The Psychotherapeutic Utility of the Five-Factor Model of Personality: A Clinician's Experience

Timothy R. Miller Stockton, CA

This article summarizes experience using the five-factor model of personality, operationalized by the NEO Personality Inventory (NEO-PI), to facilitate psychotherapy treatment with 119 private-practice, outpatient, psychotherapy patients and their family members over a period of 2 years. Trait theories such as the five-factor model implicitly challenge the premises of much clinical theory, yet they can be useful to clinicians, as they provide a detailed, accurate portrait of the client's needs, feelings, proximate motives, and interpersonal style. I suggest that: Neuroticism (N) influences the intensity and duration of the patient's distress, Extraversion (E) influences the patient's enthusiasm for treatment, Openness (O) influences the patient's reaction to the therapist's interventions, Agreeableness (A) influences the patient's reaction to the person of the therapist, and Conscientiousness (C) influences the patient's willingness to do the work of psychotherapy. Fundamental questions raised by the five-factor model about the nature of psychopathology and psychotherapy are discussed.

Because this article is a clinician's-eye-view of the five-factor model, some autobiographical information might be relevant. I am a psychologist in full-time private practice. Psychotherapy accounts for about two thirds of the clinical services I provide. I live and work in a medium-sized city in the central valley of California, not known for its prosperity or sophistication. I was trained in a professional school in which students are exposed to several equally plausible but incompatible approaches to treatment. Eager to avoid the obvious pitfalls of undisciplined eclecticism, yet unable to reject many of the treatment approaches I learned, I explored the possibility of matching treatment method to client according to the client's personality characteristics. These explorations at first seemed to fail. In retrospect, I believe that failure was inevitable in the absence of a strong taxonomy of personality. Taxonomies of plants and animals had to

be developed before nature surrendered many secrets to botanists and zoologists. I have come to suspect that a taxonomy of personality may make it possible for the first time for psychologists to understand the relationship between personality and complex networks of thinking, behavior, and feeling, such as those that arise in psychotherapy.

When I learned that a comprehensive taxonomy of personality had been developed and widely replicated, I once again became excited about the application of trait theory to the day-to-day work of the psychotherapist. I examined several published tests based on the five-factor model and ultimately chose the NEO Personality Inventory (NEO-PI; Costa & McCrae, 1985, 1989) for several reasons: It corresponds most clearly to the underlying model, its psychometric properties are excellent, it has an observer-rating form as well as a self-rating form, it has a short version (the NEO Five-Factor Inventory [NEO-FFI]), and its manual best facilitates interpretation for clinical purposes. I began to administer the NEO-PI (or occasionally, when time was short or subject cooperation was limited, the NEO-FFI) to all my adult and adolescent psychotherapy clients and my consultation clients when possible.

Since then I have tried to understand the relationship between personality characteristics on one hand, and presenting complaints, interpersonal dynamics, psychotherapy behavior, and psychotherapy outcome on the other. I believe that the understanding I have acquired so far has made me a more effective and empathic therapist, although more modest in the treatment goals I propose to my clients.

THE CLINICAL VALUE OF A TAXONOMY OF PERSONALITY

Psychotherapy is difficult to practice and impossible to master because real-world people are astoundingly diverse. Despite the advances in every branch of social science over the past century, the human landscape remains a wilderness. Authors of psychotherapy textbooks naturally employ theory to illuminate the cases of idealized, prototypical patients, but real patients in the consulting room seldom think, feel, or behave as those in the textbooks. For example: Some clients suffer excessively from life's inevitable bumps and jolts, whereas others seem to endure them without apparent difficulty, seeking help only in reaction to severe stressors. Some clients arrive for the therapy hour saying, "Thank God I'm here! I need so badly to talk. I didn't think I could make it through the week," but others consistently dread the therapy hour and feel relieved when it is over. Some clients are intrigued by an invitation to engage in a conversation with the ghost of their dead grandmother in an empty chair, whereas others find it exquisitely uncomfortable to behave in such a peculiar manner. Some clients are eager to accept the putative wisdom and good

intentions of the therapist, but others assume the therapist is a fraud or a fool until they see evidence to the contrary. Some clients will assiduously work toward goals established in the therapy hour, willing to endure discomfort and fatigue in exchange for the promise of personal growth, whereas others "forget" about behavioral goals and homework assignments, holding back from change if changing requires effort or pain.

These examples foreshadow the discussion that follows. They illustrate Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C) as they might affect the behavior and feeling of a psychotherapy client. I suggest that: N influences the intensity of the client's distress, E influences the client's enthusiasm for treatment, O influences the client's reaction to the therapist's interventions, A influences the client's reaction to the person of the therapist, and C influences the client's willingness to do the work of psychotherapy.

The five-factor model is a descriptive, taxonomic trait theory rather than an explanatory one. Trait theories have a long history in psychology, but they have not been popular among clinicians because they implicitly contradict the premises of much clinical theory. Clinicians are generally taught that certain human characteristics should be considered pathological, that the origins of pathological traits can be discerned from the client's history, and that once the origins of pathological traits are understood, they can be modified by various means, particularly insight. By contrast, trait theories erode the distinction between normal and pathological personality characteristics, they cast doubt on the clinician's ability to discern the origins of a client's personality, and they implicitly question the premise that psychotherapy can substantially modify personality.

At first glance, any trait model, including the five-factor model, might seem to have little to offer clinicians. However, there is a tradeoff. Trait theory is immediately helpful to the clinician in three particular ways. First, it helps the therapist anticipate and understand the client's private experience, because trait measures give a useful portrait of the client's feelings and needs. Second, it helps the therapist understand and anticipate the problems presented in treatment. Third, it helps the therapist formulate a practical treatment plan and anticipate the opportunities and pitfalls for treatment. Table 1 summarizes subsequent discussion of these benefits.

In this table, and in the later detailed discussion of the five factors, opposite poles of each dimension are contrasted one at a time. However, the therapist is cautioned to consider that, in real life, patients express all five factors simultaneously. In a later section, I consider just 1 of 10 possible pairwise combinations of the five factors—E and O—because it is important in selecting treatment method.

My conclusions regarding the value of the five-factor model are based on three sources of inference: first, what is already known about the five factors in the

TABLE 1
Treatment Characteristics Associated With Standing on the Five Factors

Factor and Pole	Clinical Presentation	Key Problems	Treatment Opportunities	Treatment Pitfalls
 N:				
High	A variety of painful feelings.	Full gamut of neurotic misery.	Psychological pain motivates compliance.	Existence likely to remain uncomfortable; high N cannot be interpreted away.
Low E:	Emotional blandness, especially if also low E.	Situational problems.	Wants and can benefit from advice and values clarification.	Emotional blandnes may be misunder- stood as defensiveness.
L. High	Needs to talk;	Excitable; if also	C (11 - +1	Pro di
·	needs people.	high N, unstable mood, interpersonal conflict.	Comfortable with less structured approaches; optimistic and energetic.	Talkativeness can blunt treatment focus.
Low	Reluctant to talk. Can feel overwhelmed by people.	Somber. If also high N, depression, withdrawal, apathy.	Comfortable with structured approaches.	Lacks enthusiasm for interaction with therapist.
O:		- /		
High	Likes variety, novelty; curious.	Problems vary, but concep- tualized in abstract, imaginative terms.	Prefers imaginative approaches.	Excessive curiosity can scatter resources.
Low	Discomfort and perplexity in reaction to novel experiences.	Problems vary, but concep- tualized in conventional, concrete terms.	Responds well to practical approaches: Education, support, behavior therapy.	Rigidity and lack of curiosity can be misunderstood as resistance.
\ :			cherapy.	
High	Genuinely compassionate and generous; sees the sweet side of life.	Easily exploited, naive, gullible; if high N, oversensitive to criticism.	Treatment alliance easily formed.	Accepts interpretations uncritically. Need to please therapist interferes with disclosure of transference.
				(continue

(continued)

TABLE 1 (Continued)

Factor and Pole	Clinical Presentation	Key Problems	Treatment Opportunities	Treatment Pitfalls
Low	Wants to be admired, to be "somebody." Sees bitter side of life.	Unpopular, overly competitive; lacks social support. Envious, suspicious, holds grudges.	Assertiveness and clear thinking about self-interest facilitate problem solving.	Hostility, skepticism toward therapist; difficult to form treatment alliance.
C:		•		
High	Loves accomplish- ment.	Overwork.	Works hard to benefit from treatment. Willing to tolerate discomfort and frustration.	(Possibly none.)
Low	Loves leisure.	Low achieve- ment, impulsivity, half-hearted problem solving.	(Possibly none.)	Unlikely to do home- work; likely to reject interven- tions that require hard work or toleration of discomfort.

day-to-day lives of ordinary people; second, other reports in the psychotherapy literature; and third, my clinical experience over the past 2 years, including some quantitative data. During that time, all my adult and older adolescent psychotherapy patients have taken the NEO-PI or NEO-FFI. In addition, I have administered one of these two tests to some family members of patients. The number of adolescents studied was small, so I discuss only adult subjects. Not all individuals sought psychotherapy. Some were family members of treatment seekers who became sufficiently involved with treatment to justify the request to take the test.

The sample consisted of 101 treatment seekers (91 with a diagnosed mental disorder according to the Diagnostic and Statistical Manual of Mental Disorders [3rd ed., rev.—DSM-III-R—American Psychiatric Association, 1987], 7 with no disorder, and 3 who could not be given a diagnosis with confidence) and 18 nontreatment seekers (family members of patients). This group is probably typical of an outpatient clinical sample; 63% were female. The range of ages was broad, though centered on early- to mid-adulthood. Most subjects were blue-collar workers; lower class and upper middle class subjects were represented in approximately equal numbers. The range of disorders was also quite broad, except that no patients were actively psychotic during the time of treatment.

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Referrals came from a diverse base. Patients were not referred for any particular method of treatment.

In most cases, the diagnosis was clear at the time of admission, but, in some cases, consistent with common clinical practice, the diagnosis evolved over a period of time. Although I had already administered the NEO-PI when I assigned the final diagnosis in these cases, I did not review NEO-PI scores and attempted to diagnose without reference to them.

Table 2 presents means and standard deviations of domain *T*-scores of the NEO-PI for the 119 subjects. As a group, they scored high to very high on N; average on E, A, and O; and average to low on C. Score variance was similar to that of the NEO-PI normative samples.

Treatment seekers who were assigned a DSM-III-R diagnosis were rated for treatment outcome if I had sufficient data to rate outcome with reasonable certainty. Outcome was grouped into five categories: very good (21 cases), good (27 cases), fair (16 cases), mixed (11 cases), and poor (4 cases). The rating criteria combined relative improvement with absolute level of functioning at treatment termination. This gave some advantage in outcome rating to the people who were functioning relatively well at the time of intake.

THE FIVE FACTORS IN CLINICAL CONTEXT

Although the NEO-PI provides information on specific facets of the N, E, and O domains, and although these scores support a more detailed understanding of the client, this article is concerned only with the clinical significance of the five broad factors. I discuss each in turn.

Neuroticism

Clinical presentation. N influences the intensity and persistence of the patient's distress. Eysenck (1947) was one of the first to describe N and to

TABLE 2
NEO-PI Domain *T-S*cores in a Clinical Sample

		M		
Scale	Treatment Seeking	Nontreatment Seeking	Total	SD
N	61.9	49.1ª	60.0	12.0
E	52.1	58.9ª	53.1	10.8
0	53.1	49.0	52.5	10.4
A	46.6	51.2°	47.3	9.0
C.	45.0	52.6ª	46.1	9.2

Note. Ns = 101 treatment seeking and 18 nontreatment seeking.

^aDifference between groups significant at p < .05.

explicate its significance. Since then, it has routinely emerged from factor analyses of objective personality and psychopathology inventories (Watson & Clark, 1984). The mean N score of the 101 treatment seekers in my sample was more than one full standard deviation above the means of the normative group and the nontreatment seekers (see Table 2). The 91 treatment seekers with a diagnosable mental disorder had a mean N score of 63.4. The 7 treatment seekers who did not meet the criteria for any DSM-III-R disorder were clearly different from the others; their mean score on N was 45.1, t(96) = 4.46, p < .001. Of the 101 treatment seekers, 25 scored 70 or higher on N; according to the NEO-PI norms, less than 3% of the general population would be expected to score this high on N. It seems likely that this concentration of people very high on N is typical in clinical samples.

The patients in this sample who scored very high on N were likely to meet the diagnostic criteria for relatively serious and potentially disabling disorders. For example, the 8 patients who were given the diagnosis of definite or probable borderline personality disorder had an average N score of 67, quite a high score. (These patients also had low scores on A and very low scores on C.)

Most of the 7 treatment seekers with no mental disorder were upset by the behavior of a spouse or a child. They made it clear that what they wanted was a disinterested party to help them think out loud and to offer some wise advice. In these cases a treatment focus never developed, because the patients sensed that they were not the cause of the problem, though they were open to my point of view. They generally terminated therapy after a few meetings, either feeling that they got what they came for or that the situation could not be improved.

Treatment implications. A therapist who wishes to plan treatment rationally must know where his or her patient stands on the N domain in order to interpret a presenting problem, intake diagnosis, or social history. For example, a patient relatively low on N who complains of recent onset of panic attacks probably should be treated differently from a high N patient with the same complaint. In the former case, the problem is more likely to be a reaction to a severe stressor of recent onset. In the latter case, the presenting problem is likely to mesh with a pattern of tension, worry, and dysphoria woven throughout the patient's life. To use a different example, knowledge of the N score of a patient who complains of depression in reaction to protracted marital difficulties can help the therapist assess the problem more accurately. Patients relatively low on N will not likely complain of depression in reaction to marital problems unless they are quite severe. Conversely, patients relatively high on N may overreact to less severe marital problems, and because their distress is chronic, the patient's depression is as likely to be a cause as a result of the marital problems.

Much of the recent literature on short-term psychotherapy has emphasized the importance of a treatment focus, and the evidence seems to be growing that this is an essential consideration in many forms of treatment (Strupp & Binder,

1984). Yet treatment focus selection is still more an art than a science. Knowing the client's N level can assist the therapist in selecting well. For low N patients, a good treatment focus might be a relatively isolated self-defeating behavior pattern or a strong emotional reaction to a recent stressor. With high N patients, it makes more sense for treatment to focus on more generic difficulties, such as regulation of mood, anxiety management, or chronic self-defeating behavior patterns. Setting clear and realistic treatment goals may be particularly important for high N patients, who may be further demoralized by the frustration of unrealistic expectations of treatment.

If my sample is typical, psychotherapists are likely to see relatively few clients low on N, and those they do encounter are more likely to be family members of identified patients. Most clinical textbooks provide little information regarding the diagnosis and treatment of the untroubled. Consequently, the clinician may be inclined to suspect that the happy, calm appearance of such individuals conceals anger and despair, of which the client is not aware. Certainly, both psychoanalytic theory and family systems theory encourage such inferences.

Is there any basis for suspecting that low N patients are seething caldrons of repressed negative affect? I do not think so. Research on the five-factor model in normal volunteer samples shows clearly that individuals who score low on N are seen by peers, spouses, and experts as being truly well-adjusted (McCrae, this issue). My experience with this clinical sample is entirely consistent with these findings: People low on N really are calm and untroubled. Their unhappy feelings are not intense or long lasting, and their behavior is likely to remain sensible and constructive, within the limits of their intelligence.

Outcome expectations. It might seem logical to assume that the primary purpose of psychotherapy is to lower N scores, but treatment can be conceptualized without the premise that N must be or can be substantially reduced. Although I did not collect pre- and posttreatment data on this sample, my experience suggests that, in successful cases, N scores probably change slightly at best, due mostly to moderate changes on one or two of the facet scales. To illustrate, patients with panic disorder may score 70 on N, with an Anxiety facet scale score of 80. It is not difficult to produce symptom relief in intelligent, well-motivated patients with panic disorder; when treatment is successful, it is likely that their Anxiety facet scale scores will decrease moderately. However, even after successful treatment, such patients will probably continue to suffer considerable generalized anxiety and they remain quite sensitive to fortune's slings and arrows. Consequently, it is reasonable to expect that their N domain scores dropped a few points at most. I have never seen a patient who entered treatment high on N and who subsequently terminated treatment seemingly average or low on N. These observations are consistent with Costa and McCrae (1988), who reported that all the five factors are quite stable over long periods of time. In spite of divorces, remarriages, education, changes in health, job

changes, retirement, births, and deaths, domain scores do not normally change substantially (McCrae & Costa, 1990).

In my sample, among patients with a diagnosable mental disorder, N was significantly correlated with the outcome measure, r=-.31, p<.01. It is not clear from the data whether this association reflects the fact that low N patients had less severe disorders to begin with or that they benefitted more from psychotherapy, as has been reported previously (Garfield, 1978). In any case, N scores at the beginning of treatment give some useful predictive information about the client's adjustment at the end of therapy.

Extraversion

Clinical presentation. E influences the client's enthusiasm for the process of psychotherapy and his or her expressiveness in treatment. The differences between high E and low E patients are hard to overlook. High E patients are more likely to be cheerful, to laugh and joke about their presenting complaints, and to assert their opinions to the therapist. They experience their emotions with greater intensity than their low E counterparts. At the outset of treatment, they are more likely to hit the ground running. I have seen high E clients spontaneously begin talking, with considerable depth of feeling, as I walked with them down the hall to my office on the occasion of their first psychotherapy visit. Such patients are likely to continue in the same mode throughout the course of treatment. At times I feel I must interrupt these patients in order to make interpretations or otherwise intervene. These people might seem like good patients, but the therapist must be alert to the possibility of a pseudo-alliance. For these patients, communicating and disclosing does not necessarily constitute an endorsement of the treatment. They also disclose their thoughts and fantasies to passing acquaintances and strangers.

High E patients may seem healthier to the therapist than low E patients with otherwise similar problems. This is a disservice to both groups. Extremes of E indicate the form that complaints and symptoms are likely to take (e.g., Wiggins & Pincus, 1989), not the likelihood that symptoms will arise or that functioning will be impaired. As Table 2 shows, clients in this sample did not differ from normals in the standardization sample in their level of E. (Nontreatment seekers who became involved in the therapy process were higher than average on E.) It is easy to underestimate the intensity of suffering in high E patients. I have found it useful to ask them to be quite specific and concrete in communicating how bad they feel about certain things. (For example, it sometimes helps to ask, "On a 1-to-10 scale, where 10 is the greatest anguish you can possibly imagine, how much pain did you feel at that moment?") Conversely, the somber, cheerless presentation of the troubled low E patient might cause the therapist to be unduly pessimistic.

Treatment implications. E likely accounts for the distinction between patients who eagerly anticipate each succeeding session and the patients who seem to dread each one. The explanation is hardly subtle or obscure. On the whole, extraverts are gregarious and like to talk, whereas introverts are not and do not. This matters, because most systems of psychotherapy involve considerable conversation, and low E patients rarely find themselves brimming over with words they must spill. This is not a purely academic concern: More-or-less silent patients do turn up in psychoanalysis, for example (Wallerstein, 1986). It would be incorrect to infer that less is in the mind of the low E patient. The important distinction is the extravert's greater inclination to translate mental contents into language and to share them with another person.

I recall one low E client who at first seemed a good candidate for brief psychodynamic psychotherapy. During the first three sessions he became increasingly uncomfortable, as I searched for the aplomb to handle long pauses in our dialog. In the fourth session, I shifted gears and started doing conventional cognitive therapy, a method I did not favor at the time. The client was visibly relieved. Toward the end of this session he said, "Gee, the therapy has finally begun. Did we really have to sit around and stare at each other for 3 weeks?"

The dimension of E (along with A) is also prominent in the interpersonal theories of personality and psychotherapy, which have recently been related to the five-factor model (McCrae & Costa, 1989; Trapnell & Wiggins, 1990). Interpersonal theorists (e.g., Kiesler, 1986) have contributed valuable insights about the psychotherapy process. The five-factor model facilitates further application of these insights by systematically relating them to other orthogonal dimensions of personality.

Outcome expectations. In my sample, E was positively correlated with outcome, r = .30, p = .01, although, in a multiple regression, it did not add to the predictive power of N. There was a trend for the least improvement to occur in the patients highest on N and lowest on E, but they constituted a small group. It may be that a certain minimum level of E is necessary to give clients the vigor and hope to cooperate with therapy and benefit from it. Other authors have reported findings regarding patient characteristics necessary for good psychotherapy outcome that are compatible with this supposition (e.g., Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988).

Like N, E is a strong predictor of well-being. But, just as psychotherapy can be usefully conceptualized as something other than an attempt to reduce N, it can also be understood as something other than an attempt to increase E. For example, psychotherapy might be understood as a process of helping unhappy people develop the hope, courage, and determination needed to go on loving and working, even though it often does not feel good to do so.

I am reminded of a couple I saw regularly for some time. The wife is rather low

E, high N, and consequently, rather low in her capacity for well-being. One of the most helpful aspects of treatment for her has been learning not to dread periods when she feels bad and not to blame her husband automatically when she does feel bad. She also came to understand that, despite these dysphoric periods, she is always able to regain her willingness to keep on loving others and living her life with integrity and purpose.

Openness

Clinical presentation. O influences the client's reaction to the interventions offered by the therapist. Low O psychotherapy patients resemble patients described as alexithymic (Lesser, 1981). They seem unable to fantasize or symbolize; their speech seems boring, pedantic, and overly conventional; and they do not easily understand or accept elementary psychodynamic interpretations.

These closed patients undoubtedly frustrate many therapists. They seem as though they unconsciously wish to defeat the purpose of treatment, and they can shake the confidence of a therapist whose usual interventions suddenly seem ineffectual. The existential-humanist school regards O as an end in itself (e.g., Rogers, 1961). The psychoanalytic school implicitly demands the ability to fantasize and symbolize; failure to do so is regarded as resistance, which the therapist is expected to help the client overcome. Thus, a high N, high O client who is able to fulfill the demands of the treatment model is going to seem healthier to most therapists than a high N, low O client who, despite considerable distress, free associates about cleaning the garage and the neighbor's barking dog. Therapists who understand the O domain will be less likely to make potentially harmful value judgments about such clients or themselves.

By comparison, high O patients are likely to be perceived by therapists as good patients; consequently, they are probably also more likely to be perceived as relatively healthy patients. Research on the five-factor model does not support this bias however, as N and O are uncorrelated. High O patients readily fantasize and symbolize. They have more vivid and emotional recollections of the past, including their childhood, and they are more capable of vivid internal imagery. Their speech is more likely to contain metaphors and analogies. They tend to have led varied and relatively unconventional lives. They are more willing to try new ways of thinking or relating to others. They accept odd behavioral prescriptions and paradoxical interventions. These characteristics make them interesting to talk with, at least for equally high O therapists.

However, extreme O can have some disadvantages. Very high N, very high O patients may reify their own metaphors. I recall a patient who used imaginary people and animals to represent her own feelings and impulses. These figures developed complicated, intense relationships that evolved in her imagination as she went through her daily routines; she would discuss these imaginings with

deep feeling during her therapy sessions, as if they involved real people in her life. It seemed necessary at times to help her "unsymbolize." Such phenomena might seem psychotic, but this patient suffered no other schizophrenic or schizotypal symptoms.

Treatment implications. Psychotherapy can be understood as the process of finding novel solutions to familiar problems. Some treatment methods are more unconventional than others, and clients differ in the extent to which they feel comfortable with novelty. Treatment methods can be rank-ordered according to the degree to which they require novel behavior and thinking from the client. Some clients seem to feel that unless you offer a really provocative approach you are not a serious therapist. Other clients make it clear that a genteel conversation is about as much as they are going to tolerate. This openness to novel experience is reflected in the client's O score. I have often heard clients low on O say something like this: "Some people need to lie on a couch and talk about their mother. My 'therapy' is working out at the gym." The communication is thinly disguised. These clients are not eager to experience themselves in new and unusual ways; they want therapy to be a reassuring, practical experience.

Treatment methods require varying degrees of openness to novel experience. For example, it is a fundamental premise of psychoanalysis (and related schools) that patients must discover unexpected, disturbing things about their unconscious wishes. What Freud did not anticipate is that some people are fascinated by this process, whereas others loathe it. That is not to say that high O people do not experience anxiety when they learn disturbing things about themselves. Rather, they seem to enjoy the anxiety the way some people enjoy the anxiety evoked by a horror film or a roller coaster. Other forms of treatment require a similar degree of O. Active imagination methods are prominent in the repertoire of Jungian analysts, Gestalt therapists, and hypnotherapists.

In contrast, some forms of treatment seem more conventional. Behavior therapy, for example, is often very straightforward, and I have yet to see a patient who finds the premises or methods of cognitive therapy to be strange or perplexing. Therapies that rely on emotional support are also easily tolerated by individuals who are closed to experience.

I suggested earlier that methods of therapy can also be ranked with regard to the amount of spontaneous speech and social interaction they require—characteristics related to the client's level of E. It may be possible to find the optimal form of treatment in a particular case by considering the client's scores on both E and O. For example, psychoanalysis requires that the patient speak freely about inner feelings and fantasies; such an approach may be best suited to the open extravert. By contrast, in cognitive therapy the therapist systematically interviews the patient in order to discern distressing internal dialog, and then guides the patient in formulating alternative inner speech. A closed introvert might find this approach more congenial. By classifying psychotherapies—or

therapeutic processes—along these two dimensions, it should be possible to match treatments to personalities. Certainly this approach would yield interesting hypotheses for future clinical research.

Outcome expectations. The relationship between O and treatment outcome will probably turn out to be complex. O is modestly correlated with IQ and education (Costa & McCrae, 1985), and there is some reason to believe that IQ and education predict psychotherapy outcome (Luborsky et al., 1988); so it seems reasonable to expect at least a small positive correlation between O and outcome in large clinical samples. However, the correlation may well be sensitive to the definition of good outcome. Clinician prejudice in favor of high O might affect outcome ratings. In future outcome research, it would be prudent to use outcome measures that are relatively insensitive to clinicians' biases about O. Beyond this, it would be reasonable to expect a complex interaction with therapist personality, other aspects of the patient's personality, diagnosis, and treatment method. For example, despite my best intentions, I enjoy high O clients more than low O patients, because I am high O myself. It is reasonable to expect that this countertransference problem is common, that it would affect the quality of the treatment alliance, and that it might ultimately affect outcome.

Some therapists might expect that self-referred patients would be more open, but the data in Table 2 show that the full range of variation in O is seen. In the outpatient sample discussed in this article, O was unrelated to outcome, possibly because I tried to follow my own advice about employing a broad repertoire of interventions and trying to choose them to fit the personality of the client.

Agreeableness

Clinical presentation. A influences the client's subjective reaction to the therapist, just as it influences the nature of the client's relationships with other people. High A clients either admire or feel sorry for the people around them, including those who victimize them. Their smiles are sunny and sweet. Their voices are melodious. Their humor is innocent, relatively lacking in irony and sarcasm. They rarely choose harsh words or concepts to describe their world. They want to be liked; they fear disapproval and conflict and will accept social subordination in order to avoid them. No wonder Hogan (1986) called this factor Likeability! Low A people may still seem warm, funny, and enthusiastic, especially if they are high on E, but they nevertheless establish a distinctive mood. If they smile, the smile is not a cozy, reassuring one; rather, it is usually stimulating or provocative. They like sarcastic or ironic humor, and they can make it hilarious. They are willing to risk making people uncomfortable in order to be admired or to achieve interpersonal influence; they become distressed in subordinate situations.

The presenting complaints of high A and low A patients do not differ

dramatically. Once the history is better known, if often seems that high A patients have been victimized or exploited by others in the past; often the pattern continues into the present. Ironically, high A patients will not necessarily describe themselves as naive, easily exploited, or currently victimized. Because they are doing what comes naturally to them and because they effortlessly forgive those who exploit them, they often fail to see the pattern. Conversely, low A people often do complain of victimization or excessive naivete, because they vividly remember every time they have lost the advantage in some kind of an interpersonal power struggle.

Treatment implications. I have found it useful to know where clients stand on A in the earliest stages of treatment. If they are low on A, I can safely expect skepticism about what I have to offer, sensitivity to my minor failures of empathy, and slowness in developing a truly collaborative relationship. A treatment alliance can still be achieved, but only if the therapist anticipates transference problems and is prepared to wrestle with them. Otherwise, treatment will probably go badly, in accordance with the frequently reported finding that the quality of the therapeutic alliance is among the strongest predictors of treatment outcome (Luborsky et al., 1988). Transference can be perplexing with high E, low A patients, because their enthusiastic manner can conceal skepticism and mistrust. A patient like this might seem warm, eager, and responsive to interventions, yet privately belittle the therapist.

High A people tend to present the opposite kind of transference phenomena. They are often willing to form a therapeutic alliance immediately, and they tend to accept interpretations uncritically. This is, of course, flattering to the therapist, but not necessarily adaptive behavior on the part of the client. If the maladaptiveness of this style is pointed out to high A clients, they will agree with that interpretation too. The solution is to make the client's gullibility and willingness to be exploited a continuing object of scrutiny as treatment, transference, and countertransference unfold. I have an intelligent client, high on C and A, to whom I must have said 20 times something along these lines: "This is an excellent opportunity for you to make up your own mind even though you risk offending me or someone else. I refuse to brainwash you, even if you allow me to do it." This seems like a conventional and obvious intervention, but this client's reaction is consistent. First she feels surprised, then anxious, and finally refreshed. It is interesting to note that this client has been to several previous therapists who, with the best of intentions, imposed their belief systems on her in ways that were probably harmful. Though a college graduate with an IQ of 120 or higher, she had no inkling that this had taken place.

Outcome expectations. In this study, A neither predicted outcome independent of N nor distinguished between treatment seekers and nontreatment seekers. In general, very low A patients are probably more likely to initiate early

and unsatisfactory treatment termination, but the level of A necessary for this to take place may be so low that such cases will be rather rare in most clinical populations. An important area for future research would be to examine whether low A patients have a higher therapy dropout or termination rate.

Conscientiousness

Clinical presentation. Yalom (1989) stated in his popular book, Love's Executioner and Other Tales of Psychotherapy:

Freedom not only requires us to bear responsibility for our life choices but also posits that change requires an act of will. Though will is a concept therapists seldom use explicitly, we nonetheless devote much effort to influencing a patient's will.... When years of interpretation have failed to generate change, we may begin to make direct appeals to the will.... It is through willing, the mainspring of action, that our freedom is enacted. (p. 9)

If therapists are ambivalent about the will, it is because it seems more a relative of the soul than the brain, more a philosophical construct than a scientific one. In fact, research has documented enduring and pervasive individual differences in organization, persistence, dutifulness, and self-discipline; these traits are classified in the five-factor model as elements of C.

From the therapist's point of view, people who score high on C are more likely to make an effort, to tolerate discomfort, and to delay gratification of impulses and desires. Both in the world and in therapy, this is a difference that makes a difference. C has been found to predict academic and vocational success (Digman & Takemoto-Chock, 1981). High C people are perceived by others to be relatively intelligent, even though C is not correlated with IQ (McCrae & Costa, in press). Less intelligent but high C people are the turtles who outrun the hares in a long race.

Generally speaking, the people I have seen in therapy who are substantially below average in C have been relatively unsuccessful in school and in work. Worldly success is not the only important thing in life, but it is a prerequisite for most of the things the average person desires: a secure, adequate income; social status; an attractive, competent mate; a comfortable home; and so on. People low in C are less likely to attain these things, but they are no less likely to desire them.

In the clinical sample discussed in this article, the treatment seekers with DSM-III-R disorders scored substantially lower on C (M=44.5) than the treatment seekers without mental disorders (M=53.7), t(96)=2.68, p<.01. The reason for this is unclear. Low C scores may have a previously unexpected relationship with the nature and severity of psychopathology. Or, it may be that high C people prefer to solve their own problems rather than hoping that a third party (i.e., a therapist) might offer easy solutions.

I have come to think of high N, low E, and low C as the "misery triad." People with this configuration seem to have little capacity for well-being to start with; then, to compound their misery, they have usually not excelled in any particular arena of life. They tend to be vocational and financial failures. Their futures look dreary, and not just because they are depressed. If anything, they are depressed because their futures look so dreary. In accordance with these observations, the eight borderline personality disorder patients in my clinical sample had a mean *T*-score of 39.1 on C. This is a full standard deviation lower than normal.

Treatment implications. A mismatch between effort and desire will become apparent in psychotherapy. Patients low in C will still want to be relieved of their symptoms and problems in living, but in my experience they are less likely to make an effort to change their behavior, or endure psychological or physical discomfort, even when they recognize the desirability of doing so. Many diverse examples come to mind. (a) A 28-year-old woman admits that her marriage is hopeless, that her husband makes many promises but never keeps them, and that she has little to gain and much to lose by letting their relationship linger on. She has already moved out, but she continues to spend most evenings with her husband because she feels sad and lonely when she stays away. (b) A middleaged man with a high IQ is mildly depressed because he must take a poorly paid entry-level job and try to save money while learning new work skills. He returns to the therapy hour week after week, insisting that he cannot find any job at all. A review of his job search strategy reveals that he has only applied for two jobs in the past week. (c) A woman who has hated herself for years because she is overweight is encouraged to keep an eating diary and calculate her daily caloric intake. Despite continuing encouragement, she never buys a calorie counter and never records any of her meals. Her explanation is she is afraid she will be upset if she learns how much she really eats. We agree that it might be a good thing if she got upset about her eating habits. She continues to claim that low self-esteem due to obesity is her main problem, and she never complies with the plan. (d) A client is interested in dreams, but cannot often recall them. He is encouraged on several occasions to keep a note pad by the bedside and to make notes of dreams immediately upon awakening. A month passes. He has "forgotten" to make notes of his dreams.

It seems reasonable to consider such lackadaisical, noncompliant behavior as "resistant." This may be a useful assumption if skillful confrontation or interpretation can modify it, but, in my experience, apparent resistance to change associated with low C is impervious to therapeutic attempts at modification. What, then, is to be done about low C patients? I do not know. I have tried interpretation, confrontation, treatment contracts, paradoxical approaches, self-monitoring, and other methods with little apparent success. Low C might represent one of the absolute limits to the power of psychotherapy. It may be

that for very low C clients treatment must be primarily palliative or supportive. These comments apply primarily to clients who score below 40 on the NEO-PI C scale. I recall several clients who scored between 40 and 50 on C who attended therapy sessions reliably, worked hard during the therapy hour, and made financial sacrifices to pay for treatment. They still found it difficult to endure discomfort in their daily lives, but gradually found the courage and determination to make necessary but painful changes.

By contrast, high C patients are surprisingly willing and able to cooperate with treatment, if the mode of treatment is otherwise suitable for them. I recall a client with mild obsessive—compulsive disorder who was also very high on C. I suggested that she make an unsightly smudge on her kitchen wall and leave it there. The poor woman turned white with anxiety at my suggestion, but immediately agreed that it would be for the best. She left it there for a month, suffering severe distress every time she saw it. She refused to remove it, even when I became concerned that she was pushing herself too hard. After a month she became able to relax around the smudge and to laugh at her former anxiety. It was a rewarding experience for both of us; the pain and effort invested made the victory seem sweeter.

Outcome expectations. Given these comments on C, it is not surprising that C was significantly correlated with a good outcome, r=.35, p<.01, in this clinical sample. The association remained significant in a multiple regression after controlling for N. Psychotherapy outcome may depend implicitly on the effort made by the patient. If this is so, then good outcome will likely be associated with C in other studies. Outcome may improve with low C clients if therapists can learn how better to inspire or cajole them.

This finding emphasizes the importance of objective personality tests that assess all five personality factors. The Minnesota Multiphasic Personality Inventory (MMPI), for example, primarily measures N and E. It is weakly sensitive to O and A, though it is difficult or impossible to ascertain these dimensions from commonly used scales. The C domain is completely unrepresented on the MMPI (Johnson, Butcher, Null, & Johnson, 1984).

CONCLUSIONS

I have discussed how I believe each of the five factors influences a client's clinical presentation, how therapists might productively respond to them, and how treatment outcome is affected. This discussion has mixed several sources of data with some speculation, though I have tried to keep speculation grounded in basic knowledge about the five dimensions of personality and fundamental, well-accepted principles of treatment. This article casts a broad net, as it attempts to cover the entire scope of human personality and the entire scope of

psychotherapy. If it has served a useful purpose, it has been to alert clinicians to the possibility that the five-factor model can relate patient personality, presenting complaint, treatment plan, and treatment outcome to each other in a reasonable, systematic way, without loss of empathy or compassion for the patient and without limiting the drama or profundity of the therapy process.

If the model presented here is successful, then other implications for treatment become apparent. First, many clinical theorists have conceded that no one treatment model seems generally superior and that much treatment benefit seems to arise from nonspecific factors common to many or all models. Recent enthusiasm for integrative and eclectic treatment models has arisen from this point of view. However, previous models of personality may not have been adequate to elucidate the relationship between presenting problem, patient personality, and treatment response. A contingent-eclectic treatment model, responsive to client personality, might be more effective than a generic treatment model intended to maximize nonspecific curative factors.

Second, the five-factor model appears to have tremendous potential to assist clinicians who intervene in marriages, families, or organizations. Certain combinations of personality characteristics within a social unit probably have inevitable consequences for interpersonal interaction. Understanding these can assist the family therapist or organizational consultant in selecting interventions likely to do the most good and the least harm.

Third, by recognizing the great diversity of individual differences among people, the five-factor model raises the possibility of a new approach to humanistic philosophy and psychology. The humanistic point of view is dedicated to "appreciating the unique experiential world of each individual" (Yalom, 1989, p. 19), yet it may be seen explicitly to value high O over low O (Rogers, 1961), and it seems implicitly to favor high A over low A, high E over low E, and high C over low C-the opposite positions being considered unfortunate or pathological deviations from the ideal (Bugental, 1964). The five-factor model suggests the possibility of more objective and compassionate discourse regarding the varieties of human character.

Finally, the five-factor model of personality may also be able to elucidate the personality of the therapist, its effect on the therapist's theoretical and technical predispositions, its interaction with the personality of the client, and the consequent transference and countertransference phenomena. If successful, this effort could create a rich new source of clinical wisdom. The merits of competing clinical theories and techniques have been debated for a generation or more. New theories and techniques have emerged, but few old ones have been dismissed, and the possibility of consensus has become increasingly remote. If value-neutral personality characteristics of the proponents of competing schools can be established as antecedents of their clinical preferences, then the debate may be able to proceed more productively, with a new atmosphere of mutual accommodation and respect.

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Timothy R. Miller 2155 West March Lane Suite 2B Stockton, CA 95207

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