve more attention. DSM-IV holds that comorbidity of personality disorders and Axis I disorders is the result of chance co-occurrence: Both disorders are viewed as independent entities. At least in some instances the comorbidity of personality disorders and Axis I disorders may be artifacts of overlapping criteria of both disorders (e.g. social phobia and the avoidant personality disorder).

Several models have been proposed to explain the comorbidity of personality disorders and Axis I disorders (Docherty, Fiester & Shea, 1986; Farmer & Nelson-Gray, 1990; Stein, Hollander & Skodol, 1993), which will be briefly discussed:

- Vulnerability model: The personality disorder may predispose to the development of an Axis I disorder;
- Continuity model: The personality disorder is viewed as the sub-clinical manifestation of a slowly developing Axis I disorder;
- Complication model: The personality disorder develops as a result of an enduring Axis I disorder;
- Co-effect model: Personality disorders and Axis I disorders are two separate psychobiological structures, but co-occur as a result of a third common factor or causal process;
- Attenuation model: Both disorders are alternative expressions of the same genetic or constitutional liability.

The above-mentioned models suggest causal relationships between personality disorders and Axis I disorders. These models can only be properly investigated in longitudinal designs, which has not been done until now. The following model is of a more descriptive nature.

- Modification model: An interaction is assumed between personality disorders and Axis I disorders, when occurring at the same time. This interaction is manifested in specific symptomatology, specific course of illness and prognosis. This model does not refer to any specific etiological factor.

These models may not only have their value in understanding the relationship between Axis I disorders and personality disorders, but may also be useful in understanding the comorbidity among personality disorders, e.g. the avoidant personality disorder as a vulnerability factor for the dependent personality disorder.

Two remarks should be made concerning the above-mentioned models. First, the models are not mutually exclusive, for instance, it may be that the avoidant personality disorder predisposes for panic disorder with agoraphobia (vulnerability model) and this interaction itself is manifested in additional depressive
symptomatology (modification hypothesis). Second, although these models do not differentiate between the specific personality disorders, it is tempting to assume that different types of personality disorders co-occurring with the same Axis I disorder lead to different clinical pictures and, consequently, demand specific treatment strategies.

In clinical practice, the comorbidity models may have a heuristic value. An analysis of related problems, (a macro-analysis; Emmelkamp, 1982) in which the Axis I disorders and personality disorders are conceptualized may determine which treatment strategies should be chosen and whether specific attention should be paid to the personality disorder in that particular case. Take, for example, the comorbidity of bulimia and personality disorders. Is bulimia a consequence of an underlying personality disorder (vulnerability hypothesis) or are both disorders related to the same genetic or constitutional liability (impulsivity in case of borderline personality disorder). What is the function of binge eating? Avoiding unpleasant feelings? Or is the bulimic patient unable to control her impulsive behaviour in general? The answer to such questions will determine which specific treatment strategy has to be chosen in a particular case. The presence of a borderline personality disorder in a bulimic patient may demand specific attention for impulsive behaviour in treatment, whereas for bulimic patients with an avoidant personality disorder it may be necessary also to focus on avoidance behaviour.

Assessment of personality disorders
Given the relationship between Axis I disorders and personality disorders discussed above, it is important for clinicians to assess the personality disorders in addition to the Axis I disorder. During the last decade, both structured interviews and self-report questionnaires have been developed in order to improve the reliability of the personality disorder diagnoses. In this section, the pro and cons of the most important assessment devices will be discussed.

Semi-structured interviews
Of the semi-structured interviews that cover all DSM-III-R personality disorders, the Structured Clinical Interview for DSM-III-R Axis II (SCID-II, First, Spitzer, Gibbon & Williams, 1995), the Personality Disorder Examination (PDE, Loranger, Susman, Oldham & Russakoff, 1987) and the Structured Interview for DSM-III-R Personality Disorders (SIDP-R, Stangl, Pfohl, Zimmerman, Bowers & Corenthal, 1985) are the most widely used and investigated instruments.

The SCID-II consists of 120 questions organized in sections according to the DSM-III-R diagnoses. The questions match precisely the criteria. Each item is scored on a four-point scale (inadequate information, absent, subthreshold, threshold). The SCID-II is the only structured interview, which is provided with a self-report questionnaire to screen for the presence of a personality disorder. Only positively endorsed questions need to be further inquired to shorten the length of the interview. A recent test-retest reliability study (interval between one day and two weeks with different interviewers) found kappa values ranging from 0.24
(obsessive-compulsive) to 0.74 (histrionic), with an overall weighted kappa of 0.53 (First, Spitzer, Gibbon, Williams, Davies, et al., 1995). A draft-version of the SCID-II for DSM-IV has already been developed (First, et al., 1995).

The PDE is divided in five thematic topics (work, self, interpersonal relationships, affects, impulse control) and consists of 328 items scored on a three-point scale (absent, present but of uncertain clinical significance, present and clinically significant). The WHO has selected the PDE as the standard instrument to assess the personality disorders. For this purpose, the PDE has been modified for international use and for compatibility with ICD-10 and DSM-III-R. This version of the PDE, the International Personality Disorder Examination (IPDE), consists of 157 items and is also scored on a three-point scale. Recently, the first reports of the results of the WHO field trials have been published. For interrater agreement (interviewer and observer score at the same time), the kappa values varied between 0.34 (histrionic) and 0.80 (borderline) with an overall kappa of 0.57, and retest reliability kappa values ranged between 0.24 (paranoid) and 0.70 (borderline), with an overall kappa value of 0.50. The average interval between both interviews was six months and in 93% of the cases, the same interviewer administered the interview for the second time. A DSM-IV version is available (Loranger, Sartorius, Andreoli, et al., 1994).

The SIDP-R (Stangl, et al., 1985) is a 160-item semi-structured interview, organized in 16 thematic sections (e.g. self-esteem, dependency, affect lability, impulsivity). Each DSM-III-R criterion is scored on a three-point scale (not present, moderately present, severely present) whereas the questions themselves are not scored. The interrater reliability (observer at the same time or separate interview within one week) kappa values ranged between 0.45 (avoidant) and 0.90 (dependent) for the five personality disorder categories that were diagnosed frequently enough to calculate the kappa values (Stangl, et al, 1985). The SIDP has been updated for DSM-IV (Pfohl, Blum & Zimmerman, 1995).

**Self-report questionnaires**

The most widely used self-report questionnaires are the Personality Diagnostic Questionnaire-Revised (PDQ-R, Hyler, Skodol, Kellman, Oldham & Rossnick, 1990) and the Millon Clinical Multiaxial Inventory (MCMI-I, Millon, 1983). The PDQ-R is a 152-item true/false questionnaire that matches all DSM-III-R criteria precisely. The items are organized by diagnosis with the risk of a halo-effect (the tendency to answer following questions positively when a first question has been positively endorsed). The PDQ-R appears to be highly sensitive for all personality disorder scales but has a moderate specificity when compared with structured interviews (Hyler, et al., 1990; Hyler, Skodol, Oldham, Kellman & Doidge, 1992). The developers emphasize the usefulness of the PDQ-R as a screening instrument rather than as a diagnostic instrument for the specific personality disorders. The negative predictive power (accuracy in assessing the absence of the diagnosis given a criterion diagnosis) for an individual personality disorder diagnosis ranged between 0.94 and 1.00 (Hyler et al., 1990), which is excellent.
Introduction

The MCMI-I is based on the typology of Millon's biopsychosocial model of personality disorders and differs from DSM-III in some ways. However, the MCMI-II (Millon, 1987) has undergone major revisions and is now better comparable with the other DSM-III-R measures. In addition to providing personality disorder diagnoses, the MCMI also assesses nine clinical syndromes. It contains 175 items in a true/false scoring format and a number of items are keyed in both the syndrome and personality disorder scales. The sensitivity of the MCMI-II personality disorder scales varies considerably. Good sensitivity values were reported for schizotypal, passive-aggressive and avoidant (Hills, 1995). The MCMI-II has a satisfactory negative predictive power ranging from 0.72 to 1.00 per individual personality disorder diagnosis (Hills, 1995).

Diagnostic agreement between instruments

Studies that compared the diagnostic agreement between two instruments have found poor diagnostic concordance. Perry (1992) summarized these studies and found a median kappa value of 0.25 (range: 0.08 - 0.54). These values were calculated including studies, which compared interview and self-report methods. Therefore, difference in methodology may account partly for these poor findings. However, when the interrater reliability was restricted to structured interviews, the same median kappa value (0.25) was found (range: 0.09 - 0.61). This low diagnostic concordance may be related to a number of factors such as the formulations of the criteria or the amount of items per criterion, which may differ between instruments (Zimmerman & Coryell, 1990, Zimmerman, 1994). Such differences in content may be found among questionnaires, among interviews and between both formats. To date, no instrument appears to be superior or should be regarded as the gold standard.

Duration of assessment of personality disorders

The duration of the structured interviews of personality disorders depends on the degree of personality pathology, the experience of the clinician and the patients' tendency to answer questions positively. Because of the possibility of scoring both DSM-III-R and ICD-10 criteria (International Classification of Diseases, 10th edition; WHO, 1992) the duration of the IPDE is rather long. In the WHO study, the mean length was 2 hours 20 minutes (Loranger et al., 1994). Using the SCID screening questionnaire first, the mean administration time for the SCID-II was 36 minutes (First et al., 1995). The SIDP takes about 60 to 90 minutes according to the developers (Stangl et al., 1985), whereas the MCMI and the PDQ-R take about 20 to 30 minutes (Millon, 1987; Hyler et al. 1992).

Influence of the Axis I disorder on assessment of personality disorders

All three semi-structured interviews require clinical experience. In contrast with the rating of criteria of Axis I disorders, the rating of personality disorder criteria demands a high amount of inference in order to adequately judge whether the criterion is pathological and characteristic of long-term functioning instead of temporarily affected because of the Axis I disorder. Therefore, the assessment of the personality disorder should be preceded by the assessment of the Axis I disorder.
With this information, the interviewer can give special attention to carefully differentiate between traits and states enhancing the reliability and validity of the interview.

Evidence for the influence of a depressive or anxious state on assessment of personality pathology is found in most studies addressing this issue. Both structured interviews and self-report methods for the assessment of personality disorders found less personality pathology after successful treatment (e.g. Stuart, Simons, Thase & Pilkonis, 1992; Ricciardi, Baer, Jenike, Fischer, Sholtz & Buttolph, 1992; Mavissakalian, Hamman, & Jones, 1990; Mavissakalian, & Hamann, 1987; Noyes, Reich, Suelzer & Christiansen, 1991). Only one study did not find a change in personality disorder diagnoses after treatment (Loranger, Lenzenweger, Gartner, Susman et al., 1991), although they did find a trend towards less personality pathology reported after treatment. Several explanations may account for these changes in reported personality pathology. First, it may be for both interviewer and patient difficult to differentiate between state and trait. In particular, personality traits from the anxious/fearful cluster may be difficult to differentiate from the depressive or anxious state. For instance, a criterion for the dependent personality disorder is feeling helpless when being alone or trying to avoid being alone. If a panic patient responds positively, it should be judged whether this symptom/trait was also present before the onset of the panic disorder and for how long. According to the manuals of the semi-structured interviews, a symptom should be present more than five years in order to be assessed as a personality feature. Second, patients may exaggerate maladaptive traits at admission in order to receive treatment. Afterwards, they may minimize their maladaptive traits. Third, patients may have learned at the first interview that denying questions does not lead to further clarifications and shortens the interview (Loranger et al., 1991).

What is the best occasion to assess the personality disorder? If the personality disorder is assessed before treatment, the required information may be used for treatment decisions. As noted before, however, the Axis I disorder may confound the personality disorder assessment. Alternatively, assessing the personality disorder after treatment may provide a more reliable personality disorder diagnosis, but will hardly affect treatment decisions. Given this state of affairs, it seems wise to assess the personality disorder before and after treatment, since both assessment occasions may have their own specific predictive value. Personality disorders assessed after treatment may be a reliable relapse indicator, whereas personality disorders assessed before treatment may be a reliable predictor of the short-term treatment effect.

Concluding remarks
In clinical practice, it is recommended to screen patients on personality pathology by a self-report questionnaire. If there are indications that the patient suffers from one or more personality disorder, a structured interview with the patient may be needed. Further, the problems associated with the categorical personality disorder diagnosis warrant the inclusion of dimensional personality trait measures, e.g. the
NEO-PI (Costa & McCrae, 1992). In order to obtain as much relevant information as possible concerning personality, both categorical and dimensional personality (disorder) traits should be integrated. In case of more than one personality disorder diagnosis or the personality disorder diagnosis NOS, personality trait measures may be useful in deciding which personality disorder or personality disorder feature have consequences for treatment planning.

**Impact of personality disorders on treatment**

Until a few years ago clinical lore suggested that personality disorders were a significant negative predictor of outcome. However, it is only recently that controlled studies have been conducted to determine the effect of the presence or absence of a personality disorder on the outcome of treatment of an Axis I disorder. Most of these studies involved bulimic, depressed, or anxious patients. There is some evidence that personality disorders are negatively associated with outcome of drug treatment in eating disorder (desipramine; Rossiter, Agras, Telch & Schneider, 1993; Ames-Frankel, Devlin, Walsh, Strasser, Sadik, Oldham & Roose, 1992), in major depression (anti-depressants; Sato, Sakado, & Sato, 1993; Sato, Sakado, Sato, & Morikawa, 1994), in panic disorder (e.g. benzodiazepines; Noyes, Reich, Christiansen, Suelzer, Pfohl & Coryell, 1990; Reich, 1988; Reich & Green, 1991), and in mixed anxiety patients (e.g. phenelzine; Tyrer, Casey & Gall, 1983). Results in obsessive-compulsive disorder are inconclusive (e.g. Baer, Jenike, Black, Treece, Rosenfeld & Greist, 1992; Mavissakalian, et al., 1990). The emphasis in this chapter is on studies that have investigated this issue in patients treated with (cognitive) behaviour therapy. Studies into the effects of personality disorders on depression, anxiety disorders and eating disorders will be briefly discussed.

**Depression**

A number of studies have addressed this issue in the cognitive and behavioural treatment of depression, but results are as yet inconclusive. Thompson, Gallagher & Czirr (1988) investigated the impact of personality disorders assessed with the SIDP on the effects of behaviour therapy and psychodynamic therapy in elderly patients with major depression. Treatment was more effective with patients without a personality disorder than with patients with a personality disorder, irrespective of treatment. This effect was most notable for patients with compulsive personality disorder and passive-aggressive personality disorder. Three studies have been reported investigating the effects of personality disorders on the outcome of cognitive therapy. Persons, Burns, & Perloff (1988) and Simon, Thase, Pilkonis, McGeary, & Calahane (1991), investigated the influence of personality disorders on the outcome of cognitive therapy in patients with major depression. In contrast to the Thompson et al. (1988) study, no differences in outcome were found between both patient groups. However, in the Persons et al. (1988) study patients with a personality disorder were significantly more likely to drop out of treatment prematurely. The results of the NIMH Treatment of Depression Collaborative Research Program are of particular interest since the effects of personality disorders
were investigated on different treatments: interpersonal therapy, cognitive therapy and drug treatment (imipramine). The diagnoses of personality disorder were based on an unstructured clinical interview. Results of this study revealed that personality disorders negatively affected treatment outcome of interpersonal therapy and imipramine, but less so of cognitive therapy. However, differences between conditions were non significant (Shea, Pilkonis, Beckham, Collins, Elkin, Sotsky, & Docherty, 1990).

Taken the results of these studies together, there is some evidence that personality disorders negatively influence the outcome of behavioural treatment (Thompson et al., 1988), but patients with and without personality disorders who stay in treatment appear to do equally well in cognitive therapy.

Anxiety disorders

Mavissakalian & Hamman (1987) found a significant relationship between personality disorders as assessed by the PDQ and outcome of treatment consisting of drug-assisted self-exposure in vivo for panic disorder with or without agoraphobia. Seventy-five percent of patients without personality pathology responded to treatment, whereas only 25% of patients with personality psychopathology did so. In a study by Black, Wesner, Gabel, Bowers, & Monahan (1994) personality disorders were associated with poorer treatment response with cognitive therapy and placebo, but not with drug treatment (fluvoxamine). Finally, Keijsers, Hoogduin & Schaap (1994) found personality disorders to be related to outcome of behaviour therapy, but this was no longer significant when controlled for multiple tests.

A number of studies investigated whether specific personality disorder criteria rather than personality disorders per se are related to outcome. Chambless, Renneberg, Goldstein & Graceley (1992) found avoidant personality features to be associated with poor treatment outcome. Treatment consisted of a broad-spectrum behavioural program, either conducted in groups or individually. When initial depression was taken into account no significant differences were found. Interestingly, dependent and histrionic features were associated with more positive outcomes. Dreessen, Arntz, Luttels & Sallaerts (1994) found no differences in outcome between patients with personality disorders versus patients without personality disorders after treatment, consisting of either applied relaxation, exposure in vivo, cognitive therapy or a combination of cognitive therapy and exposure in vivo. However, multiple regression analyses revealed that obsessive-compulsive personality disorder features predicted worse outcome, whereas borderline personality disorder features predicted better outcome. In contrast, in a study by Rathus, Sanderson, Miller and Wetzler (1995) obsessive-compulsive features predicted better outcome, whereas elevated scores on the scales of the B cluster predicted worse outcome.

Turner (1987) was the first to investigate the effect of personality disorders on outcome after cognitive-behavioural treatment for social phobia. Results revealed that personality disorders were associated with poor outcome. However,
numbers of patients were rather small. In more recent studies, however, personality disorders were not a significant predictor of outcome (Mersch et al., 1995; Scholing & Emmelkamp, 1994; Van Velzen, Emmelkamp, Scholing & Luteijn, 1995). These conflicting results may be due to a number of differences in the studies, including the type of treatment and the way in which the personality disorder was assessed. In the Mersch et al. (1995) and van Velzen et al. study (1995) personality disorders were assessed by a structured interview (SCID), while in the Scholing & Emmelkamp (1994) study personality disorders were assessed by self-report (MCMI). In the Turner (1987) study, diagnosis was based on clinical impressions and MMPI profiles and was made retrospectively and in an unblind fashion.

Few studies have investigated the effect of personality disorders on other anxiety disorders. In obsessive-compulsives results are inconclusive. Minichiello, Bear & Jenike (1987) and Fals-Stewart & Lucente (1993) found some impact of personality disorders on outcome of behaviour therapy, but this was not corroborated in a study by Steketee (1990). Only one study has addressed this issue in generalized anxiety disorder (Sanderson, Beck & McGinn, 1994). Here, no differences in outcome of cognitive therapy were found between patients with a personality disorder and patients without a personality disorders.

Eating disorders
Fahy, Eisler & Russell (1993) investigated the effect of personality disorders on the outcome of cognitive-behaviour therapy. Patients with a personality disorders did significantly worse than patients without a personality disorders both on bulimic behaviour and binge frequency. When controlled in the statistical analysis for initial severity and depression, however, the differences were no longer significant. In a study by Rossiter et al. (1993) bulimics with a high cluster B score (consisting of histrionic, narcissistic, anti-social and borderline features) had a significantly poorer response to treatment consisting of either cognitive-behavioural treatment, drug treatment (desipramine) or a the combination of both treatments. In contrast to the Fahy et al. (1993) study, pre-treatment depression was not related to outcome.

Concluding remarks
Taken the results of the studies together, a complex picture emerges. Studies that investigated whether one or more personality disorder categories were associated with treatment outcome have led to conflicting results. A more profitable strategy appears to be to relate specific personality features rather than categories to treatment outcome. Definite conclusions are not yet warranted given a number of methodological problems in most of the studies discussed. Most studies into the effects of personality disorders on treatment outcome are difficult to interpret since personality disorders were assessed in patients who were treated in comparative therapy outcome studies, which means that patients in such studies are treated by different treatment methods. However, personality disorders may affect the outcome of different treatments in different ways. For example, a specific personality disorder (e.g. avoidant personality disorder) may have a negative effect on behavioural procedures whereas the effects of the same personality disorder on the
outcome of cognitive therapy may be negligible, because this treatment, in dealing with cognitive processes, may indirectly also deal with the personality problem. That personality disorders may specifically affect the outcome of different treatments is illustrated in a study by Tyrer, Seivewright, Ferguson, Murphy & Johnson (1993): Cognitive and behaviour therapy were found to be more effective in patients without a personality disorder, whereas drug treatment (primarily by anti-depressants) was found to be equally effective with patients with a personality disorder and without a personality disorder. Similarly, personality disorders were a negative predictor of outcome in cognitive therapy but not in drug treatment (fluvoxamine) (Black et al., 1994). In contrast, in the NIMH study personality disorders predicted worse functioning after treatment with interpersonal therapy and imipramine, but not after cognitive therapy (Shea et al., 1990).

Further, it should be noted that analyses are usually restricted to those patients who complete treatment. When data are taken into account of patients who drop out of treatment a different picture may emerge. In a study on cognitive therapy with generalized anxiety disorder patients (Sanderson, Beck, & McGinn, 1994) no differences in outcome of cognitive therapy were found between patients with and without a personality disorder. However, patients with a comorbid personality disorder were more likely to drop out of treatment. Van Velzen et al. (1995) found that drop out was significantly related to a comorbid depressive disorder in social phobic patients, and a trend was found for more dropouts from the social phobic group with severe personality disorders (cluster A and B). Also, all patients with a comorbid depressive disorder received a personality disorder diagnosis, therefore, it may be that this combined condition in social phobic patients (personality disorder and a depressive disorder) makes patients especially vulnerable to drop out of a behavioural treatment. In a study on bulimia nervosa (Coker, Vize, Wade & Cooper, 1993) dropouts were more likely to be diagnosed as having borderline personality disorder than patients who stayed in therapy. In the Dreesen et al. (1994) study on anxiety disorders, however, drop out was not related to personality disorder.

Another methodological confound relates to initial severity and comorbid depression. For example, in anxiety disorders there is considerable evidence that patients with a comorbid personality disorder have more severe symptoms and are more depressed than patients without a personality disorder (see Chapter 1). Researchers need to statistically control for these variables, which has hardly been done. When it is stated that personality disorders negatively influence treatment outcome for Axis I disorders, it should be noted that no clear evidence for a causal role of the personality disorder has been established. Most studies simply demonstrate that patients with a personality disorder do worse than patients without a personality disorder. This does not establish that the presence or absence of the personality disorder was the critical factor. Patients with a personality disorder, compared to those without a personality disorder, differ on a range of other
variables (e.g. severity or duration of the presenting Axis I disorder). Any of these other variables might be the critical elements influencing treatment outcome.

**Therapeutic relationship**

There are several reasons why patients with a personality disorder or personality disorder features may do less well in therapy than patients without such a disorder. Such patients often show poor compliance with therapeutic guidelines and homework assignments and low motivation for change. In these patients the relationship between therapist and patient may be rather important but patients with a personality disorder may particularly experience difficulties in establishing a therapeutic relationship. There is now considerable evidence that the outcome of behaviour therapy is related to the quality of the therapeutic relationship, although this evidence is correlational thus precluding causal interpretations. Most studies of cognitive-behaviour therapy have found that stronger alliances lead to less dropouts and greater improvement immediately after completion of therapy (Rau & Goldfried, 1994). Further, research findings indicate that alliance assessed as early as in the third or fourth therapy session is a good predictor of therapeutic outcome (Garfield, 1994). This emphasizes the importance of focusing on the therapeutic relationship early in therapy. A number of instruments are available to assess the therapeutic relationship. From the client-centred tradition, the Barret-Lennard Relationship Inventory (BLRI; Barret-Lennard, 1962) has been used to assess therapist's qualities of Empathy, Positive regard and Congruence as viewed by the patient. However, it is questionable how useful these dimensions are for cognitive-behaviour therapists. From a more eclectic approach stems the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989). It measures three components: The development of the therapeutic bond, agreement between therapist and patient on tasks, and agreement between therapist and patient on goals of therapy. Besides a patient and therapist form, an observer form is also available. Finally, the Therapist-Client Rating Scale (TCRS, Bennun, Hahlweg, Schindler & Langlotz, 1986) was constructed from a behavioural perspective, and is available in two forms: Ratings of the behaviour of the patient by the therapist and vice versa. Positive regard, Competency and Activity are rated by the patient. Positive regard, Self-disclosure and Cooperation are rated by the therapist.

Personality disorders can be conceptualized as rigid patterns of interpersonal relationships and as such it seems unlikely that such habitual patterns of relating would not affect the therapeutic relationship. Clinicians should be flexible in their therapeutic attitude towards patients with different personality disorders. Whereas the borderline patient is afraid of getting harmed by the therapist and will test how far the collaboration of the therapist will go, the avoidant personality disorder is afraid of being rejected and not really accepted by the therapist and may have

---

1 We would like to thank the anonymous reviewer for this remark.
difficulties in showing his vulnerable self (Beck & Freeman, 1990). In patients who lack the need of affiliation and basic trust, considerable therapist's effort is needed to develop a constructive therapeutic relationship. When the interpersonal relationships of a patient are characterized by mistrust and hostility, other therapists' behaviour may be required when patients are highly dependent and cling to their therapist. Rather than viewing such patients as "difficult", therapists better could deal with problems in the therapeutic relationship as (another) target for treatment. Unfortunately, none of the studies into the therapeutic relationship has investigated whether the quality of the therapeutic relationship is influenced by the personality disorder of the patient.

If the assessment reveals that personality problems may impede treatment progress, assessment of interpersonal styles may be considered. In a number of studies, a moderate association was found between interpersonal variables of the patient and quality of the therapeutic relationship (Henry, Strupp, Schacht & Gaston, 1994). The following instruments may be used to assess the interpersonal behaviour of the patient: Interpersonal Checklist (ICL, LaForge, 1955) or the Impact Message Inventory (IMI, Kiesler, Anchin, Perkins, Chirico, Kyle, & Federmanet, 1985). These instruments assess friendliness and dominance for both therapist and patient. It is postulated that friendly behaviour triggers friendly behaviour, whereas dominant behaviour triggers the opposite response, submissive behaviour. Here, the therapist could disrupt the vicious cycle of the patient's interpersonal behaviour by responding differently, in that way pressuring the patient to change (Kiesler, 1991).

Further, there is some evidence that personality disorder patients may affect therapist competence. A study on interpersonal therapy found therapist competence negatively affected by patients who were rated as difficult in the first few sessions (Foley, O'Malley, Rounsaville, Prusoff, & Weissman, 1987), and there are no a priori reasons why competence of behaviour therapist and cognitive therapist would not be influenced by "difficult behaviour" of patients with a personality disorder. Three essential aspects have been reported to be characteristic of a competent therapist: (a) a theoretical framework; (b) memory of the client issues; (c) skilful and appropriate use of interventions (Shaw & Dobson, 1988). Structured instruments of therapist competence need to be developed, the contemporary methods varying greatly, depending on the therapy model being taught (Beutler, Machado & Neufeldt, 1994). Training in the use of extensive treatment manuals (in which the rationale of treatment and guidelines for motivating patients and intervention techniques are described) may enhance the competence of the therapist. These methods will offer a clear structure in the session as well as over the sessions. When treating patients with a personality disorder, a clear structure seems to be an important aspect of treatment and may contribute to the quality of the therapeutic relationship.

Finally, it seems therapeutically wise to make a functional behavioural analysis of the interpersonal behaviour of a patient with a (co-morbid) personality
disorder and to adapt the treatment protocol accordingly (e.g. Persons & Bertagnolli, 1994; Pretzer & Hampel, 1994; Turkat & Maisto, 1985).

**Concluding remarks**

Although the personality disorder is a familiar concept in clinical practice, systematic research into this issue is of a much later date. Recently, studies are emerging from different disciplines, focusing on a number of issues: The concept and definition of the personality disorder, development of valid assessment instruments, prevalence of personality disorders in various populations and evaluation of treatment outcome for personality disorders and for Axis I disorders with a comorbid personality disorder. One of the major gains from these studies is the development of structured assessment instruments leading to greater accuracy in diagnosing personality disorders and cross-studies comparison. However, these gains also make clear that the categorical concept of personality disorder is disputable and dimensional alternatives are under investigation, with the Five-Factor Model of personality (Costa & McCrae, 1992) as one of the most frequently studied alternatives.

Despite the conceptual and methodological problems, which have been discussed in this chapter, some conclusions can be drawn. Personality disorders are diagnosed in about half of the patients with Axis I disorders of depression, anxiety disorders or eating disorder. A preponderance of personality disorders from the anxious cluster are found in these Axis I samples. The clinical picture of patients with a co-morbid personality disorder seems to differ from patients without a personality disorder. Patients with a personality disorder report more severe psychopathology, not necessarily related to their target (the primary diagnosis of the sample under study) Axis I disorder. For example, in anxiety disorders, depressive disorders are found to co-occur with a personality disorder. Although studies into the effect of personality disorders on treatment outcome have led to conflicting results, the clinical impression that personality disorders generally influence treatment negatively can no longer be supported. Encouraging results are obtained with cognitive-behavioural strategies for patients with personality disorders who complete treatment for an Axis I disorder. Future studies should take into account the level of severity of the target Axis I complaint and additional Axis I disorders which may also affect treatment outcome. Until now, most treatment outcome studies have only compared patients with or without a personality disorder. Future research should focus on the consequences of the specific types of personality disorders in relation to Axis I disorders.

Since some evidence is found that patients with a personality disorder tend to drop out of treatment, research should not only focus on treatment outcome but also on factors that influence dropout, like additional Axis I disorders and the therapeutic relationship. There are some clues that the latter might be influenced by the interpersonal style of the patient. Since a large part of the personality disorder
patient’s problems is of an interpersonal nature, the latter variable may be of great importance.

In order to get a more comprehensive view of the impact of personality disorders on treatment outcome and dropout, the following issues should be studied in more detail: (a) The relationship between personality disorders, target Axis I disorders and additional Axis I disorders and symptoms and their specific contribution to treatment outcome (including dropout); (b) The influence of the therapeutic relationship on treatment outcome; (c) The relationship between personality disorder, the interpersonal behaviour of the patient, the therapeutic relationship, and therapist competence and their specific contribution to treatment outcome.