SPECIAL ARTICLE

Psychoanalysis today

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The paper discusses the precarious position of psychoanalysis, a therapeutic approach which historically has defined itself by freedom from constraint and counted treatment length not in terms of number of sessions but in terms of years, in today's era of empirically validated treatments and brief structured interventions. The evidence that exists for the effectiveness of psychoanalysis as a treatment for psychological disorder is reviewed. The evidence base is significant and growing, but less than might meet criteria for an empirically based therapy. The author goes on to argue that the absence of evidence may be symptomatic of the epistemic difficulties that psychoanalysis faces in the context of 21st century psychiatry, and examines some of the philosophical problems faced by psychoanalysis as a model of the mind. Finally some changes necessary in order to ensure a future for psychoanalysis and psychoanalytic therapies within psychiatry are suggested.

Key words: Psychoanalysis, psychodynamic therapy, psychotherapy, psychoanalytic theory, empirically validated treatments, review

Psychoanalysis today is an embattled discipline. What hope is there in the era of empirically validated treatments (1), which prizes brief structured interventions, for a therapeutic approach which defines itself by freedom from constraint and preconception (2), and counts treatment length not in terms of number of sessions but in terms of years? Can psychoanalysis ever demonstrate its effectiveness, let alone cost-effectiveness? After all, is psychoanalysis not a qualitatively different form of therapy which must surely require a qualitatively different kind of metric to reflect variations in its outcome? Symptom change as a sole indicator of therapeutic benefit must indeed be considered crude in relation to the complex interpersonal processes which evolve over the many hundreds of sessions of the average 3-5 times weekly psychoanalytic treatment. Most psychoanalysts are sceptical about outcome investigations.

Surprisingly, given this unpropitious backdrop, there is, in fact, some suggestive evidence for the effectiveness of psychoanalysis as a treatment for psychological disorder. The evidence in relation to psychoanalytic outcomes was recently overviewed by Gabbard et al (3), and suggestions for enriching this literature with ongoing naturalistic follow-along investigations were offered. But the absence of evidence is only part of the problem. Indeed, it may be symptomatic of the scientific difficulties that psychoanalysis faces in the 21st century. I will review the evidence base of psychoanalytic treatments and go on to examine in more detail the problems faced by psychoanalysis as a body of ideas rather than as a mode of treatment.

DATA GATHERING AND PSYCHOANALYSIS

Psychoanalysts emulating the founder of the discipline take special pride in discovery. This has led to an abundance of psychoanalytic ideas. Yet this very overabundance of clinically rooted concepts is beginning to threaten the clinical enterprise (4). The plethora of clinical strategies and techniques that are not all mutually compatible creates almost insurmountable problems in the transmission of psychoanalytic knowledge and skills (5). Sadly, this also leads to resistance to the systematization of psychoanalytic knowledge, since those whose frame of reference depends on ambiguity and polymorphy can be threatened by the systematization of clinical reasoning. The source of the problem of theoretical diversity lies in psychoanalytic methods of data-gathering. As is well known, data is not the plural of anecdote. Psychoanalytic practice has profound limitations as a form of research. Psychoanalytic theory precludes the possibility that psychoanalysts can be adequate observers of their clinical work. The discovery of the pervasiveness of countertransference has totally discredited Freud's clinician-researcher model. In the absence of a genuine research tradition, academic disciplines will appropriately distance themselves from psychoanalytic study, in much the same way that they hold journalism at arm's length.

Progress in disciplines concerned with the mind has been remarkable. Excluding information from these disciplines is a high risk strategy at a time when interdisciplinary collaboration is perceived as the driving force of knowledge acquisition. Modern science is almost exclusively interdisciplinary. Many major universities have been restructured to facilitate interdisciplinary work. The impetus is for the abolition of discipline based departments and the re-configuring of medical faculties in terms of interdisciplinary research groupings (scientists working on similar problems regardless of their discipline of origin). It is likely that many basic questions that psychoanalysts have not been able adequately to answer, such as how psychological therapy cures, will only be illuminated by interdisciplinary (neuroscientific) research.

The last 30 years' advances in all the neurosciences have negated the reasons for the earlier psychoanalytic disregard of this field (6). Neuroscientists are no longer just concerned with cognitive disabilities or so-called organic disor-

ders (7,8). Recent reviews of neuroscientific work confirm that many of Freud's original observations, not least the pervasive influence of non-conscious processes and the organizing function of emotions for thinking, have found confirmation in laboratory studies (9,10). If Freud were alive today, he would be keenly interested in new knowledge about brain functioning, such as how neural nets develop in relation to the quality of early relationships, the location of specific capacities with functional scans, the discoveries of molecular genetics and behavioral genomics (11) and he would surely not have abandoned his cherished *Project for a Scientific Psychology* (12), the abortive work in which he attempted to develop a neural model of behavior. Genetics has progressed particularly rapidly, and mechanisms that underpin and sustain a complex gene-environment interaction belie early assumptions about constitutional disabilities (13). In fact, for the past 15-20 years the field of neuroscience has been wide open for input from those with an adequate understanding of environmental determinants of development and adaptation.

It may be that the difficulty in pinpointing the curative factors in psychoanalytic treatment is directly related to the limitations of the uniquely clinical basis for psychoanalytic inquiry. The impact of psychoanalysis cannot be fully appreciated from clinical material alone. The repetition of patterns of emotional arousal in association with the interpretive process elaborates and strengthens structures of meaning and emotional response. This may have far-reaching effects, I would argue, even on the functioning of the brain and the expression of genetic potential. A range of studies have already suggested that the impact of psychotherapy can be seen in alterations in brain activity, using brain imaging techniques (14-16). These studies as a group provide a rationale for the hope that intensive psychoanalytic treatment might meaningfully affect biological as well as psychological vulnerability. This field is in its infancy but is progressing so fast that it seems highly likely that many future psychoanalytic discoveries about the mind will be made in conjunction and collaboration with biological science.

HOW PSYCHOANALYSIS WILL (COULD) BENEFIT FROM AN INTERDISCIPLINARY DIALOGUE

Whilst clinical psychoanalysis needs little help in getting to know an individual's subjectivity in the most detailed way possible, when we wish to generalize to a comprehensive model of the human mind, the discipline can no longer exist on its own. A general psychoanalytic model of mind, if it is to be credible, should be aligned with the wider knowledge of mind gained from a range of disciplines. This is already happening, albeit informally. Psychoanalysts cannot help incorporating advances about discoveries relevant to mental function because these are invariably contained in all our intuitive, common sense, folk psychologies or theories of the mind (17,18). Folk psychology develops alongside scientific discovery. The impact of psychoanalysis on psychiatric disorder over the course of the 20th century offers the best evidence for this. Our culture's acceptances of Freudian discoveries have made it more difficult for individuals to claim dramatic dysfunctions such as blindness, anesthesia, and paralysis. Medicine has advanced to a point where individuals must accept that the absence of a pathophysiological account for a bodily dysfunction implies emotional determinants - thus the disguise function of the physical symptom is lost and the point prevalence of conversion hysteria plummets. Just as common-sense knowledge of medicine and psychology impacts on our patients, so it must unconsciously influence the nature of psychoanalysts' theoretical musings. Thus, 'scientific advances' infiltrate psychoanalytic theory by the backdoor of the analyst's preconscious.

Mitchell (19), by contrast, claimed that 'no experiment or series of experiments will ever be able to serve as a final and conclusive arbiter of something as complex and elastic as the psychoanalytic theory'. Indeed, Mitchell writes that "ultimately it is the community of psychoanalytic practitioners who provide the crucial testing-ground in the crucible of daily clinical work". As we have seen, the community has been singularly unsuccessful in definitively eliminating theories, in part because of the loose definitions adopted to define underlying concepts. This is inevitable if the mechanisms or processes that underpin the surface function described are not well understood. The meaning of the construct has to be sensed or intuited. In psychoanalysis, communication, whether in writing or clinical discourse, occurs in terms of its impact upon the reader. As Phillips (20) puts it, paraphrasing Emerson, in psychoanalytic writing there is an attempt to "return the reader to his own thoughts whatever their majesty, to evoke by provocation. According to this way of doing it, thoroughness is not inciting. No amount of 'evidence' or research will convince the unamused that a joke is funny". In psychoanalysis we accept that something has been understood when the discourse about it is inciting. Elusiveness and ambiguity are not only permissible, they may be critical to accurately depict the complexity of human experience. It is here, in the specification of the mental mechanisms whose effects psychoanalytic writings describe and whose nature they allude to, that systematic research using psychoanalytic methods as well as methods from other disciplines will turn out to be so useful. Gill (21), in his discussion of the possible validation of psychoanalytic concepts, adopted a similar approach and suggested that Mitchell underestimated the potential contribution of systematic, not necessarily experimental, research on the psychoanalytic situation.

The above does not constitute an attempt to suggest that psychoanalytic concepts can be 'tested' or 'validated' by the methods of another science. Rather, systematic observations could be used to investigate the psychological processes underpinning clinical phenomena, which psychoanalysts currently use the metaphoric language of

metapsychology to approximate. Inter-disciplinary research cannot test psychoanalytic theory, it cannot demonstrate that particular psychoanalytic ideas are true or false. What it can do is to elaborate the mental mechanisms that are at work in generating the phenomena that psychoanalytic writings describe. It is here, in the specification of the mental mechanisms whose effects psychoanalytic writings describe and whose nature they allude to, that systematic research using psychoanalytic methods as well as methods from other disciplines will be useful. This in turn will help to systematize the knowledge base of psychoanalysis so that integration with the new sciences of the mind becomes increasingly easier. Not only will psychoanalysts be able more readily to show that their treatment works, but they will have new possibilities of communicating with other scientists about their discoveries. It is to this set of opportunities that I would now like to turn. The integration of psychoanalytic ideas with modern science is unlikely to interest investigators from other disciplines unless psychoanalysis can actually contribute to directing or to informing data collection in these disciplines. For psychoanalysis to be taken seriously as a scientific study of the mind, it has to engage in systematic laboratory studies, epidemiological surveys or qualitative exploration in the social sciences.

Of course, methods for such systematic research are still in their infancy. The validation of theory poses a formidable challenge. Even apparently easily operationalisable constructs such as defense mechanisms have rarely been formulated with the kind of exactness required by research studies. Extra-clinical investigations, however, may help to constrain theorizing; for example our growing knowledge of infants' actual capacities may enable us to limit speculation concerning the impact of infancy on adult function. The projective processes of infancy are unlikely to work in the adultomorphic way described by Bion (22-24) and Klein (25-27), but this does not mean that these descriptions do not contain important truths about adult mental function, simply that 'infancy' is used metaphorically in these theorizations about mental process. For example, evidence from infant research provides strong evidence for Bion's containment concept. It uses the more readily operationalizable notion of 'marked mirroring' to denote the mother's capacity to reflect the infant's affect, while also communicating that the affect she is expressing is not hers but the infant's (28-30). Mothers who can 'mark' their emotional expression (add a special set of attributes, such as playfulness, to their expression of the child's affect that makes it clearly different from their own expression of that affect) appear to be able to soothe their baby considerably more rapidly. This may not be all that Bion meant by containment, but it seems to be linked to his hypotheses concerning the subsequent problems faced by individuals whose caregivers were unable to provide this mirroring encounter with emotion regulation. Restricting theory building to the clinical domain is foolhardy in the extreme.

To summarize, psychoanalysis could benefit from integrating its working theories with research findings from other fields by elaborating the psychoanalytic psychological models of the mechanisms involved in key mental processes. This in turn would help to systematize the psychoanalytic knowledge base, so that integration with the new sciences of the mind becomes increasingly easier. Not only will we be able more readily to show that our treatment works, but we will have new possibilities of communicating with other scientists about our discoveries. The integration of psychoanalytic ideas with modern science is unlikely to interest investigators from other disciplines unless psychoanalysis can actually contribute to directing or to informing data collection in these disciplines. Merely reviewing ideas in developmental science or neuroscience for their proximity to psychoanalytic hypotheses has scant relevance to them. For psychoanalysis to take its place at the high table of the scientific study of the mind, it has to show its mettle in the battlefield of systematic laboratory studies, epidemiological surveys or qualitative exploration in the social sciences.

THE EVIDENCE BASE OF PSYCHOANALYTIC TREATMENT

The evidence base for psychoanalytic therapy remains thin. There is little doubt that the absence of solid and persuasive evidence for the efficacy of psychoanalysis is the consequence of the self-imposed isolation of psychoanalysis from the empirical sciences. Few would dispute the assertion that psychoanalytic theory is in a perilous state. The psychoanalytic clinical situation might have yielded all that it can offer to advance our understanding of mind. Yet 'importing' extra-clinical data is often fiercely resisted and those psychoanalysts who have attempted to do so have commonly been subjected to subtle and not so subtle derision.

Psychoanalysts have been encouraged by the body of research that supports brief dynamic psychotherapy. A meta-analysis of 26 such studies has yielded effect sizes comparable to other approaches (31). It may even be slightly superior to some other therapies if long term follow-up is included in the design. One of the best designed randomized controlled trials (RCTs), the Sheffield Psychotherapy Project (32), found evidence for the effectiveness of a 16 session psychodynamic treatment based on Hobson's model (33) in the treatment of major depression. There is evidence for the effectiveness of psychodynamic therapy as an adjunct to drug dependence programs (34). There is ongoing work on a brief psychodynamic treatment for panic disorder (35). There is evidence for the use of brief psychodynamic approaches in work with older people (36).

There are psychotherapy process studies which offer qualified support for the psychoanalytic case. For example, psychoanalytic interpretations given to clients which are judged to be accurate are reported to be associated with relatively good outcome (37,38). There is even tentative evidence from the reanalysis of therapy tapes from the National Institute of Mental Health (NIMH) Treatment of Depres-

sion Collaborative Research Program that the more the process of a brief therapy (e.g. cognitive-behavioural therapy, CBT) resembles that of a psychodynamic approach, the more likely it is to be effective (39).

Evidence is available to support therapeutic interventions which are clear derivatives of psychoanalysis. However, most analysts would consider that the aims and methods of short-term once a week psychotherapy are not comparable to 'full analysis'. What do we know about the value of intensive and long-term psychodynamic treatment? Here the evidence base becomes somewhat patchy.

The Boston Psychotherapy Study (40) compared long-term psychoanalytic therapy (two or more times a week) with supportive therapy for clients with schizophrenia in a randomized controlled design. There were some treatment specific outcomes, but on the whole clients who received psychoanalytic therapy fared no better than those who received supportive treatment. In a more recent randomized controlled study (41), individuals with a diagnosis of borderline personality disorder were assigned to a psychoanalytically oriented day-hospital treatment or treatment as usual. The psychoanalytic arm of the treatment included therapy groups three times a week as well as individual therapy once or twice a week over an 18 month period. There were considerable gains in this group relative to the controls and these differences were not only maintained in the 18 months following discharge, but increased, even though the day hospital group received less treatment than the control group (42). The cost-effectiveness of these treatments is surprisingly impressive, with the cost of psychoanalytic partial hospital treatment comparable to treatment as usual for these patients, and the costs of the treatment mostly recovered in terms of savings in service use within 18 months of the end of treatment (43-46). Trials with similar patient groups using comparisons of outpatient psychoanalytic therapy treatments with extended baselines have yielded relatively good outcomes (47) as did comparisons with treatment as usual (48). Several prospective follow-along studies using a pre-post design have suggested substantial improvements in patients given psychoanalytic therapies for personality disorders (49-51). Uncontrolled studies, however, particularly those with relatively small sample sizes and clinical populations whose condition is known to fluctuate wildly, cannot yield data of consequence concerning what type of treatment is likely to be effective for whom.

A further controlled trial of intensive psychoanalytic treatment of children with chronically poorly controlled diabetes reported significant gains in diabetic control in the treated group which was maintained at one year follow-up (52). Experimental single case studies carried out with the same population supported the causal relationship between interpretive work and improvement in diabetic control and physical growth (53). The work of Heinicke also suggests that four or five times weekly sessions may generate more marked improvements in children with specific learning difficulties than a less intensive psychoanalytic intervention (54).

One of the most interesting studies to emerge recently was the Stockholm Outcome of Psychotherapy and Psychoanalysis Project (55). The study followed 756 persons who received national insurance funded treatment for up to three years in psychoanalysis or in psychoanalytic psychotherapy. The groups were matched on many clinical variables. Four or five times weekly analysis had similar outcomes at termination when compared with one to two sessions per week psychotherapy. However, in measurements of symptomatic outcome using the Short Check List-90 (SCL-90), improvement on three year follow-up was substantially greater for individuals who received psychoanalysis than those in psychoanalytic psychotherapy. In fact, during the follow-up period, psychotherapy patients did not change, but those who had had psychoanalysis continued to improve, almost to a point where their scores were indistinguishable from those obtained from a non-clinical Swedish sample.

A large scale follow-up study of a representatively selected group of psychoanalytically and psychotherapeutically treated individuals was recently reported from the German Psychoanalytic Association's collaborative investigation (56). A selection of patients whose treatments had taken place in a designated time period were interviewed by independent assessors and outcomes assessed by both standardized and interviewer coded instruments. While the group had been quite impaired at the time of referral according to retrospective assessments, on follow-up over 80% showed good outcomes. Follow-up data was favorable in relation to both anxiety and depression and savings were also demonstrated in relation to the use of hospital and outpatient medical treatment of physical symptoms replicating earlier German investigations (57). This carefully conducted study also provided important qualitative data in relation to the experience of psychoanalytic treatment and the relatively common disjunction of psychological changes at the level of self-understanding, and interpersonal-relational and work-related domains.

Another large pre-post study of psychoanalytic treatments has examined the clinical records of 763 children who were evaluated and treated at the Anna Freud Centre, under the close supervision of Freud's daughter (58-61). Children with certain disorders (e.g. depression, autism, conduct disorder) appeared to benefit only marginally from psychoanalysis or psychoanalytic psychotherapy. Interestingly, children with severe emotional disorders (three or more Axis I diagnoses) did surprisingly well in psychoanalysis, although they did poorly in once or twice a week psychoanalytic psychotherapy. Younger children derived greatest benefit from intensive treatment. Adolescents appeared not to benefit from the increased frequency of sessions. The importance of the study is perhaps less in demonstrating that psychoanalysis is effective, although some of the effects on very severely disturbed children were quite remarkable, but more in identifying groups for whom the additional effort involved in intensive treatment appeared not to be warranted.

The Research Committee of the International Psychoanalytic Association has recently prepared a comprehensive review of North American and European outcome studies of psychoanalytic treatment (62). The Committee concluded that existing studies failed to unequivocally demonstrate that psychoanalysis is efficacious relative to either an alternative treatment or an active placebo, and identified a range of methodological and design problems in the fifty or so studies described in the report. Nevertheless, the report is encouraging to psychoanalysts. A number of studies testing psychoanalysis with 'state of the art' methodology are ongoing and are likely to produce more compelling evidence over the next years. Despite the limitations of the completed studies, evidence across a significant number of pre-post investigations suggested that psychoanalysis appears to be consistently helpful to patients with milder (neurotic) disorders and somewhat less consistently so for other, more severe groups. Across a range of uncontrolled or poorly controlled cohort studies, mostly carried out in Europe, longer intensive treatments tended to have better outcomes than shorter, non-intensive treatments. The impact of psychoanalysis was apparent beyond symptomatology, in measures of work functioning and reductions in health care costs.

THE LIMITATIONS OF THE EVIDENCE BASED APPROACH

There are limitations concerning the nature of the evidence base for all psychotherapies. These limitations are well-known and their implications go well beyond the evaluation of the current status of psychoanalysis. The outcomes literature concerns RCTs administered over relatively brief periods (three to six months) with short follow-ups and a failure to control for inter-current treatments over these periods. Most evidence-based treatment reviews have been uniquely based on RCTs. RCTs in psychosocial treatments are often regarded as inadequate because of their low external validity or generalizability (63). In brief, they are not relevant to clinical practice - a hotly debated issue in the field of psychotherapy (64) and psychiatric research (65). There are a number of well publicized reasons: a) the unrepresentativeness of healthcare professionals participating; b) the unrepresentativeness of participants screened for inclusion to maximize homogeneity; c) the possible use of atypical treatments designed for a single disorder; d) limiting the measurement of outcome to the symptom that is the focus of the study and is easily measurable (66).

Belief in the supremacy of RCTs opens the door to treatments which, even if effective, one may not wish to entertain. A recent report in the British Medical Journal on the effects of remote, retro-active intercessory prayer on the outcome of patients with bloodstream infection is salutary. Leonard Leibovici (67) from the Rabin Medical Centre in Israel randomized 3,393 adult patients whose bloodstream infection was detected in the hospital between 1990 and 1996. A list of the first names of the patients in the intervention group was given to a person who said a short prayer for the wellbeing and recovery of the group as a whole. It was argued that as God is unlikely to be limited by linear time, an intervention carried out 4-10 years after the patients' infection and hospitalization was as likely to be effective as one carried out during the infection. Staggeringly, there were significant results on two of the three outcome measures. Length of hospital stay and duration of fever were both shorter in the intervention group. Mortality was also lower in the intervention group but the difference was not statistically significant. As two other independent studies also support intercessory prayer (68,69) by the American Psychological Association's criteria for empirically based treatments, this intervention should be accepted except for the heterogeneity of the medical conditions for which the treatment was used. This finding highlights the risk associated with an atheoretical stance to evidence based practice that reifies and idealises a research design. RCTs unquestionably have the potential to yield clinically relevant data in the absence of an adequate understanding of the underlying process. When James Lind in 1753 determined that lemons and limes cured scurvy, he knew nothing about ascorbic acid, nor did he understand the concept of a nutrient. Yet Leibovici's study demonstrates the absurdity which can be created by bringing the world of rigorous measurement into a domain that is totally unsuited to it.

Most importantly from the standpoint of psychoanalysis, the current categorization in evidence-based psychotherapies conflates two radically different groups of treatments: those that have been adequately tested and found ineffective for a client group, and those that have not been tested at all. It is important to make this distinction, since the reason that a treatment has not been subjected to empirical scrutiny may have little to do with its likely effectiveness. It may have far more to do with the intellectual culture within which researchers operate, the availability of treatment manuals, and peer perceptions of the value of the treatment (which can be critical for both funding and publication). The British psychodynamically oriented psychiatrist Jeremy Holmes (70) has eloquently argued in the British Medical Journal that the absence of evidence for psychoanalytic treatment should not be confused with evidence of ineffectiveness. In particular, his concern was that cognitive therapy would be adopted by default because of its research and marketing strategy rather than its intrinsic superiority. He argued that: a) the foundations of cognitive therapy were less secure than often believed; b) the impact of CBT on long-term course of psychiatric illness was not well demonstrated; c) in one 'real life trial' at least the CBT arm had to be discontinued because of poor compliance from a problematic group of patients who nevertheless accepted and benefited from couples therapy (71); d) the effect size of CBT is exaggerated by comparisons with waiting list controls; e) the emergence of a post-CBT approach (e.g. 72,73) that leans increasingly on psychodynamic ideas.

Whilst the present author is entirely in sympathy with Holmes' perspective, even if his work with Roth (74) was one of the targets of his criticism, it is only fair to expose the shortcomings of his communication. Tarrier (75), in a commentary on Holmes' piece, writes with passion: "Holmes relies on the specious old adage that absence of evidence is not evidence of absence [of effectiveness]. [...] I would have more enthusiasm for this argument if traditional psychotherapy were new. It has been around for 100 years or so. The argument, therefore, becomes a little less compelling when psychotherapy's late arrival at the table of science has been triggered by a threat to pull the plug on public funding because of the absence of evidence". Sensky and Scott (76) were similarly outraged both by Holmes' selective review of evidence and his allegations that some cognitive therapists are starting to question aspects of their discipline. The message from the CBT camp is this: if psychoanalytic clinicians are going to address the issue of evidence based practice, they will have to do more than gripe and join in the general endeavour to acquire data.

Of course, psychodynamic clinicians are at a disadvantage and not simply because they are late starters (after all, many new treatments find a place at the table of evidence based practice). There are profound incompatibilities between psychoanalysis and modern natural science. Whittle (77) has drawn attention to the fundamental incompatibility of an approach that aims to fill in gaps in self-narrative with cognitive psychology's commitment to minimal elaboration of observations, a kind of Wittgensteinian cognitive asceticism. In the former context, success is measured as eloquence (or meaningfulness) which is not reducible to either symptom or suffering. Moreover, psychoanalytic explanations invoke personal history, but behaviour genetics has brought environmental accounts into disrepute. While CBT also has environmentalist social learning theory at its foundations, it has been more effective in moving away from a naïve environmentalist position. To make matters worse, within psychoanalysis there has been a tradition of regarding the uninitiated with contempt, scaring off most open-minded researchers.

Psychoanalysts are not yet fully committed to systematically collecting data with the potential to challenge and contradict as well as to confirm cherished ideas. The danger that must be avoided at all costs is that research is embraced selectively only when it confirms previously held views. This may be a worse outcome than the wholesale rejection of the entire enterprise of seeking evidence, since it immunizes against being affected by findings at the same time as creating an illusion of participation in the virtuous cycle of exploring, testing, modifying and re-exploring ideas.

But the absence of psychoanalytic research raises a related problem that particularly concerns me. A recent study from Luborsky's research team (78) demonstrates that the allegiance of the researcher predicts almost 70% of the variance in outcome across studies, with a remarkable multiple r of .85 if three different ways of measuring allegiance are simultaneously introduced. This means that 92% of the time we can predict which of two treatments compared will be most successful based on investigator allegiance alone. This becomes a pernicious self-fulfilling prophecy, as investigators who favour less focused more long-term treatment approaches are gradually excluded from the possibility of receiving funding and, if their treatments are subjected to systematic inquiry at all, these studies are performed by those with least interest in such treatments.

CONCLUSIONS

Our aim should be to assist the movement of psychoanalysis toward science. In order to ensure a future for psychoanalysis and psychoanalytic therapies within psychiatry, psychoanalytic practitioners must change their attitude in the direction of a more systematic outlook. This attitude shift would be characterized by several components: a) The evidence base of psychoanalysis should be strengthened by adopting additional data-gathering methods that are now widely available in biological and social science. New evidence may assist psychoanalysts in resolving theoretical differences, a feat which the current database of predominantly anecdotal clinical accounts have not been capable of achieving. b) The logic of psychoanalytic discourse would need to change from its overdependence on rhetoric and global constructs to using specific constructs that allow for cumulative data-gathering. c) Flaws in psychoanalytic scientific reasoning, such as failures to consider alternative accounts for observations (beyond that favored by the author), should be overcome and in particular, the issue of genetic and social influence should be approached with increased sophistication. d) The isolation of psychoanalysis should be replaced by active collaboration with other mental health disciplines. Instead of fearing that fields adjacent to psychoanalysis might destroy the unique insights offered by clinical work, we need to embrace the rapidly evolving 'knowledge chain' focused at different levels of the study of brain-behavior relationship, which, as Kandel (7,79) points out, may be the only route to the preservation of the hard won insights of psychoanalysis.

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