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Therapist Attitudes and Patient Outcomes

III. A Latent Class (LC) Analysis of Therapists

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Abstract

Background: Previous research has reported large differences in treatment results between individual therapists practicing the same type of psychotherapy, but little is as yet known about the factors explaining this variation. In previous studies the authors have found associations with therapeutic attitudes as measured by the TASC 2 scales.

Methods: A sample of 160 therapists were clustered in a nonparametric LC regression modelling of their patients' repeated self-ratings on the SCL-90 across stages in psychotherapeutic treatment. This classification was then explored in relation with the therapists' TASC 2 scores.

Results: Five classes were identified differing widely in terms of the patients' outcome trajectories. Membership in these classes was significantly influenced by the therapists' scores on the TASC 2 scales. The adjustment, neutrality, and artistry scales of the TASC 2 were found specifically discriminative. A discriminant analysis confirmed the findings in general. Collectively, the TASC 2 scales were able to assign 59% of the therapists to their correct latent class, a reduction from chance by 39%.

Conclusions: Therapists with a psychoanalytic or eclectic orientation are systematically different in terms of the outcomes they tend to contribute to with their patients. This variation is partly accounted for by differences in their therapeutic attitudes.

Therapist Attitudes and Patient Outcomes

III. A Latent Class Analysis of Therapists

In their recent review of therapist variables Beutler et al. (2004) conclude that "[r]esearch on therapist personality, well-being, and personal values is sparse but has [nevertheless] produced some interesting findings. … promising effects have been noted with respect to a variety of attitudes and values" (p. 292). Whereas Beutler and co-workers prefer to consider the congruence between therapist and patient in attitudes and values, this paper focuses on the therapist's values and attitudes in therapeutic matters. This is an area with a long history but apparently of little current interest (Ambühl, Orlinsky & SPR Collaborative Research Network, 1997; Fey, 1958; Fiedler, 1950a, b; McNair & Lorr, 1964; Pope, 1977; Rice, Fey & Kepecs, 1972; Rice, Gurman & Razin, 1974; Sundland, 1977; Sundland & Barker, 1962; Wallach & Strupp, 1964; Weissman, Goldschmid & Stein, 1971; Wogan & Norcross, 1985). Also, little is known about the relationship between such attitudes and the therapist's treatment results (Blatt, Sanislow, Zuroff & Pilkonis, 1996; Lafferty, Beutler & Crago, 1989; Howard, Orlinsky & Trattner, 1970).

In a previous paper we have presented a set of therapeutic attitude scales (Sandell et al., 2004) as part of a comprehensive therapist questionnaire, Therapeutic Identity (ThId). On the basis of a series of factor analyses in a random sample of licensed Swedish therapists, nine factors were identified. Corresponding factor scales were developed, called the Therapist Attitudes Scales (TASC 2).[1] The scales have been found to predict the self-designated theoretical orientations of the therapists and to discriminate reliably between therapists with different levels of professional experience and different varieties of training. We were also able to identify **four clusters** of therapists based on their therapeutic attitudes. These were interpreted primarily on the basis of their associations with variables related to the therapists' training. One was a cognitive/behavioural cluster, comprising 14% of the national sample. Another consisted of therapists with classical psychoanalytic attitudes (32%). The two remaining clusters were interpreted as consisting of therapists with more eclectic attitudes, high on scales where the cognitive/behavioral cluster was high but also high on scales where the psychoanalytic cluster was high. One of these two clusters was closer to the

psychoanalytic cluster (33%), the other closer to the cognitive/behavioural cluster (22%). The cluster profiles are displayed in Figure 1, upper panel.

(Insert Figure 1)

In a following study (Grant & Sandell, 2004) we applied the TASC scales to another sample of therapists in the Stockholm Outcome of Psychoanalysis and Psychotherapy Project (STOPPP). This sample was linked to a sample of patients on which we have outcome data at different stages of treatment and post-treatment. On the basis of their TASC scores these therapists were assigned to the standard, national clusters. We then compared these clusters on the basis of the therapists' treatment results with their patients. When we split the treatments into psychotherapies and psychoanalyses, we found one cluster deviating significantly from the others. Patients in psychotherapy—but not psychoanalysis—with therapists in the psychoanalytic cluster did significantly worse than patients with therapists in the other clusters. This was interpreted as a negative transfer of psychoanalytic attitudes—and possibly also technique—onto psychotherapy, creating what we chose to call "as-if analyses."

In a further study (Sandell et al., in press) we compared two groups of cases in this same sample. Whereas the associations between the therapist's attitudes and his or her patients' symptom distress were not significantly different from 0 in a group in ongoing treatment, there was a significant multiple correlation ($\underline{R} = .51$) after termination of treatment. This was interpreted as a moderator effect of the therapists' attitudes on the relation between treatment stage and symptom distress.

In this study, using non-parametric latent class analysis (LCA) in a multi-level framework, we have identified classes of therapists on the basis of their patients' outcome trajectories and explored the associations between these latent classes and the TASC 2 scales.

Method

Design

The design has been extensively described by Blomberg, Lazar & Sandell (2001) and Sandell et al. (2000). It was a quasi-experimental, partly cross-sectional, partly longitudinal design, based on a postal three-wave panel survey on patients in psychotherapy or psychoanalysis and

a survey on their therapists. The procedures for the collection and analysis of data are outlined in the following section.

Procedure

(1) A sample of 756 persons in subsidized treatment or on the waiting-list for such subsidization was selected so as to ensure that it consisted of people who had terminated their treatments as well as people who were in ongoing treatment or had not yet started treatment.

(2) A questionnaire, including a number of self-rating scales, was distributed to these 756 persons in 1994, and in 1995 and 1996 to all who had responded the first year. The return rates of 78%, 86% and 89%, respectively, produced a panel of 445 persons (59%).

(3) With three possible treatment states (pre-treatment, in-treatment, post-treatment) and three panel waves, it was possible to establish an ordinal time scale with nine successive steps, corresponding to stages in treatment: three before treatment, three during treatment, and three after treatment. We located each patient in the panel each year on this scale, which henceforth will be referred to as the treatment stage scale or, simply, the stage scale. Twelve patients never commenced treatment. They were excluded from further analyses, and this reduced the stage scale to eight steps.

(4) In 1995 a questionnaire was distributed to the 294 therapists with patients in the sample. After four reminders, 209 (71%) had returned their questionnaires.

(5) Given attrition among patients as well as therapists, data from both the patient and the therapist was available for 327 cases, with 167 therapists. This was but slightly more than would be expected by chance (756 x 0.59 x 0.71 = 317).

(6) The basic model for our analyses was to use nonparametric latent class (LC) regression analysis to cluster the therapists on the basis of their patients' outcome trajectories. The TASC 2 scales were then explored in relation to the class variable.

Therapists and treatments

All 294 therapists with patients in the sample were licensed by the National Board of Health and Social Welfare. Some were fully trained psychoanalysts as well, members of either of the two psychoanalytic societies in Sweden. In the autumn of 1995 a postal questionnaire, Therapeutic Identity (ThId), was distributed to all. Analyses of the 29% attrition showed no systematic sources of dropout.

Of the 167 therapists who had provided data and whose patients had provided data as well, 127 (76%) were women and 40 men. Their mean age was 54.2 (6.4). The majority were psychologists (77%), 10% social workers. Therapist training was psychoanalytic (6%); university degree (15%); various equivalent private institutes with different orientations (71%); and child psychotherapeutic (9%). Sixty percent had supervisory training. Mean number of years working as a psychotherapist after licensing was 10 (SD = 4) and before licensing (under supervision) 11 years (SD = 4.5).

Of the therapists 95% claimed to be "rather strongly" or "strongly" orientated towards a psychoanalytic or psychodynamic theoretical position, 16% claiming also to share, "strongly" or "rather strongly," an eclectic position.

On the basis of the referrals, psychotherapy was defined as once- or twice-a-week treatment with a licensed psychotherapist, and psychoanalysis as three-to-five-times-a-week treatment with a fully trained psychoanalyst, member of either of the two psychoanalytic societies in Sweden belonging to the International Psychoanalytical Association. Both kinds were planned to be long-term, according to the referrals, and all were individual treatments. Low-dose therapies were defined as an "other" category, for treatments that fit neither of the above definitions, such as brief therapy, low-frequency supportive therapy, family therapy, group therapy, etc. These treatments typically took place while the patient was waiting for the therapy she or he was referred to.

The treatments were not manualized or standardized with respect to duration, session frequency, technique, etc. Without a manual, further specification of the treatments has to be ex post facto, in terms of provider characteristics, on the basis of information in the ThId. Further details on the treatment providers are given in Blomberg et al. (2001) and in Sandell et al. (2002).

Therapist Questionnaire

The ThId contains about 150 questions and/or items, divided into six sections: Of these, sections (e) to (f) of the ThId have three sets of items to chart the therapists' therapeutic attitudes (Grant & Sandell, 2004; Sandell et al., 2004). Section (e) had two sets of items. One of them (e:1) had 33 items to rate one's belief in the curative value of each of a number of ingredients of psychotherapy (e.g., "Helping the patient avoid anxiety-provoking situations"). The items were rated on five-point Likert-type scales, from 0 (does not help at all) to 4 (helps a lot). The items were collected from various sources: experiences of the authors, suggestions

from colleagues, theoretical literature, and earlier instruments (Rice et al., 1974; Sundland & Barker, 1962; Wallach & Strupp, 1964; Weissman et al., 1971).

The second set (e:2) had another 31 items to describe one's manner of conducting psychotherapy in the general case (e.g., "I do not answer personal questions from the patient"). In both sets, the items were rated on five-point scales, from 0 (do not agree at all) to 4 (agree very much). Again, the items were of our own design on the basis of our own experiences, suggestions from colleagues, and theoretical literature, and also included adaptations and free translations of items from earlier instruments (Rice et al., 1974; Sundland & Barker, 1962; Wallach & Strupp, 1964; Weissman et al., 1971).

Section (f:1) contained a series of 16 items relating to more basic assumptions about the nature of psychotherapy and the nature of the human mind ("What are your general beliefs about the human mind and about psychotherapy?"). The items were inspired by Hjelle and Ziegler (1981), Sundland and Barker (1962), and Wallach and Strupp (1964). The rating scales were continuous bipolar scales, with each of the poles offering a completion of the item stem (e.g., "Psychotherapy may be described ... as a science—as a form of art"). The respondents were instructed to indicate their agreement with either pole by a cross mark anywhere on the line between the poles. Five-step scores were derived by partitioning the line in five equal parts.

The items in sections (e:1), (e:2) and (f:1) were grouped in nine scales on the basis of factor analyses in a random sample of 325 licensed psychotherapists throughout Sweden, of which 227 had responded (70%) (Sandell et al., 2004). The scales, presented in the Appendix, were adjustment, insight, kindness, neutrality, supportiveness, self-doubt, irrationality, artistry, and pessimism. The internal consistencies of the scales varied between .50 and .87 and showed generally strong validity in relation to self-designated theoretical orientation and to training in different therapeutic modalities.

Patients

The typical patient in the 327 cases sample was a woman (77%), single (58%) or divorced (20%), with children (53%), of Swedish origin (95%). The majority (78%) had at least some university education and typically worked in the health care, education, or social sector. The mean age was 38.9 (SD = 8.3). The number of psychotherapy cases was 264, whereas 53 were psychoanalysis cases and 10 cases in "low-dose" therapies.

Assessment Procedures

The Well-being Questionnaire (henceforth the WbQ) was designed to explore the patients' symptoms, social relations, and morale. The following standard self-rating scales were included: The Symptom Check List (SCL-90; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974); the Social Adjustment Scale (SAS; Weissman & Bothwell, 1976; Weissman, Prusoff, Thompson, Harding & Myers, 1978), in a revised version to suit Swedish users in the 1990s; and the Sense of Coherence Scale (SOCS; Antonovsky, 1987). Principal components analyses of the three mean scores across all items showed, in each wave of the panel, that a single component accounted for at least 82% of the total variance and that the so-called General Symptom Index (GSI; the mean score across all 90 items) of the SCL-90 had the largest loading, > .89 in all waves. We concluded that the GSI adequately reflected general well-being and decided to present the results on the GSI, only. The internal consistency estimates for the GSI in the three waves varied between .83 and .96. The GSI was analysed in its square root form (GSIsqrt) so as to counteract its tendencies to curvilinearity (Sandell, Blomberg & Lazar, 2002).

Statistical analyses

Nonparametric LC regression modelling with repeated measures (Vermunt & van Dijk, 2001) was used to analyse the GSIsqrt. Nonparametric LC models are less subject to biases due to violations of conventional assumptions about linearity, normality, homoscedasticity, independence, and homogeneity. An LC model introduces a latent nominal variable for classes or clusters. This class variable serves as a moderator in interaction with one or several observed predictors. Typically, LC regression analysis does four things simultaneously; (a) identifies latent classes; (b) estimates regression models for each class; (c) tests covariates to predict class membership; (d) assigns cases to classes. When the dependent variable is a repeated measure, LC regression may be seen as a case of multilevel modelling.

We used the Latent GOLD 4.0 software (Garson, 2001; Vermunt & Magidson, 2005) and analysed the GSIsqrt with therapists as the units of analysis. Thus, using the SPSS Aggregate routine, we averaged each therapist's patients' self-ratings by treatment stage and thus obtained, for each therapist, a vector of his or her patients' mean GSIsqrt scores by stage. Due to randomly missing data, complete data remained for 160 therapists and 659 observations spread across the stage scale.

Thus, each therapist was classified on the basis of his or her patients' repeated GSIsqrt scores across the stage scale, and a nonparametric regression model was estimated for each class of therapists. Such a model for each class condenses the development of the therapists' patients in terms of a regression coefficient, representing these patients' average rate of change across stages, and an intercept, representing their mean pre-treatment state as measured by the GSIsqrt. We simultaneously explored the associations between this classification of the therapists and his or her TASC 2 scores by including the TASC 2 scales as covariates. Using a routine in Latent GOLD each scale was transformed to a seven-category scale so as to obtain as rectangular distributions as possible.

Norm Groups

To establish a standard for evaluating patient outcome in relation to "normality," the WbQ was also distributed to two non-clinical groups: (a) a random community sample of 400 persons between 20 and 69 years of age in Stockholm County; and (b) a sample of 250 psychology students. The psychology students were in an introductory class, outside the national professional psychologists training program. As a group the pooled non-clinical groups were demographically quite similar to the outcome sample, with a majority of women (79 v. 77%), single (62 v. 58%) or divorced (10 v. 20%), of Swedish origin (93 v. 95%) with at least some university training (100 v. 78%). Their mean age was 33.9 (10.1) years, compared to 38.9 (SD = 8.3) among the patients. The norm groups responded to the questionnaire only once, in May 1994. Without any reminders, the response rates in the two groups were 37% and 79%, respectively. The responders in the two groups had almost identical mean values on the self-rating scales, and they were therefore collapsed into one group. The group was used merely for descriptive comparison purposes.

Hypothesis

The general hypothesis tested was that there is a systematic heterogeneity among the therapists in their patients' development across the stage scale and that this heterogeneity is partly accounted for by the therapists' therapeutic attitudes as reflected in their TASC 2 scores.

Results

Preliminary tests of the design

In order to be able to interpret the regression coefficients in terms of patients'change as a function of stages in treatment, moderated by therapist attitudes, it is of vital importance that

the stage scale was not confounded with other variables. We therefore explored the associations between the stage scale and a number of variables pertaining to the therapists, the patients, and the treatments. Testing more than 30 variables for their correlations with time, we found only one with a near-significant correlation: patients' number of previous treatments in psychiatric open care, -.10, $\underline{p}$ =.055. We concluded that our stage scale was free of obvious strong confounds.

Classification of therapists

In an initial run, without any covariates, LC models with increasing numbers of classes were compared. The minimum Bayesian Information Criterion (BIC), based on the log-likelihood and considering the degrees of freedom, was used to determine the number of classes to five. We then reran the five classes model, now including the nine TASC 2 scales as covariates. The solution accounted for 64% of the total variance. The contribution of the TASC 2 scales brought a 39% decrease in classification errors ($\underline{\lambda}$), corresponding to $\underline{R}^2$ = .28. In Table 1 the estimated parameters are displayed, and the mean trajectories of GSIsqrt across the stages scale for each class are displayed in Figure 1.

(Insert Table 1 and Figure 1)

Considering the $\underline{\beta}$ coefficients (the intercepts and the slopes), it will be seen that there was one class (#1; 32%) with very good treatment results with their patients and one (#2; 27%) with also quite respectable results. Also, there were two classes of therapists (#4 and #5; 11% each) whose patients, at an average, developed in a disadvantageous direction, significantly so in both classes. The remaining class (#3; 20%) had a mean change parameter that did not deviate significantly from 0.

In regard to the covariates, as may be seen from the Wald estimates, there were significant ($\underline{p}$ <.05) overall associations with artistry, neutrality, and adjustment. Kindness and pessimism tended to differentiate between the clusters at a somewhat less than significant level ($\underline{p}$s .076 and .075, respectively).

Specifically, the $\underline{\gamma}$ parameters in the lower part of Table 1 indicate that membership in class #1 was significantly predicted by high scores on kindness and a trend ($\underline{p}$ <.10) towards higher scores on neutrality. Membership in class #2 was significantly predicted by high scores

on neutrality and artistry and low scores on adjustment, irrationality and pessimism, and there was also a trend for higher scores on kindness. In contrast, class #3 membership was significantly predicted by low scores on kindness. Membership in class #4 (with negative treatment results) was predicted by high scores on adjustment and pessimism and low scores on neutrality and artistry. There was as well a trend towards higher scores on irrationality. Finally, membership in class #5 (also with negative treatment results) was not well predicted at all; there was only a trend towards low scores on adjustment.

A discriminant analysis of the five classes of therapists, using the nine TASC 2 scales as independent variables, generally confirmed the above findings. Two significant discriminant functions accounted for altogether 95% of the between-classes variance, χ^2 (36; $\underline{N}$ = 160) = 147.52 and χ^2 (24; $\underline{N}$ = 160) = 64.95, $\underline{p}$s <.001. The first function discriminated between classes #1 and 4, on the one hand, and #2 and 3, on the other. Pessimism and irrationality had the highest positive standardized discriminant coefficients and artistry the most negative one. The second discriminant function differentiated between classes #1 and 2, on the one hand, and #3 and 4 on the other. Kindness, neutrality, and artistry had the highest positive weights and adjustment the most negative weight in the discriminant function. Class #5 had intermediate values on both functions and occupied a small middle area in the midst of the twodimensional space. A 59% hit rate in the classification based on the discriminant functions differs favourably from the 20% expected by chance, corresponding to the $\underline{\lambda}$ = .39. Class #5 membership was the most difficult to predict, with a hit rate of not more than 29%, in starkest contrast to class #4 membership, with 75%. It should be realized that the hit rates would be reduced on cross-validation.

In Figure 2 we show the mean profiles of the five classes across the TASC 2 scales, in $\underline{z}$ scores. One may notice that the univariate differences and significances did not agree perfectly with the multivariate findings of the LC analysis and the discriminant analysis. The largest between-groups ranges were on kindness, artistry, and pessimism. Univariately, the class of most effective therapists (#1) was identified by especially high scores on kindness, irrationality and pessimism (and not very low scores on any other scales), whereas the class of therapists with the most negative treatment outcomes (#4) had especially low mean scores on neutrality, irrationality and artistry and higher scores than any other group on adjustment and insight.

(Insert Figure 2)

Discussion

We consider two conclusions as justified: (a) Therapists with a psychoanalytic or eclectic orientation (on a psychoanalytic base) are very different in terms of the outcomes they tend to contribute to with their patients. (b) These differences are partly associated with differences in their therapeutic attitudes.

Based on the LC analysis and the discriminant analysis, we have found that kindness and neutrality, positively, and adjustment, negatively, most consistently discriminated between the good and the bad outcome classes (#1 and #4). Artistry and, with opposite signs, irrationality and pessimism tended to discriminate between the two classes on the good end of the outcome dimension (#1 and #2), Interestingly enough, irrationality and pessimism also differentiated multivariately the same way between the worst outcome class (#4) and the "flat" outcome class (#3).

Because the present study used the same data base (although not exactly the same sample) as our previous study (Sandell et al., in press), there is no surprise finding convergence between the results of the two. Thus, kindness and artistry were found in both studies contributing strongly to positive outcomes. More interesting in this context, however, may be the divergences between the studies. Neutrality, rather important in the present study, was significant in the previous one merely as a suppressor. Adjustment, irrationality, and pessimism figured rather frequently in the classifications in the present study but appeared quite unimportant in the previous one. This may have to do with the fact that we found a U-shaped relation between positive outcome and attitudes when we explored the associations with outcome post hoc by trichotomizing these three TASC 2 variables. Curvilinear relations will of course be overlooked by ordinary correlations.

The meaning of these U-curved relations may be difficult to understand. Why should both high and low scores on an attitude scale be associated with good outcomes, or both good and bad outcomes be associated with high attitude scores? The present study implies that the prediction of outcome is a matter of classification on the basis of constellations of attitude scores, not linear combinations. Thus, to take but one example, given the $\underline{\gamma}$ parameters, the class of most effective therapists (#1) differs most sharply from the worst outcome class (#4)

on neutrality, from the second worst outcome class (#5) on irrationality, from the flat outcome class (#3) on kindness, and from the second best outcome class (#2) on pessimism. No single linear combination of these scores will predict outcome, particularly as high scores on irrationality and pessimism also characterize the worst outcome class but then in conjunction with high scores on adjustment and insight.

Whatever these complications, it appears from the present findings that therapists with good treatment results are characterized by high TASC 2 scores on kindness and neutrality, maybe also on supportiveness, although the importance of that scale was concealed by its rather strong association with kindness. Whereas some therapists may believe that being kind and neutral are incompatible, this is really based on a misreading of the psychoanalytic literature. Neutrality is to avoid being intrusive with one's wishes, beliefs and values; kindness is to let the patient feel one's consideration and good will. These in combination appear in this study to create the good relationship that over and over has been shown so important for good therapy outcome (e.g., Norcross, 2002; Wampold, 2001). Our previous studies have shown that neither gender nor age has any strong associations to these factors, and neither was closely associated with self-assigned theoretical orientations or therapist experience variables.

Contrariwise, therapists with particularly bad outcomes among their patients (class #4) were characterized by relatively high scores on adjustment and pessimism. One might speculate that this profile reflects a general defeatism and resignation on the part of these therapists, the belief that change is difficult and the best one can do is to adapt to the circumstances. Low scores on artistry and neutrality should also alert therapists to reconsider their beliefs and values. It is interesting to note that the therapists in this class were more often correctly identified than any other class on the basis of the discriminant functions. Maybe these associations, if replicated, should be used in the selection of therapists and therapist students?

However, it should be noted that no direct causality is implied by the present findings. What is implied are moderator effects; in a LC regression model, the latent class variable interacts with the observed predictors—the attitude scales, in this study—which means that class serves as a moderator variable on attitudes or vice versa (Magidson & Vermunt, 2002), that is, on treatment outcome. Certainly, the therapeutic attitudes cannot have any effects unless manifested as opinion statements or—more likely—acted out through therapeutic interventions. To what extent there is an exact convergence between these interventions and

the implications of the attitudes' remains to be shown. Thus, for instance, it is not certain whether therapists high on neutrality really are more neutral in their behaviour towards their patients or that therapists high on artistry really are more creative or intuitive in their work. We hold it as likely that there is positive correlation, however.

Although many have argued that the outcome variation among therapists in general is quite large, even when they are purporting to do the same kind of therapy (Beutler, 1997; Blatt et al., 1996; Crits-Christoph et al., 1991; Crits-Christoph & Mintz, 1991; Lafferty et al., 1989; Lambert, 1990; Luborsky et al., 1986; Luborsky, McLellan, Diguer, Woody & Seligman, 1997; Luborsky, McLellan, Woody, O'Brien & Auerbach, 1985; Wampold, 2001), the present findings should not be immediately generalized to other, non-psychodynamic, therapist populations. However, given the quite dramatic differences in patient outcomes between the therapist classes, one may well ask how meaningful is the question, "Is psychoanalytically orientated therapy effective?" Obviously, that depends to large extent on who the therapist is. Indeed, the largest class, making up almost 1/3 of the therapists, have what may only be regarded as outstandingly good average results, and another 1/4 (and a little more) also have impressive treatment results, moving their average patient from well up in the clinical range to the normal mean level. But that leaves about 1/5 with results that are probably not good enough in their patients' views, and another 1/5 with outright bad results with their average patient, in the worst cases moving her or him from a sub-clinical level to the border of the clinical range. Although, on a probability basis, psychoanalytically orientated therapists may be expected to produce a good outcome, there appears to be systematic differences between them, such that some may not be expected to do so. Attitudes seem to help predict that, but what else? And what do these therapists really do, on the basis of their attitudes and other possible predictive factors? Maybe the research focus in the psychotherapy area had better shift from treatments to the treatment providers (Beutler et al., 2004)?

References

Ambühl, H., Orlinsky, D., & SPR Collaborative Research Network (1997). Zum Einfluss der theoretischen Orientierung auf die psychotherapeutische Praxis. Psychotherapeut, 42, 290-298.

Antonovsky, A. (1987). Unraveling the Mystery of Health: How People Manage Stress and Stay Well. San Francisco: Jossey-Bass.

Beutler, L. E. (1997). The psychotherapist as a neglected variable in psychotherapy: An illustration by reference to the role of therapist experience and training. Clinical

Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., & Wong, E. (2004). Therapist variables. In M. J. Lambert (Ed.), Bergin and Garfield's Handbook of Psychotherapy and Behavior Change (5th ed., pp. 227-306). New York: Wiley.

Blatt, S. J., Sanislow, C. A., Zuroff, D. C., & Pilkonis, P. A. (1996). Characteristics of effective therapists: Further analyses of data from the National Institute of Mental Health Treatment of Depression Collaborative Research Program. Journal of Consulting and Clinical Psychology, 64, 1276-1284.

Blomberg, J., Lazar, A., & Sandell, R. (2001). Outcome of patients in long-term psychoanalytical treatments. First findings of the Stockholm Outcome of Psychotherapy and Psychoanalysis (STOPP) study. Psychotherapy Research, 11, 361-382.

Crits-Christoph, P., & Mintz, J. (1991). Implications of therapist effects for the design and analysis of comparative studies of psychotherapies. Journal of Consulting and Clinical Psychology, 59, 20-26.

Crits-Christoph, P., Carroll, K., Perry, K., Luborsky, L., McLellan, A. T., Woody, G. E., Thompson, L., Gallagher, D., & Zitrin, C. (1991). Meta-analysis of therapist effects in psychotherapy outcome studies. Psychotherapy Research, 1, 81-91.

Derogatis, L. R., & Lazarus, L. (1994). SCL-90-R, Brief Symptom Inventory, and matching clinical ratings scales. In M. E. Maruish (Ed.), The Use of Psychological Testing for Treatment Planning and Outcome Assessment (pp. 217-248). Hillsdale, N.J.: Lawrence Erlbaum.

Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symtom Checklist (HSCL): A self-report symtom inventory. Behavioral Science, 19, 1-15.

Fey, W. F. (1958). Doctrine and experience: Their influence upon the psychotherapist. Journal of Consulting Psychology, 22, 403-409.

Fiedler, F. E. (1950a). The concept of the ideal therapeutic relationship. Journal of Consulting Psychology, 14, 239-245.

Fiedler, F. E. (1950b). Comparison of therapeutic relationships in psychoanalytic, nondirective, and Adlerian therapy. Journal of Consulting Psychology, 14, 436-445.

Garson, G. D. (2001). Software reviews. Latent Gold. Social Science Computer Review, 19, 369-378.

Grant, J., & Sandell, R. (2004). Close family or mere neighbours? Some empirical data on the differences between psychoanalysis and psychotherapy. In P. Richardson, C. Renlund & H. Kächele (Eds.), Research on Psychoanalytic Psychotherapy in Adults (pp. 81-108). London: Karnac.

Hjelle, L. A. & Zigler, D. J. (1992). Personality Theories: Basic Assumptions, Research, and Applications (3rd ed.). New York: McGraw-Hill.

Howard, K. I., Orlinsky, D. E., & Trattner, J. H. (1970). Therapist orientation and patient experience in psychotherapy. Journal of Counseling Psychology, 17, 263-270.

Lafferty, P., Beutler, L. E., & Crago, M. (1989). Differences between more and less effective psychotherapists: A study of select therapist variables. Journal of Consulting and Clinical Psychology, 57, 76-80.

Lambert, M. J. (1990). The individual therapist's contribution to psychotherapy process and outcome. Clinical Psychology Review, 9, 469-485.

Luborsky, L., Crits-Christoph, P., McLellan, A. T., Woody, G., Piper, W., Liberman, B., Imber, S., & Pilkonis, P. (1986). Do therapists vary much in their success? Findings from four outcome studies. American Journal of Ortopsychiatry, 56, 501-521.

Luborsky, L., McLellan, A. T., Diguer, L., Woody, G., & Seligman, D. A. (1997). The psychotherapist matters: Comparison of outcomes across twenty-two therapists and seven patient samples. Clinical Psychology--Science & Practice, 4, 53-65.

Luborsky, L., McLellan, A. T., Woody, G. E., O'Brien, C. P., & Auerbach, A. (1985). Therapist success and its determinants. Archives of General Psychiatry, 42, 602-611.

Magidson, J., & Vermunt, J. K. (2002). Latent class models. Belmont, MA: Statistical Innovations Inc. (Available through www.statisticalinnovations.com).

McNair, D. M., & Lorr, M. (1964). An analysis of professed psychotherapeutic techniques. Journal of Consulting Psychology, 28, 265-271.

Norcross, J. C. (Ed.) (2002). Psychotherapy Relationships that Work. Therapist Contributions and Responsiveness to Patients. New York: Oxford University Press.

Pope, B. (1977). Research on therapeutic style. In A. S. Gurman & A. M. Razin (Eds.), Effective Psychotherapy: A Handbook of Research (pp. 356-394). New York: Pergamon.

Rice, D. G., Fey, W. F., & Kepecs, J. G. (1972). Therapist experience and "style" as factors in co-therapy. Family Process, 11, 1-12.

Rice, D. G., Gurman, A. S., & Razin, A. M. (1974). Therapist sex, "style," and theoretical orientation. Journal of Nervous and Mental Disease, 159, 413-421.

Sandell, R., Blomberg, J., & Lazar, A. (2002). Time matters. On temporal interactions in psychoanalysis and long-term psychotherapy. Psychotherapy Research, 12, 39-58.

Sandell, R., Blomberg, J., Lazar, A., Carlsson, J., Broberg, J, & Schubert, J. (2000). Varieties of long-term outcome among patients in psychoanalysis and long-term psychotherapy. A review of findings in the Stockholm Outcome of Psychoanalysis and Psychotherapy Project (STOPPP). International Journal of Psychoanalysis, 81, 921-942.

Sandell, R., Carlsson, J., Schubert, J. Broberg, J., Lazar, A., & Blomberg, J. (2002). Varieties of therapeutic experience and their associations with patient outcome. European Psychotherapy, 3, 17-25.

Sandell, R., Carlsson, J., Schubert, J. Broberg, J., Lazar, A., & Grant, J. (2004). Therapist attitudes and patient outcomes. I. Development and validation of the Therapeutic Attitudes Scales (TASC 2). Psychotherapy Research, 14, 471-486.

Sandell, R., Carlsson, J., Schubert, J. Broberg, J., Lazar, A., & Grant, J. (in press). Therapist attitudes and patient outcomes. II. Therapist attitudes moderate change during treatment. Psychotherapy Research.

Sundland, D. M. (1977). Theoretical orientations of psychotherapists. In A. S. Gurman & A. M. Razin (Eds.), Effective Psychotherapy: A Handbook of Research (pp. 189-219). New York: Pergamon.

Sundland, D. M. & Barker, E. N. (1962). The orientations of psychotherapists. Journal of Consulting Psychology, 26, 201-212.

Vermunt, J. K. & van Dijk, L. A. (2001). A non-parametric random coefficient approach: The latent class regression model. Multilevel Modelling Newsletter, 13(2), 6-13.

Vermunt, J. K. & Magidson, J. (2003). Latent GOLD 4.0 User's Guide. Belmont, MA: Statistical Innovations Inc.

Wallach, M. S., & Strupp, H. H. (1964). Dimensions of psychotherapists' activity. Journal of Consulting Psychology, 28, 120-125.

Wampold, B. E. (2001). The Great Psychotherapy Debate. Models, Methods, and Findings. Mahwah, NJ: Lawrence Erlbaum.

Weissman, H. N., Goldschmid, M. L., & Stein, D. D. (1971). Psychotherapeutic orientation and training: Their relation to the practices of clinical psychologists. Journal of Consulting and Clinical Psychology, 37, 31-37.

Weissman, M. M., & Bothwell, S. (1976). Assessment of social adjustment by patient self-report. Archives of General Psychiatry, 33, 1111-1115.

Weissman, M. M., Prusoff, B. A., Thompson, W. D., Harding, P. S., & Myers, J. K. (1978). Social adjustment by self-report in a community sample and in psychiatric outpatients. Journal of Nervous and Mental Disease, 166, 317-326.

Wogan, M., & Norcross, J. C. (1985). Dimensions of therapeutic skills and techniques: Empirical identification, therapist correlates, and predictive utility. Psychotherapy, 22, 63-74.

Footnotes

[1] Based on preliminary analyses, an initial and somewhat different set of scales has been presented by Grant and Sandell (2004) as the TASC. The scales used here (TASC 2) have been refined and redefined on the basis of further analyses.

Table 1.

Characteristics of the LCA-derived classes

Class #	1	2	3	4	5	Wald
Class size (%)	31	27	20	11	11	
R^2	.57	.31	.03	.09	.17	
β parameters						
Intercept	1.29†††	0.86†††	1.03†††	1.19†††	0.46†††	2034.53***
Slope	-0.149***	-0.055***	-0.019	0.035*	0.069**	180.41***
γ parameters						
Adjustment	0.33	-1.81**	0.50	-1.02(*)	2.01*	10.12*
Insight	-0.35	-0.33	-0.82	0.07	1.43	3.12
Kindness	1.16*	0.74(*)	-1.24*	0.15	-0.80	8.45(*)
Neutrality	1.19(*)	1.32*	-0.73	0.30	-2.08*	11.52*
Supportiveness	0.17	0.49	-0.53	0.18	-0.30	1.48
Self-doubt	0.30	0.44	0.25	0.33	-1.32	2.70
Irrationality	1.05	-1.13*	-0.76	-0.76	1.61(*)	6.63
Artistry	0.00	2.05***	0.71	0.40	-3.16**	12.82*
Pessimism	1.23	-1.54*	-1.68	0.13	1.86*	8.51(*)

††† p <.001 (one-tailed tests)

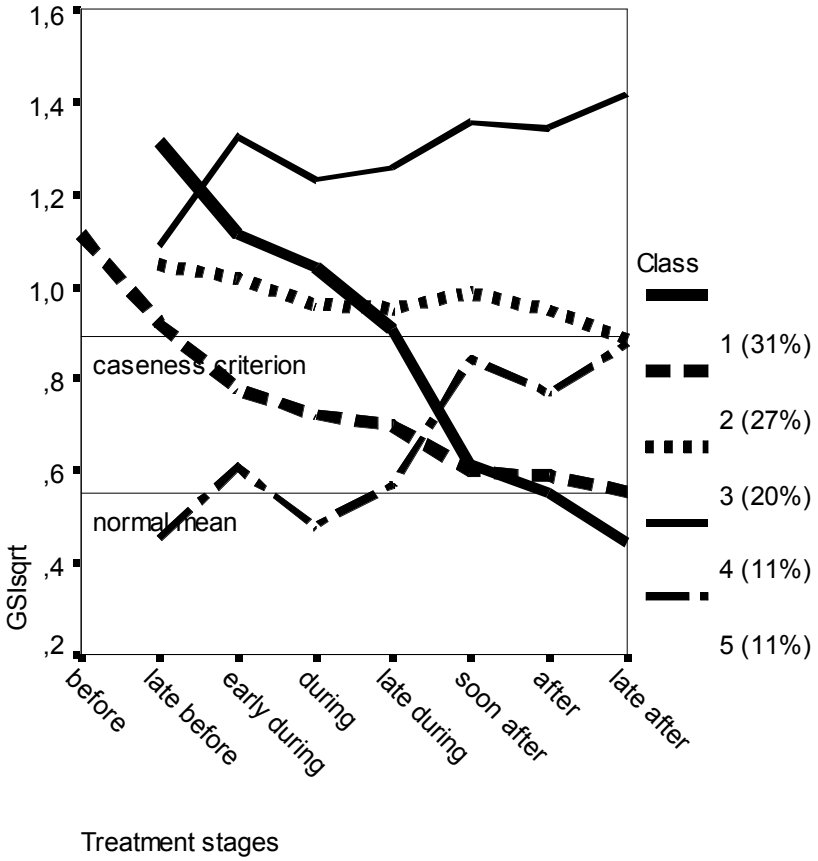
*** p <.001; ** p <.01; * p <.05; (*) p <.10 (two-tailed tests)

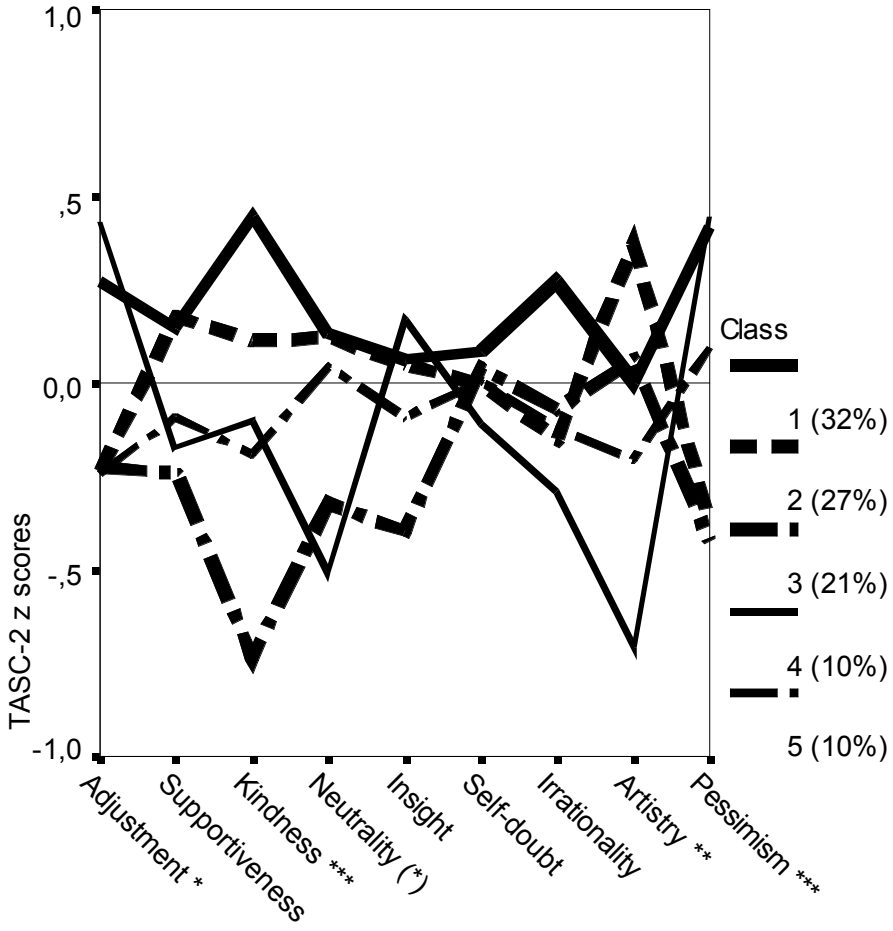
Note. The β parameters refer to the values of the intercepts and slopes when the outcome variable, GSI, was regressed on the time stage scale. The γ parameters refer to the strength of the association between class membership and the attitude variables.

Figure captions

Figure 1. Mean trajectories on the GSIsqrt across stages in treatment for patients with therapists in different LCA-derived clusters with the TASC 2 scales as covariates. (Reference lines refer to normal mean and the "caseness criterion" [Derogatis & Lazarus, 1994] distinguishing the 10% highest-scoring persons in a normal population.)

Figure 2. Mean profiles for therapists in different LCA-derived clusters across the TASC 2 scales. *** $p < .001$; ** $p < .01$; * $p < .05$; (*) $p < .10$ (two-tailed tests)


1,6
1,4
1,2
1,0
,8
,6
,4
,2
GSIsqrt
caseness criterion
normal mean
Class
1 (31%)
2 (27%)
3 (20%)
4 (11%)
5 (11%)
before
late before
early during
during
late during
soon after
after
late after
Treatment stages


1,0
,5
0,0
-,5
-1,0
TASC-2 z scores
Class
1 (32%)
2 (27%)
3 (21%)
4 (10%)
5 (10%)
Adjustment *
Supportiveness
Kindness ***
Neutrality (*)
Insight
Self-doubt
Irrationality
Artistry **
Pessimism ***

Appendix

The TASC 2 scales

Curative Factors ("What do you think contributes to long-term and stable therapeutic change?")

Adjustment α = .82 (.83 in norm sample)	Giving the patient concrete goals Working for the patient's adjustment to prevailing social circumstances Stimulating the patient to think about his/her problems in more positive ways Helping the patient to avoid repeating old mistakes Helping the patient avoid anxiety-provoking situations Working with the patient's symptoms Giving the patient concrete advice Helping the patient to adapt or adjust to his/her symptoms Helping the patient to become reality-orientated Letting the therapist take the initiative and lead the sessions Helping the patient to control his/her emotions Educating the patient about his/her symptoms and psychic problems Helping the patient to forget painful experiences
Insight α = .72 (.87 in norm sample)	Helping the patient to see the connections between his/her problems and childhood Helping the patient to understand that old reactions and relations are being repeated with the therapist Working with the patient's defences Helping the patient to understand that old behaviour and relations are being repeated

	Supporting the patient in the therapy to reflect on early painful experiences
	Helping the patient to remember and confront possible sexual abuse
	Working with the patient's childhood memories
	Bringing the patient's sexuality to the fore
	Giving the patient the opportunity to work with his/her dreams
	Interpreting the patient's body language
	Helping the patient to clarify his/her feelings
	Letting the patient act out his/her feelings (catharsis)
	Letting the patient herself/himself take the initiative in the therapy
Kindness	Being a warm and kind therapist
α = .81	Making the patient feel well liked by the therapist
(.82 in norm sample)	Supporting and encouraging the patient
	Consideration and good care-taking
	Letting the patient get things off his/her chest
Therapeutic Style Factors ("What are you like as a therapist?")	
Neutrality	I do not answer personal questions from the patient
α = .74	I keep my personal opinions and circumstances completely outside the therapy
(.79 in norm sample)	I do not express my own feelings in the sessions
	I am more neutral than personal in therapy
	My verbal interventions are brief and concise
	If a patient asks, I might agree to talk with one of his/her relatives (R)
	My countertransference is an important instrument in my work
	I avoid physical contact with the patient
	Keeping the therapeutic frame is fundamental in my work

	I want the patient to develop strong feelings in the therapy
Supportiveness α = .75 (.75 in norm sample)	I often put questions to the patient It is important to order and structure the material I always make the therapeutic goals explicit to myself during a therapy I always communicate the therapeutic goals to the patient in the beginning of a therapy I have a positive attitude towards extra sessions I am active in sessions It is important to convey hope to the patient I do not want the patient to develop strong feelings towards me as a person I am anxious for the patient to achieve his/her life goals
Self-doubt α = .54 (.50 in norm sample)	I do best with patients who are similar to myself My involvement with the patient's life goals is an obstacle to therapeutic work I do not allow long periods of silence during the therapy session I doubt my own ability to contain the patient's feelings I easily frustrate the patient I find it difficult to deal with the patient's aggression
<u>Basic Assumptions Factors</u>	
Irrationality α = .66 (.67 in norm sample)	By nature, man is ... rational / irrational Human behaviour is governed ... by free will / by uncontrollable factors Human behaviour is governed ... by external, objective factors / internal, subjective factors Psychotherapeutic work is governed by … conscious processes / unconscious processes
Artistry	Psychotherapy may be described ... as a form of art / as a science (R)

α = .63 (.57 in norm sample)	Psychotherapy may be described ... as a craft / as free creative work
	Therapeutic work is governed ... by training / by personality
	Psychotherapeutic work is governed by … intuition / systematic thinking (R)
	Psychotherapeutic work is governed by … relativistic views / absolute convictions (R)
Pessimism α = .30 (.48 in norm sample)	The underlying principles of human behaviour are ... completely understandable / not at all understandable
	Humans may develop ... infinitely/not at all
	Psychotherapeutic work is governed by the idea ... that everything may be understood/that not everything may be understood
	Personality is fundamentally … changeable / unchangeable
	Personality is formed by … heredity / environment (R)

(R) Reversed scoring of item