

An Update on Empirically Validated Therapies

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In 1995 the Division 12 Task Force on Promotion and Dissemination of Psychological Procedures published its report in this journal. A major focus of that report was increasing training in psychological interventions that have been supported in empirical research by making clinical psychologists and students more aware of these treatments and facilitating training opportunities. To provide the basis for a survey on the degree to which clinical programs and internships were currently providing training in empirically supported therapies, the task force constructed a list of examples of treatments meeting criteria for efficacy as established by the task force.

Based on feedback that members of the profession found this list of interventions to be very useful in training and clinical work, while also recognizing its very incomplete basis, the Division 12 board charged the succeeding task force (Task Force on Psychological Interventions), appointed in succession by Presidents Martin Seligman and Gerald Koocher, with adding to this preliminary list on an annual basis. This is one purpose of the current report. In addition, we raise several issues about the use and limitations of empirically supported treatments as currently identified. In keeping with the practice established by the first task force, the members of the group who constructed the present report are diverse in theoretical orientation and work in a variety of settings -- psychology departments, medical schools, and private practice.

Cautions About the Use of the List of Treatments

Because the task force found that misinterpretations of the 1995 report abounded, particularly where the list of examples of empirically validated treatments (EVTs)¹ was concerned, we begin this report with some caveats about the appropriate use of the updated list herein.

1. This list is intended to facilitate education by identifying treatments with a scientific basis. This list is far from complete and should not be employed as the basis for decisions concerning reimbursable treatments by third party payers. Although we will continue to update the list in subsequent publications, it is beyond our resources to form a complete catalogue, and emerging data would make any such list quickly out of date. That a treatment is not on our list in no way means that it has been shown to be ineffective.

This list is particularly incomplete where children's problems and prevention programs are concerned. A separate Division 12 task force constituted by President Gerald Koocher and chaired by Suzanne Bennett Johnson is focusing on these issues. Moreover, there are areas of the literature that are currently being examined by members of the task force who have not yet completed their reviews (e.g., family therapy, treatment of alcoholism). Treatments

from these areas will be considered in the next edition of this report.

2. This list does not substitute for educators' and practitioners' own decisions about what is the most appropriate treatment for a given client. We have made no recommendations about what is the best treatment for a particular problem. The problem for which the client is seeking treatment is only one of the factors that need to be considered in selecting among treatment interventions. Applications of manualized treatments to practice require flexibility and adaptation to the requirements of each case and setting.

3. We have drawn up this list based on criteria we set. The reader may disagree. As part of the scientist-practitioner tradition of clinical psychology, we would hope that clinical programs are training their students specifically in the evaluation of the efficacy of psychological interventions and that postdoctoral practitioners continue to evaluate treatments based on the empirical merits. In short, we encourage readers to use our list as a starting point, but to make their own judgments. We have clarified our criteria since the last task force report (1995) and hence include the table of criteria again here. See Table 1.

In particular the reader may wish to know how we resolved cases where there were conflicting data about the efficacy of a treatment. Typically we relied on meta-analyses. When these were not available, we came to a judgment based on the quality of the methodology across trials and the preponderance of the data.

Also important is what variables were tested in analyses of treatment efficacy. We concentrated on tests of change in the defining problem or symptoms, although a number of investigators also demonstrated improvement on broader tests of psychological functioning and quality of life. Thus, for example, if a study focused on treatment of alcoholism via couples therapy, we did not consider the treatment efficacious if marital satisfaction improved but alcohol-related problems did not. (Note that this study does provide additional evidence for the efficacy of the treatment where marital discord is concerned.)

4. Included in the current edition of the list are new entries as well as the original entries, which in some cases have been modified on the basis of additional information or the correction of errors. New or modified entries are marked with an asterisk in Table 2. We have organized Table 2 by problem area and have identified which treatments we have found that are effective for specific difficulties. (These were not restricted to diagnoses, but could include any reliably specified problem for which a client might seek assistance.) We excepted token economy programs from the problem-specific restriction because the problem behaviors to which token economies have been applied are legion (see Kazdin, 1977).

5. For treatments to be considered for this list, we require that the supporting research have been conducted

with treatment manuals (with specific and rare exceptions). There are two reasons for this. First, it makes for better research design and interpretable results. Second, it allows readers to know what the treatment actually entailed and therefore what has been supported. For example, there are many types of dynamic therapy. When we indicate that brief dynamic therapy is probably efficacious as an adjunctive treatment for opiate addiction (Woody, Luborsky, McLellan, & O'Brien, 1990), we mean specifically the treatment described in the manual employed in that research, which was Supportive-Expressive Psychotherapy as adapted for substance abuse (Luborsky, Woody, Hole, & Vellecho, 1995). Whether a very different type of dynamic therapy like Davanloo's (1980) would be effective remains to be studied and should not be assumed. This is equally the case for behavioral and cognitive therapies. For example, relaxation training and exposure and response prevention are both behavior therapies, but the latter is significantly more efficacious than the former in the treatment of obsessive-compulsive disorder (Rachman, Hodgson, & Marks, 1971). Thus, there are many interventions that fall under a rubric in the table, and the brand names are not the critical identifiers. The manuals are.

6. Depending on the problem treated, the psychological intervention cited in Table 2 may have been in addition to other treatment the patient received (e.g., medication for psychotic patients, drug counseling, medical interventions for pain) or the sole treatment. In case of the former we determined that the psychological intervention had a positive impact above and beyond the effects of the other interventions. In considering use of these treatments, the reader needs to consult the papers and manuals to determine when the psychological intervention should be considered part of a broader treatment approach.

Client Characteristics and the Interpretation of EVT Findings

Delivery of psychotherapy services and estimates of the likelihood that a given EVT will be helpful to a particular client are made difficult by the myriad potential variables that might affect a given client's response to treatment. In this section, we will consider two such broad areas of concern: using EVTs with ethnic minority clients and Aptitude X Treatment Interactions.

Treatment of Ethnic Minority Clients

Have EVTs been established for ethnic minority populations? Analogue investigations aside, we know of no psychotherapy treatment research that meets basic criteria important for demonstrating treatment efficacy for ethnic minority populations -- namely, research in which (a) pre- and post treatment status is assessed for clients from one or more ethnic minority group(s), (b) clients are blocked according to their particular ethnic group membership and randomly assigned to different treatments or to treatment and control groups, (c) multiple, culturally cross-validated assessment instruments are employed, and (d) findings are replicated (see Sue, 1995; Sue, Zane, & Young, 1994). The dearth of culturally cross-validated measures makes even beginning such research problematic.

Examining the citations for EVTs identified in the 1995 task force report, we find not a single study included tests of the efficacy of the treatment for ethnic minority populations. Most investigators did not specify ethnicity of subjects or

only 6-7 made any reference to race or ethnicity of subjects (e.g., DiMascio et al., 1979; Falloon et al., 1985; Foa et al., 1991; Hogarty et al., 1986; Mattick & Peters, 1988; Wilfley et al., 1990). Not one used ethnicity as a variable of interest. Recently, Chambless and Williams (1995) examined whether one EVT, in vivo exposure for agoraphobia, was as effective for African American outpatients as for white ones. These preliminary data suggested it was not. More research is clearly needed before conclusions can be drawn, but the point is that the data do not, at present, exist, or at least have not been reported.

What implications can be drawn for research and practice with ethnic minority populations? Strictly speaking, then, the efficacy of EVTs has not been established with ethnic minority populations. This is unfortunate for several reasons. First, the United States is among the most diverse nations in the world, and most therapists will have to deal with clients from very different cultural backgrounds. Second, there is indication that mental health needs of ethnic minority populations are high, and that these groups have been underserved or inappropriately served by the mental health profession. Third, the lack of rigorous research on the efficacy of treatment for culturally diverse populations is poor science because it shows a lack of attention to the limits of generalization from the samples studied. Obviously, those treatments that have been validated for one population may be valid for another. However, as scientists, we cannot assume that the effects will be similar. Outcomes must be demonstrated by empirical research, especially in view of the controversies in the literature concerning the necessity of considering cultural factors in treatment.

Recommendations. If we are to base practice on research findings, then we must begin to conduct rigorous outcome research on diverse cultural groups. Elsewhere Sue and colleagues (e.g., Sue et al., 1994) have addressed practical (e.g., finding adequate samples of minority groups) as well as methodological (e.g., finding cross-culturally valid assessment measures) problems in research involving ethnic minority groups. We need innovative and effective strategies to increase our ability to study ethnic minority groups and to draw meaningful conclusions. For now, we offer the following suggestions:

1. Ethnicity of subjects should be specified in all studies. NIMH has issued requirements concerning the inclusion of minorities in clinical research, but this only affects NIMH-funded research. Journal editors might encourage all investigators to report the ethnicity of their samples.
2. Investigators should be given incentives for studies of ethnicity and treatment. For example, NIMH provides supplements to individuals from underrepresented groups for work on existing research grants. These supplements could be used for research on ethnicity.
3. We encourage researchers who have subjects from different ethnic groups in their studies to report the effect sizes on major outcome variables by ethnicity. Thus, although it is unlikely that any one researcher would have a large enough sample to draw meaningful conclusions about the efficacy of a given treatment for minority clients, data would accrue in the literature and ultimately permit meta-analysis.
4. We should more clearly define what barriers are preventing researchers, especially more senior and

populations. For example, does the problem stem from methodological and conceptual difficulties, lack of interest, controversies in ethnic research, or practical problems alone? The NIMH Office of Research on Minority Health has prepared an outreach notebook to assist investigators, but whether the federal program emphasis will yield a harvest of new data is yet to be determined.

5. Given the lack of efficacy data, should we continue offering psychotherapy to diverse populations? Yes. We have a responsibility to provide services, even without definitive research findings on which to base services. Of greater importance is the need to alleviate suffering to the best of our ability and to the best of our knowledge, based on generalization from white samples.

Aptitude X Treatment Interactions

To date the task force's efforts have been focused on identifying treatments that are efficacious for particular problems or diagnoses. This is a step away from the uniformity myth that all clients are the same and can be successfully treated with the same procedures, yet it does not go far enough. When practitioners select from among efficacious treatments for a given client, they must consider not only the problem for which the person seeks treatment, but also any personal qualities of the client that may affect which treatment will be most helpful for this particular person. This poses formidable problems because a large number of factors might shape any individual's response to a given type of treatment (Beutler, 1991). Nonetheless, creative research in this area is beginning to emerge and may be found in studies of Aptitude X Treatment Interactions (ATIs).

As noted by Smith and Sechrest (1991), research in this area is notoriously difficult because psychotherapy studies usually lack the power to detect such interactions, and ATIs tend to be difficult to replicate. Many of the findings have been what Beutler (1991, p. 226) calls "happenstantial" rather than emerging from tests of theory-driven, a priori hypotheses. For the purposes of this report, we established initial criteria for identifying ATIs in conjunction with those used in Table 1. We suggest that (a) the aptitude (client) variable must be assessed with reliable and valid measures; and (b) that differential efficacy must be shown such that the clients who are high on the aptitude in question fare better or worse in one of the specified treatments than those who are low on the aptitude; that is, that a significant interaction is shown. Alternatively, a large number of single case design experiments might be conducted to show that the treatment effect occurs for clients showing the aptitude, but not for those who do not. In reality, all the research we located employed group designs.

Our intention was to include yet another table in this report in which we would list the replicated ATIs established through sound research. We found that such a table would have been premature. Nonetheless, because of the great practical importance of this topic, we review here the findings that are emerging and that may prove useful to the clinician. We hope that in our next report, more definitive statements may be possible.

Beutler (1991) has suggested that, although the number of client characteristics that might be supposed to affect treatment outcome seems infinite, they actually boil down to three or four. For example, one of the characteristics attracting the most research is resistance or reactance. Would

treatment in general? Or only with particular treatments or particular interventions within treatments? Beutler has argued that, by examining the strategies used in various types of therapy, rather than the overall labels, the researcher may form clear hypotheses about possible ATIs.

An emerging body of research suggests that reactance is an important characteristic for therapists to consider in the selection of strategy. Beutler, Engle et al. (1991) found that depressed patients low on reactance fared better in cognitive therapy than in a telephone-based supportive/self-directive therapy condition. On the other hand, patients high on reactance did better if assigned to the supportive/self-directive condition, even though this was a rather minimal treatment. The authors hypothesized that reactant clients respond negatively to the directive nature of cognitive therapy. In support of this notion, Beutler, Mohr et al. (1991) briefly described similar findings from a German study in which reactant clients in another directive therapy (behavior therapy) did worse than reactant clients who received (presumably nondirective) client-centered therapy. Findings for the low reactance clients were the reverse.

Beutler and colleagues' findings are reminiscent of those by Shoham and colleagues. In a study with procrastinating college students Shoham-Salomon, Avner and Neeman (1989) found that highly reactant clients benefited more from paradoxical instructions than from a straightforward behavioral intervention. These findings were replicated with clinic patients with sleep-onset insomnia (Shoham, Bootzin, Rohrbaugh, & Urry, 1995). Thus, a growing body of research suggests that we need to select treatment approaches for reactant patients with especial care to possible ATIs. It seems reasonable to hypothesize at this point that reactant clients respond negatively to the directive aspects of cognitive and behavioral therapies, but additional research is needed to verify this process hypothesis.

Three studies suggest another client characteristic to consider is impulsivity/low socialization. (These concepts are highly correlated and so are grouped here.) Beutler, Engle et al. (1991) determined that depressed clients high on impulsivity did better in cognitive therapy than in supportive/self-directive therapy (and the converse for low impulsive clients). These findings suggest that the structure of cognitive therapy might assist clients who are deficient in impulse control. Two studies on this question have been conducted with alcoholic samples. In research on posthospitalization alcoholism treatment, Kadden, Cooney, Getter, and Litt (1989) found some (albeit inconsistent) evidence that low socialization clients improved more in structured coping-skills training groups, whereas high socialization clients did better in Yalom-type groups which were more free-form and focused on interactions among group members. Testing cognitive behavioral treatment with and without a relationship enhancement focus for alcoholic outpatients, Longabaugh et al. (1994) found that patients with antisocial personality disorder (low socialization/high impulsivity) who were in the relationship enhancement condition drank more heavily during the follow-up period than those who had received cognitive behavior therapy alone. Relationship enhancement neither added to nor detracted from treatment response of the patients without antisocial personality. Although solid conclusions are premature, these data suggest that, given two treatments of equal general efficacy, clients' needs for structure and an individual treatment focus may be an

Finally, whether patients in treatment for chemical abuse and dependence need psychotherapy or simply drug or alcohol counseling has been a matter of some contention. ATI research may ultimately provide some answers to this question. For example, Woody et al. (1990) found that opiate addicts who scored low on measures of psychiatric severity fared equally well in drug counseling with or without additional psychotherapy (dynamic or cognitive). On the other hand, those with higher psychiatric severity improved more if they received psychotherapy in addition to drug counselling. Kadden et al. (1989) found a different type of ATI with psychiatric severity for their alcoholic population. Patients with more severe psychiatric symptoms fared better in structured coping skills training groups whereas those with less severe symptoms did better in the interactional groups.

In a final analysis, Kadden et al. (1989) examined whether the clinicians who had treated their alcoholic subjects as inpatients were able to predict which aftercare program would be more efficacious for which patient. They were not. This is discouraging in that, at present, all we have to rely upon is our clinical judgment. However, the data we have reviewed, although preliminary, offer hope that, with careful, prospective, and theory-driven research, reliable ATIs may be established which will help guide the practitioner in determining what treatment is best for what client and, thus, to maximize the efficacy of treatment.

Ethics, Science, and Clinical Interventions

Psychology is a science. Seeking to help those in need, clinical psychology draws its strength and uniqueness from the ethic of scientific validation. Whatever interventions that mysticism, authority, commercialism, politics, custom, convenience, or carelessness might dictate, clinical psychologists focus on what works. They bear a fundamental ethical responsibility to use where possible interventions that work and to subject any intervention they use to scientific scrutiny.

Among the major aspects of this ethic is, first, that clinical psychologists are active, competent consumers of the research literature. In this document (see Tables 1 and 2) we publish our criteria for treatment efficacy and a list of treatments meeting these basic criteria. However, we urge practitioners not to consider a treatment's inclusion on this list as a substitute for their own judgment. That an experiment involving an intervention yielded a significant statistic is not, of course, a necessary and sufficient reason to conclude that the intervention has been adequately validated for a given purpose with a given population under given circumstances. It is important to consider such factors as the size and nature of the sample, the methodology, the nature of statistical inferences, the clinical significance of the change observed, and other facets. For example, is the validating evidence free of such fundamental errors as overlooking potentially confounding variables or interactions, using a design with insufficient power, failing to adjust alpha when apparently significant results are based on a large number of tests, and concluding that insignificant differences among small groups prove the null hypothesis (i.e., demonstrate the equivalence of treatments), or overgeneralizing the results? Have the findings been independently replicated? Have they been published in peer-reviewed scientific and professional journals? Practitioners cannot avoid the ethical responsibility to consider such factors when deciding whether treatments should be used

ones we have raised have been outlined by a task force appointed by the APA Boards of Professional and Scientific Affairs, the Task Force on Psychological Intervention Guidelines (1995). The template developed by this group is well worth the practitioner's study.

Second, clinical psychologists must remain current and read beyond a specific area. The research literature is always evolving rapidly. Interventions showing initial promise may be shown by later, more elaborate research to be useless or perhaps even harmful under certain conditions. Subsequent research, while continuing to validate the intervention, may show alternate interventions to be even more effective, efficient, or safe. To read only in a specific area is to foster ignorance of other areas. Clinicians who read only behavioral, cognitive, dynamic, feminist, pharmacological, or any other specific area of research will likely remain unaware of empirically supported interventions that might be relevant to a wide variety of patients. To take an extreme and hypothetical example, therapists might know of only one intervention consistent with their theoretical orientation that has been empirically supported for a specific problem. Let's say research has shown it to be efficacious in 73% of the cases after a 3-year course of treatment. Are those therapists acting ethically if, because they do not read outside their own area of interest, they remain ignorant of an intervention associated with another theoretical orientation that has been repeatedly shown to be effective in 94% of the cases after a 5-week course of treatment?

Third, clinical psychologists bring information about empirically supported treatments to bear when addressing their patients' legal and ethical rights to informed consent to treatment and informed refusal of treatment. As part of the consent process, clinicians should make sure that clients understand what the treatment can be reasonably expected to accomplish and in what period of time, what any negative effects of the treatment might be, what other treatments might be considered, and whether these would be expected to be more or less helpful and more or less costly. Clinicians who remain uninformed about the research literature are ill-equipped to discuss these issues with clients and thus to discharge their ethical obligation. (For a further discussion, see Pope & Vasquez, 1991).

Conclusion

This is an interim report in an on-going process. We invite readers' feedback, notations of errors, and suggestions for treatments for the Task Force on Psychological Interventions to consider (with accompanying supportive journal articles or citations when possible). Sanderson and Woody (1995) have published a list of training materials for EVTs identified by the first task force report (1995), and Sanderson is also editing a series of articles for this journal describing each EVT. We expect to continue these efforts and to include materials and articles pertinent to EVTs identified in this report. We would welcome readers' assistance in identifying training materials and supervision. Please send suggestions to the chair of the Task Force, Dianne Chambless (see Author Note).

References

- Agras, W.S., Schneider, J.A., Arnow, B., Raeburn, S.D., & Telch, C.F. (1989). Cognitive-behavioral and response-prevention treatments for bulimia nervosa. *Journal of Consulting and Clinical Psychology*, 57, 215-221.
- Arean, P.A., Perri, M.G., Nezu, A.M., Schein, R.L., Christopher F. & Joseph T X (1993) Comparative

- effectiveness of social problem-solving therapy and reminiscence therapy as treatments for depression in older adults. *Journal of Consulting and Clinical Psychology*, 61, 1003-1010.
- Auerbach, R., & Kilmann, P. R. (1977). The effects of group systematic desensitization on secondary erectile failure. *Behavior Therapy*, 8, 330-339.
- Azrin, N. H., Bersalel, A., Bechtel, R., Michalicek, A., Mancera, M., Carroll, D., Shuford, D., & Cox, J. (1980). Comparison of reciprocity and discussion-type counseling for marital problems. *American Journal of Family Therapy*, 8, 21-28.
- Azrin, N. H., Nunn, R. G., & Frantz, S. E. (1980). Habit reversal vs. negative practice treatment of nailbiting. *Behaviour Research and Therapy*, 18, 281-285.
- Azrin, N. H., Nunn, R. G., & Frantz-Renshaw, S. (1980). Habit reversal treatment of thumbsucking. *Behaviour Research and Therapy*, 18, 395-399.
- Balkom A.J.L.M. van, Oppen, P. van, Vermeulen, A.W.A., Nauta, N.C.E., Vorst, H.C.M., & Dyck, R. van (1994). A meta-analysis on the treatment of obsessive compulsive disorder: A comparison of antidepressants, behaviour and cognitive therapy. *Clinical Psychology Review*, 14, 359-381.
- Barlow, D. H., Craske, M. G., Cerny, J. A., & Klosko, J. S. (1989). Behavioral treatment of panic disorder. *Behavior Therapy*, 20, 261-282.
- Barlow, D.H., Rapee, R.M., & Brown, T.A. (1992). Behavioral treatment of generalized anxiety disorder. *Behavior Therapy*, 23, 551-570.
- Barrett, P.M., Dadds, M.R., Rapee, R.M., & Ryan, S.M. (in press). Family intervention for childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*.
- Beutler, L.E. (1991). Have all won and must all have prizes? Revisiting Luborsky et al.'s verdict. *Journal of Consulting and Clinical Psychology*, 59, 226-232.
- Beutler, L.E., Engle, D., Mohr, D., Daldrup, R.J., Bergan, J., Meredith, K., & Merry, W. (1991). Predictors of differential response to cognitive, experiential, and self-directed psychotherapeutic procedures. *Journal of Consulting and Clinical Psychology*, 59, 333-340.
- Beutler, L.E., Mohr, D.C., Grawe, K., Engle, D., & McDonald, R. (1991). Looking for differential effects: Cross-cultural predictors of differential psychotherapy efficacy. *Journal of Psychotherapy Integration*, 1, 121-141.
- Blanchard, E. B., Andrasik, F., Ahles, T. A., Teders, S. J., & O'Keefe, D. (1980). Migraine and tension headache: A meta-analytic review. *Behavior Therapy*, 11, 613-631.
- Blanchard, E. B., Schwarz, S. P., & Radnitz, C. (1987). Psychological assessment and treatment of irritable bowel syndrome. *Behavior Modification*, 11, 348-372.
- Borkovec, T.D., & Costello, E. (1993). Efficacy of applied relaxation and cognitive-behavioral therapy in the treatment of generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 61, 611-619.
- Borkovec, T. D., Mathews, A. M., Chambers, A., Ebrahimi, S., Lytle, R., & Nelson, R. (1987). The effects of relaxation training with cognitive or nondirective therapy and the role of relaxation-induced anxiety in the treatment of generalized anxiety. *Journal of Consulting and Clinical Psychology*, 55, 883-888.
- Butler, G., Fennell, M., Robson, P., & Gelder, M. (1991). Comparison of behavior therapy and cognitive behavior therapy in the treatment of generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 59, 167-175.
- Chambless, D.L., & Williams, K.E. (1995). A preliminary study of the effects of exposure in vivo for African Americans with agoraphobia. *Behavior Therapy*, 26, 501-515.
- Clark, D. M., Salkovskis, P.M., Hackman, A., Middleton, H., Anastasiades, P., & Gelder, M. (1994). A comparison of cognitive therapy, applied relaxation, and imipramine in the treatment of panic disorder. *British Journal of Psychiatry*, 164, 759-769.
- Davanloo, H. (Ed.) (1980). *Short term dynamic psychotherapy*. New York: Jason Aronson.
- DiMascio, A., Weissman, M. M., Prusoff, B. A., Neu, C., Zwilling, M., & Klerman, G. L. (1979). Differential symptom reduction by drugs and psychotherapy in acute depression. *Archives of General Psychiatry*, 36, 1450-1456.
- Dobson, K. S. (1989). A meta-analysis of the efficacy of cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, 57, 414-419.
- Elkin, I., Shea, M. T., Watkins, J. T., Imber, S. D., Sotsky, S. M., Collins, J. F., Glass, D. R., Pilkonis, P. A., Leber, W. R., Docherty, J. P., Fiester, S. J., & Parloff, M. B. (1989). National Institute of Mental Health Treatment of Depression Collaborative Research Program: General effectiveness of treatments. *Archives of General Psychiatry*, 46, 971-982.
- Epstein, L.H., Valoski, A., Wing, R.R., & McCurley, J. (1994). Ten-year outcomes of behavioral family-based treatment for childhood obesity. *Health Psychology*, 13, 373-383.
- Fairburn, C. G., Jones, R., Peveler, R. C., Hope, R. A., & O'Conner, M. (1993). Psychotherapy and bulimia nervosa: Longer-term effects of interpersonal psychotherapy, behavior therapy, and cognitive behavior therapy. *Archives of General Psychiatry*, 50, 419-428.
- Falloon, R. H., Boyd, J. L., McGill, C. W., Williamson, M., Razani, A., Moss, H. B., Giulderman, A. M., & Simpson, G. M. (1985). Family management in the prevention of morbidity of schizophrenia: Clinical outcome of a two-year longitudinal study. *Archives of General Psychiatry*, 42, 887-896.
- Fals-Stewart, W., Marks, A.P., & Schafer, J. (1993). A comparison of behavioral group therapy and individual behavior therapy in treating obsessive-compulsive disorder. *Journal of Nervous and Mental Disease*, 181, 189-193.
- Feske, U., & Chambless, D.L. (1995). Cognitive behavioral versus exposure only treatment for social phobia: A meta-analysis. *Behavior Therapy*, 26, 695-720.
- Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology*, 59, 715-723.
- Fuchs, C.Z., & Rehm, L.P. (1977). A self-control behavior therapy program for depression. *Journal of Consulting and Clinical Psychology*, 45, 206-215.
- Gallagher-Thompson, D., & Steffen, A.M. (1994). Comparative effects of cognitive-behavioral and brief dynamic therapy for depressed family caregivers. *Journal of Consulting and Clinical Psychology*, 62, 543-549.
- Garfield, S.L. (in press). Some problems associated with "validated" forms of psychotherapy. *Clinical Psychology: Science and Practice*.
- Heimberg, R. G., Dodge, C. S., Hope, D. A.,

behavioral group treatment for social phobia: Comparison with a credible placebo control. *Cognitive Therapy and Research*, 14, 1-23.

Higgins, S.T., Budney, A.J., Bickel, W.K., Hughes, J.R., Foeg, F., & Badger, G. (1993). Achieving cocaine abstinence with a behavioral approach. *American Journal of Psychiatry*, 150, 763-769.

Hiss, H., Foa, E.B., & Kozak, M.J. (1994). Relapse prevention program for treatment of obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology*, 62, 801-808.

Hogarty, G. E., Anderson, C. M., Reiss, D. J., Kornblith, S. J., Greenwald, D. P., Javna, C. D., & Madonia, M. J. (1986). Family psychoeducation, social skills training, and maintenance chemotherapy in the aftercare treatment of schizophrenia: I. One-year effects of a controlled study on relapse and expressed emotion. *Archives of General Psychiatry*, 43, 633-642.

Holroyd, K.A., & Penzien, D.B. (1990). Pharmacological versus nonpharmacological prophylaxis of recurrent migraine headache: A meta-analytic review of clinical trials. *Pain*, 42, 1-13.

Houts, A.C., Berman, J.S., & Abramson, H. (1994). Effectiveness of psychological and pharmacological treatments for nocturnal enuresis. *Journal of Consulting and Clinical Psychology*, 62, 737-745.

Jacobson, N. S., & Follette, W. C. (1985). Clinical significance of improvement resulting from two behavioral marital therapy components. *Behavior Therapy*, 16, 249-262.

Johnson, S. M., & Greenberg, L. S. (1985). Differential effects of experiential and problem-solving interventions in resolving marital conflict. *Journal of Consulting and Clinical Psychology*, 53, 175-184.

Kadden, R.M., Cooney, N.L., Getter, H., & Litt, M.D. (1989). Matching alcoholics to coping skills or interactional therapies: Posttreatment results. *Journal of Consulting and Clinical Psychology*, 57, 698-704.

Kazdin, A.E. (1977). *The token economy: A review and evaluation*. New York: Plenum.

Kazdin, A. E., & Bass, D. (1989). Power to detect differences between alternative treatments in comparative psychotherapy outcome research. *Journal of Consulting and Clinical Psychology*, 57, 138-147.

Kazdin, A. E., & Wilcoxon, L. A. (1976). Systematic desensitization and nonspecific treatment effects: A methodological evaluation. *Psychological Bulletin*, 83, 729-758.

Keane, T.M., Fairbank, J.A., Caddell, J.M., & Zimering, R.T. (1989). Implosive (flooding) therapy reduces symptoms of PTSD in Vietnam combat veterans. *Behavior Therapy*, 20, 245-260.

Keefe, F. J., Dunsmore, J., & Burnett, R. (1992). Behavioral and cognitive-behavioral approaches to chronic pain: Recent advances and future directions. *Journal of Consulting and Clinical Psychology*, 60, 528-536.

Leitenberg, H., & Callahan, E.J. (1973). Reinforced practice and reduction of different kinds of fears in adults and children. *Behaviour Research and Therapy*, 11, 19-30.

Lewinsohn, P. M., Hoberman, H. M., & Clarke, G. N. (1989). The Coping With Depression Course: Review and future directions. *Canadian Journal of Behavioural Science*, 21, 470-493.

Lieberman, R. P. (1972). Behavioral modification of schizophrenia: A review. *Schizophrenia Bulletin*, 1(6), 37-

Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 48, 1060-1064.

Longabaugh, R., Rubin, A., Malloy, P., Beattie, M., Clifford, P.R., & Noel, N. (1994). Drinking outcomes of alcohol abusers diagnosed as antisocial personality disorder. *Alcoholism: Clinical and Experimental Research*, 18, 778-785.

LoPiccolo, J., & Stock, W. E. (1986). Treatment of sexual dysfunction. *Journal of Consulting and Clinical Psychology*, 54, 158-167.

Luborsky, L., Woody, G.E., Hole, A.V., & Vellecho, A. (1995). Supportive-expressive dynamic psychotherapy for treatment of opiate dependence. In J.P. Barber & P. Crits-Christoph (Eds.), *Dynamic therapies for psychiatric disorders* (Axis I) (pp. 131-160). New York: Basic Books.

Lynch, P.N., & Zamble, E. (1989). A controlled behavioral treatment of irritable bowel syndrome. *Behavior Therapy*, 20, 509-523.

Marshall, W. L., Jones, R., Ward, T., Johnston, P., & Barbaree, H. E. (1991). Treatment outcome with sex offenders. *Clinical Psychology Review*, 11, 465-485.

Mattick, R. P., & Peters, L. (1988). Treatment of severe social phobia: Effects of guided exposure with and without cognitive restructuring. *Journal of Consulting and Clinical Psychology*, 56, 251-260.

Mitchell, J.E., Pyle, R.L., Eckert, E.D., Hatsukami, D., Pomeroy, C., & Zimmerman, R. (1990). A comparison study of antidepressants and structured intensive group psychotherapy in the treatment of bulimia nervosa. *Archives of General Psychiatry*, 47, 149-157.

O'Brien, S., Ross, L.V., & Christophersen, E.R. (1986). Primary encopresis: Evaluation and treatment. *Journal of Applied Behavior Analysis*, 19, 137-145.

Öst, L. (1988). Applied relaxation vs progressive relaxation in the treatment of panic disorder. *Behaviour Research and Therapy*, 26, 13-22.

Öst, L.-G., Salkovskis, P.M., & Hellstrom, K. (1991). One-session therapist-directed exposure vs. self-exposure in the treatment of spider phobia. *Behavior Therapy*, 22, 407-422.

Otto, M.W., Pollack, M.H., Sachs, G.S., Reiter, S.R., Meltzer-Brody, S., Rosenbaum, J.F. (1993). Discontinuation of benzodiazepine treatment: Efficacy of cognitive behavioral therapy for patients with panic disorder. *American Journal of Psychiatry*, 150, 1485-1490.

Pope, K., & Vasquez, M. (1991). *Ethics in psychotherapy and counseling: A practical guide for psychologists*. San Francisco: Jossey-Bass.

Rachman, S.J., Hodgson, E., & Marks, I.M. (1971). Treatment of chronic obsessive-compulsive neurosis. *Behaviour Research and Therapy*, 9, 237-247.

Rehm, L.P., Fuchs, C.Z., Roth, D.M., Kornblith, S.J., & Romano, J.M. (1979). A comparison of self-control and assertion skills treatments of depression. *Behavior Therapy*, 10, 429-442.

Sanderson, W.C., & Woody, S.R. (Eds.) (1995). Manuals for empirically validated treatments. *The Clinical Psychologist*, 48(4), 7-11.

Saunders, T., Driskell, J.E., Hall, J., & Salas, E. (in press). The effect of stress inoculation training on anxiety and performance. *Journal of Occupational Health Psychology*.

Scogin, F., & McElreath, L. (1994). Efficacy of

quantitative review. *Journal of Consulting and Clinical Psychology*, 62, 69-74.

Scotti, J.R., Evans, I.M., Meyer, L.H., & Walker, P. (1991). A metaanalysis of intervention research with problem behavior: Treatment validity and standards of practice. *American Journal on Mental Retardation*, 96, 233256.

Shoham, V., Bootzin, R.R., Rohrbaugh, M.J., & Urry, H. (in press). Paradoxical versus relaxation treatment for insomnia: The moderating role of reactance. *Sleep Research*, 24a.

Shoham-Salomon, V., Avner, R., & Neeman, R. (1989). You are changed if you do and changed if you don't: Mechanisms underlying paradoxical interventions. *Journal of Consulting and Clinical Psychology*, 57, 590-598.

Smith, B., & Sechrest, L. (1991). Treatment of aptitude X treatment interactions. *Journal of Consulting and Clinical Psychology*, 59, 233-244.

Snyder, D.K., & Wills, R.M. (1989). Behavioral versus insight-oriented marital therapy: Effects on individual and interspousal functioning. *Journal of Consulting and Clinical Psychology*, 57, 39-46.

Snyder, D.K., Wills, R.M., & Grady-Fletcher, A. (1991). Long-term effectiveness of behavioral versus insight-oriented marital therapy: A 4-year follow-up study. *Journal of Consulting and Clinical Psychology*, 59, 138-141.

Spiegel, D.A., Bruce, T.J., Gregg, S.F., & Nuzzarello, A. (1994). Does cognitive behavior therapy assist slow-taper alprazolam discontinuation in panic disorder? *American Journal of Psychiatry*, 151, 876-881.

Sue, S. (1995). The implications of diversity for scientific standards of practice. In S.C. Hayes, V. M. Follette, R.M. Dawes, & K.E. Grady (Eds.), *Scientific standards of psychological practice: Issues and recommendations* (pp. 265-279). Reno, NV: Content Press.

Sue, S., Zane, N., & Young, K. (1994). Research on psychotherapy with culturally diverse populations. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed.) (pp. 783-820). NY: Wiley & Sons.

Task Force on Promotion and Dissemination of Psychological Procedures. (1995). Training in and dissemination of empirically-validated psychological treatments. *The Clinical Psychologist*, 48(1), 3-23.

Task Force on Psychological Intervention Guidelines (1995). *Template for developing guidelines: Interventions for mental disorders and psychosocial aspects of physical disorders*. Unpublished manuscript, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242.

Thackwray, D.E., Smith, M.C., Bodfish, J.W., & Meyers, A.W. (1993). A comparison of behavioral and cognitive-behavioral interventions for bulimia nervosa. *Journal of Consulting and Clinical Psychology*, 61, 639-645.

Trull, T. J., Nietzel, M. T., & Main, A. (1988). The use of meta-analysis to assess the clinical significance of behavior therapy for agoraphobia. *Behavior Therapy*, 19, 527-538.

Turner, J.A., & Clancy, S. (1988). Comparison of

for chronic low back pain. *Journal of Consulting and Clinical Psychology*, 56, 261-266.

Walter, H. I., & Gilmore, S. K. (1973). Placebo versus social learning effects in parent training procedures designed to alter the behavior of aggressive boys. *Behavior Therapy*, 4, 361-377.

Wells, K. C., & Egan, J. (1988). Social learning and systems family therapy for childhood oppositional disorder: Comparative treatment outcome. *Comprehensive Psychiatry*, 29, 138-146.

Wheeler, M.E., & Hess, K.W. (1976). Treatment of juvenile obesity by successive approximation control of eating. *Journal of Behavior Therapy and Experimental Psychiatry*, 7, 235-241.

Wilfley, D. E., Agras, W. S., Telch, C. F., Rossiter, E. M., Schneider, J. A., Cole, A. G., Sifford, L., & Raeburn, S. D. (1993). Group cognitive-behavioral therapy and group interpersonal psychotherapy for the nonpurging bulimic individual: A controlled comparison. *Journal of Consulting and Clinical Psychology*, 61, 296-305.

Woody, G. E., Luborsky, L., McLellan, A. T., & O'Brien, C. P. (1990). Corrections and revised analyses for psychotherapy in methadone maintenance patients. *Archives of General Psychiatry*, 47, 788-789.

Footnote

1. The Task Force on Promotion and Dissemination of Psychological Procedures adopted the term "empirically validated treatments" for psychological interventions meeting its criteria. In discussions about the report, the term "empirically supported treatments" was suggested as more felicitous, and we agree that this is a preferable term. The term "validation" might be taken to mean that we believe research on a treatment is complete (see Garfield, in press), although the task force (1995) was at pains to avoid this implication in its report. We retain the label EVTs to avoid confusion at this point but caution the reader to keep in mind that validation is an on-going process.

Author Note

Although this paper originated as an effort of the Division 12 Task Force on Psychological Interventions, we are publishing it as individuals rather than representatives of the Division. This is to make clear that this report does not constitute nor is it intended to be viewed as a clinical guideline, standard, or official policy statement of either the Division of Clinical Psychology or of the American Psychological Association. We have listed the task force chair as the first author; authorship was otherwise randomly determined. Members of the Task Force on Psychological Interventions are Larry Beutler, Karen Calhoun, Dianne L.

Chambless (Chair), Michael Goldstein, Suzanne Bennett Johnson, Gerald Koocher (ex officio), Susan McCurry, Kenneth S. Pope, William C. Sanderson, Stanley Sue, and Sheila R. Woody. Special advisory members are: Paul Crits-Christoph, Varda Shoham, and David A. Williams.

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Table 1

Criteria for Empirically-Validated Treatments

Well-Established Treatments

- I. At least two good between group design experiments demonstrating efficacy in one or more of the following ways:
 - A. Superior to pill or psychological placebo or to another treatment.
 - B. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989).

OR
- II. A large series of single case design experiments ($n \geq 9$) demonstrating efficacy. These experiments must have:
 - A. Used good experimental designs and
 - B. Compared the intervention to another treatment as in I.A.

FURTHER CRITERIA FOR BOTH I AND II:
- III. Experiments must be conducted with treatment manuals.
- IV. Characteristics of the client samples must be clearly specified.
- V. Effects must have been demonstrated by at least two different investigators or investigatory teams.

Probably Efficacious Treatments

- I. Two experiments showing the treatment is more effective than a waiting-list control group.

OR
- II. One or more experiments meeting the Well-Established Treatment Criteria I, III, and IV, but not V.

OR
- III. A small series of single case design experiments ($n \geq 3$) otherwise meeting Well-Established Treatment Criteria II, III, and IV.

Table 2 - Examples of Empirically Validated Treatments

<u>Well-Established Treatments</u>	<u>Citation for Efficacy Evidence</u>
ANXIETY AND STRESS:	
Cognitive behavior therapy for panic disorder with and without agoraphobia	Barlow et al. (1989); Clark et al. (1994)
Cognitive behavior therapy for generalized anxiety disorder.....	Butler et al. (1991); Borkovec et al. (1987)
Group cognitive behavioral therapy for social phobia.....	Heimberg et al. (1990); Mattick & Peters (1988)
*Exposure treatment for agoraphobia.....	Trull et al. (1988)
*Exposure treatment for social phobia.....	Feske & Chambless (1995)
Exposure and response prevention for obsessive-compulsive disorder.....	Balkom et al. (1994)
*Stress Inoculation Training for Coping with Stressors.....	Saunders et al. (in press)
Systematic desensitization for simple phobia	Kazdin & Wilcoxon (1976)
DEPRESSION:	
Cognitive therapy for depression	Dobson (1989); DiMascio et al. (1979)
Interpersonal therapy for depression.....	Ekin et al. (1989)
HEALTH PROBLEMS:	
*Behavior therapy for headache.....	Blanchard et al. (1987); Holroyd & Penzien (1990)
*Cognitive behavior therapy for irritable bowel syndrome.....	Blanchard et al. (1980); Lynch & Zamble (1989)
*Cognitive behavior therapy for chronic pain	Keefe et al. (1992); Turner & Clancy (1988)
*Cognitive-behavior therapy for bulimia.....	Agras et al. (1989); Thackwray et al. (1993)
Interpersonal therapy for bulimia	Fairburn et al. (1993); Wilfley et al. (1993)
PROBLEMS OF CHILDHOOD:	
*Behavior modification for enuresis.....	Houts et al. (1994)
Parent training programs for children with oppositional behavior	Walter & Gilmore (1973); Wells & Egan (1988)
MARITAL DISCORD:	
Behavioral marital therapy.....	Azrin, Bersalel et al. (1980); Jacobson & Follette (1985)
SEXUAL DYSFUNCTION:	
Behavior therapy for female orgasmic dysfunction and male erectile dysfunction.....	LoPiccolo & Stock (1986); Auerbach & Kilmann (1977)
OTHER:	
Family education programs for schizophrenia	Hogarty et al. (1986); Falloon et al. (1985)
Behavior modification for developmentally disabled individuals	Scotti et al. (1991)
Token economy programs	Kazdin (1977); Liberman (1972)
Probably Efficacious Treatments	
ANXIETY:	
Applied relaxation for panic disorder	Öst (1988)
*Applied relaxation for generalized anxiety disorder.....	Barlow et al., (1992); Borkovec & Costello, (1993)
*Exposure treatment for PTSD.....	Foa et al. (1991); Keane et al. (1989)
*Exposure treatment for simple phobia.....	Leitenberg & Callahan (1973); Öst et al. (1991)
*Stress Inoculation Training for PTSD	Foa et al. (1991)
*Group exposure and response prevention for obsessive-compulsive disorder ..	Fals-Stewart et al. (1993)
*Relapse prevention program for obsessive-compulsive disorder.....	Hiss et al. (1994)
CHEMICAL ABUSE AND DEPENDENCE:	
*Behavior therapy for cocaine abuse	Higgins et al. (1993)
*Brief dynamic therapy for opiate dependence.....	Woody et al. (1990)
*Cognitive therapy for opiate dependence.....	Woody et al. (1990)
*Cognitive-behavior therapy for benzodiazepine withdrawal in panic disorder patients	Otto et al. (1994); Spiegel et al. (1993)
DEPRESSION:	
*Brief dynamic therapy	Gallagher-Thompson & Steffen(1994)
*Cognitive therapy for geriatric patients.....	Scogin & McElreath (1994)
*Psychoeducational treatment	Lewinsohn et al. (1989)
*Reminiscence therapy for geriatric patients	Arean et al. (1993); Scogin & McElreath (1994)
*Self-control therapy	Fuchs & Rehm (1977); Rehm et al. (1979)
HEALTH PROBLEMS:	
*Behavior therapy for childhood obesity	Epstein et al. (1994); Wheeler & Hess (1976)
*Group cognitive-behavior therapy for bulimia	Mitchell et al. (1990)
MARITAL DISCORD:	
Emotionally focused couples therapy	Johnson & Greenberg (1985)
Insight-oriented marital therapy.....	Snyder et al. (1989, 1991)
PROBLEMS OF CHILDHOOD:	
*Behavior modification of encopresis	O'Brien et al. (1986)
*Family anxiety management training for anxiety disorders.....	Barrett et al. (in press)
OTHER:	
Behavior modification for sex offenders.....	Marshall et al. (1991)
Dialectical behavior therapy for borderline personality disorder.....	Linehan et al. (1991)
Habit reversal and control techniques	Azrin, Nunn & Frantz (1980)
	Azrin, Nunn & Frantz-Renshaw (1980)