

How important are the common factors in psychotherapy? An update

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The common factors have a long history in the field of psychotherapy theory, research and practice. To understand the evidence supporting them as important therapeutic elements, the contextual model of psychotherapy is outlined. Then the evidence, primarily from meta-analyses, is presented for particular common factors, including alliance, empathy, expectations, cultural adaptation, and therapist differences. Then the evidence for four factors related to specificity, including treatment differences, specific ingredients, adherence, and competence, is presented. The evidence supports the conclusion that the common factors are important for producing the benefits of psychotherapy.

Key words: Common factors, contextual model, psychotherapy, alliance, empathy, expectations, cultural adaptation, therapist differences, specific ingredients

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The so-called common factors have a long history in psychiatry, originating with a seminal article by S. Rosenzweig in 1936 (1) and popularized by J. Frank in the various editions of his book *Persuasion and Healing* (2-4). During this period, the common factors have been both embraced and dismissed, creating some tension (5-9). The purpose of this paper is not to review or discuss the debate, but to provide an update, summarizing the evidence related to these factors.

To understand the evidence for the common factors, it is important to keep in mind that these factors are more than a set of therapeutic elements that are common to all or most psychotherapies. They collectively shape a theoretical model about the mechanisms of change in psychotherapy.

A particular common factor model, called the contextual model, has been recently proposed (8,10). Although there are other common factor models (e.g., 4,11), based on different theoretical propositions, the predictions made about the importance of various common factors are similar and the choice of the model does not affect conclusions about the impact of these factors. The contextual model is presented below, followed by a review of the evidence for the common factors imbedded in the model.

THE CONTEXTUAL MODEL

The contextual model posits that there are three pathways through which psychotherapy produces benefits. That is, psychotherapy does not have a unitary influence on patients, but rather works through various mechanisms. The mechanisms underlying the three pathways entail evolved characteristics of humans as the ultimate social species; as such, psychotherapy is a special case of a social healing practice.

Thus, the contextual model provides an alternative explanation for the benefits of psychotherapy to ones that empha-

size specific ingredients that are purportedly beneficial for particular disorders due to remediation of an identifiable deficit (8).

The three pathways of the contextual model involve: a) the real relationship, b) the creation of expectations through explanation of disorder and the treatment involved, and c) the enactment of health promoting actions. Before these pathways can be activated, an initial therapeutic relationship must be established.

Initial therapeutic relationship

Before the work of therapy can begin, an initial bond between therapist and patient needs to be created. E. Bordin stated in 1979 that “some basic level of trust surely marks all varieties of therapeutic relationships, but when attention is directed toward the more protected recesses of inner experience, deeper bonds of trust and attachment are required and developed” (12, p. 254). The initial meeting of patient and therapist is essentially the meeting of two strangers, with the patient making a determination of whether the therapist is trustworthy, has the necessary expertise, and will take the time and effort to understand both the problem and the context in which the patient and the problem are situated.

The formation of the initial bond is a combination of bottom-up and top-down processing. Humans make very rapid determination (within 100 ms), based on viewing the face of another human, of whether the other person is trustworthy or not (13), suggesting that patients make very rapid judgments about whether they can trust their therapist. More than likely, patients make rapid judgments about the dress of the therapist, the arrangement and decorations of the room (e.g., diplomas on the wall), and other features of the therapeutic setting (14). However, patients come to therapy with expectations about the nature of psychotherapy as

well, due to prior experiences, recommendations of intimate or influential others, cultural beliefs, and so forth. The initial interaction between patient and therapist is critical, it seems, because more patients prematurely terminate from therapy after the first session than at any other point (15).

Pathway 1: The real relationship

The real relationship, defined psychodynamically, is “the personal relationship between therapist and patient marked by the extent to which each is genuine with the other and perceives/experiences the other in ways that befit the other” (16, p. 119). Although the psychotherapeutic relationship is influenced by general social processes, it is an unusual social relationship in that: a) the interaction is confidential, with some statutory limits (e.g., child abuse reporting), and b) disclosure of difficult material (e.g., of infidelity to a spouse, of shameful affect, and so forth) does not disrupt the social bond. Indeed, in psychotherapy, the patient is able to talk about difficult material without the threat that the therapist will terminate the relationship.

The importance of human connection has been discussed for decades, whether is it called attachment (17), belongingness (18), social support (19), or the lack of loneliness (20,21). In fact, perceived loneliness is a significant risk factor for mortality, equal to or exceeding smoking, obesity, not exercising (for those with chronic cardiac disease or for healthy individuals), environmental pollution, or excessive drinking (22-24). Psychotherapy provides the patient a human connection with an empathic and caring individual, which should be health promoting, especially for patients who have impoverished or chaotic social relations.

Pathway 2: Expectations

Research in a number of areas documents that expectations have a strong influence on experience (25). Indeed, the purported price of a bottle of wine influences rating of pleasantness as well as neural representations (26). The burgeoning research on the effects of placebos documents the importance of expectations, as placebos have robustly shown to alter reported experience as well as demonstrating physiological and neural mechanisms (27,28).

Expectations in psychotherapy work in several possible ways. Frank (4) discussed how patients present to psychotherapy demoralized not only because of their distress, but also because they have attempted many times and in many ways to overcome their problems, always unsuccessfully. Participating in psychotherapy appears to be a form of remoralization.

However, therapy has more specific effects on expectations than simple remoralization. According to the contextual model, patients come to therapy with an explanation for their distress, formed from their own psychological beliefs,

which is sometimes called “folk psychology” (29-31). These beliefs, which are influenced by cultural conceptualizations of mental disorder but also are idiosyncratic, are typically not adaptive, in the sense that they do not allow for solutions. Psychotherapy provides an explanation for the patient’s difficulties that is adaptive, in the sense that it provides a means to overcome or cope with the difficulties. The patient comes to believe that participating in and successfully completing the tasks of therapy, whatever they may be, will be helpful in coping with his or her problems, which then furthers for the patient the expectation that he or she has ability to enact what is needed. The belief that one can do what is necessary to solve his or her problem has been discussed in various ways, including discussions of mastery (4,32), self-efficacy (33), or response expectancies (25).

Critical to the expectation pathway is that patients believe that the explanation provided and the concomitant treatment actions will be remedial for their problems. Consequently, the patient and therapist will need to be in agreement about the goals of therapy as well as the tasks, which are two critical components of the therapeutic alliance (34,35). Hatcher and Barends described the alliance as “the degree to which the therapy dyad is engaged in collaborative, purposive work” (36, p. 293). Creating expectations in psychotherapy depends on a cogent theoretical explanation, which is provided to the patient and which is accepted by the patient, as well as on therapeutic activities that are consistent with the explanation, and that the patient believes will lead to control over his or her problems. A strong alliance indicates that the patient accepts the treatment and is working together with the therapist, creating confidence in the patient that the treatment will be successful.

Pathway 3: Specific ingredients

The contextual model stipulates that there exists a treatment, particularly one that the patient finds acceptable and that he or she thinks will be remedial for his or her problems, creating the necessary expectations that the patient will experience less distress. Every treatment that meets the conditions of the contextual model will have specific ingredients, that is, each cogent treatment contains certain well-specified therapeutic actions.

The question is how the specific ingredients work to produce the benefits of psychotherapy. Advocates of specific treatments argue that these ingredients are needed to remediate a particular psychological deficit. The contextual model posits that the specific ingredients not only create expectations (pathway 2), but universally produce some salubrious actions. That is, the therapist induces the patient to enact some healthy actions, whether that may be thinking about the world in less maladaptive ways and relying less on dysfunctional schemas (cognitive-behavioral treatments), improving interpersonal relations (interpersonal psychotherapy and some dynamic therapies), being more accepting

of one's self (self-compassion therapies, acceptance and commitment therapy), expressing difficult emotions (emotion-focused and dynamic therapies), taking the perspective of others (mentalization therapies), and so forth. The effect of lifestyle variables on mental health has been understated (37). A strong alliance is necessary for the third pathway as well as the second, as without a strong collaborative work, particularly agreement about the tasks of therapy, the patient will not likely enact the healthy actions.

According to the contextual model, if the treatment elicits healthy patient actions, it will be effective, whereas proponents of specific ingredients as remedial for psychological deficits predict that some treatments – those with the most potent specific ingredients – will be more effective than others (8).

EVIDENCE FOR VARIOUS COMMON FACTORS

Now that the contextual model has been briefly presented, attention is turned toward an update of the evidence for the common factors. Each factor reviewed is imbedded in the contextual model, although each of them is more generically considered atheoretically as an important one. As will be apparent, many of the common factors are not theoretically or empirically distinct.

To present the evidence succinctly and with as little bias and error as possible, we rely on meta-analyses of primary studies. Studies that examine the association of levels of a common factor and outcome are typically reported by some type of correlation statistic (such as Pearson's product-moment correlation), whereas studies that experimentally manipulate and compare conditions typically report some standardized mean difference (such as Cohen's *d*). For comparison purposes, correlational statistics are converted to Cohen's *d*. All meta-analyses reported aggregate statistics, corrected for bias, based on the effects of individual studies appropriated weighted. To understand the importance of effects, Cohen (38) classified a *d* of 0.2 as small, 0.5 as medium, and 0.8 as large. The evidence is summarized in Figure 1, where the effects of various common factors are compared to those of various specific factors.

Alliance

The alliance is composed of three components: the bond, the agreement about the goals of therapy, and the agreement about the tasks of therapy (12). As discussed above, alliance is a critical common factor, instrumental in both pathway 2 and pathway 3.

Alliance is the most researched common factor. Typically the alliance is measured early in therapy (at session 3 or 4) and correlated with final outcome. The most recent meta-analysis of the alliance included nearly 200 studies involving over 14,000 patients and found that the aggregate correla-

tion between alliance and outcome was about .27, which is equivalent to a Cohen's *d* of 0.57 (39), surpassing the threshold for a medium sized effect.

There have been a number of criticisms of the conclusion that alliance is an important factor in psychotherapy (40), most of which have focused on the correlational nature of alliance research. However, each of the criticisms has been considered and has been found not to attenuate the importance of the alliance (see 8).

First, it could well be that early symptom relief causes a strong alliance at the third or fourth session – that is, early responders report better alliances and have better outcomes. To address this threat, early therapy progress must be statistically controlled or longitudinal research is needed to examine the association of alliance and symptoms over the course of therapy. The studies that have examined this question have found evidence to support either interpretation, but the better designed and more sophisticated studies are converging on the conclusion that the alliance predicts future change in symptoms after controlling for already occurring change.

Second, it could be that the correlation between alliance and outcome is due to the patients' contributions to the alliance. According to this line of thinking, some patients may come to therapy well prepared to form a strong alliance and it is these patients who also have a better prognosis, so the alliance-outcome association is due to the characteristics of the patients rather than to something that therapists provide to the patients. Disentangling the patient and therapist contributions involves the use of multilevel modeling. Recently, Baldwin et al (41) performed such an analysis and found that it was the therapist contribution which was important: more effective therapists were able to form a strong alliance across a range of patients. Patients' contribution did not predict outcome: patients who are able to form better alliances, perhaps because they have secure attachment histories, do not have better prognoses. Indeed, patients with poor attachment histories and chaotic interpersonal relationships may well benefit from a therapist who is able to form alliances with difficult patients. These results have been corroborated by meta-analyses (42).

Third, there may be a halo effect if the patient rates both the alliance and the outcome. However, meta-analyses have shown that the alliance-outcome association is robust even when alliance and outcome are rated by different people. It also appears that the alliance is equally strong for cognitive-behavioral therapies as it is for experiential or dynamic treatments, whether a manual is used to guide treatment or not, and whether the outcomes are targeted symptoms or more global measures.

There are other threats to validity of the alliance as a potent therapeutic factor, but the evidence for each of them is nonexistent or weak (8). The research evidence, by and large, supports the importance of the alliance as an important aspect of psychotherapy, as predicted by the contextual model.

As mentioned above, distinctions between certain common factors are difficult to make. A distinction has been

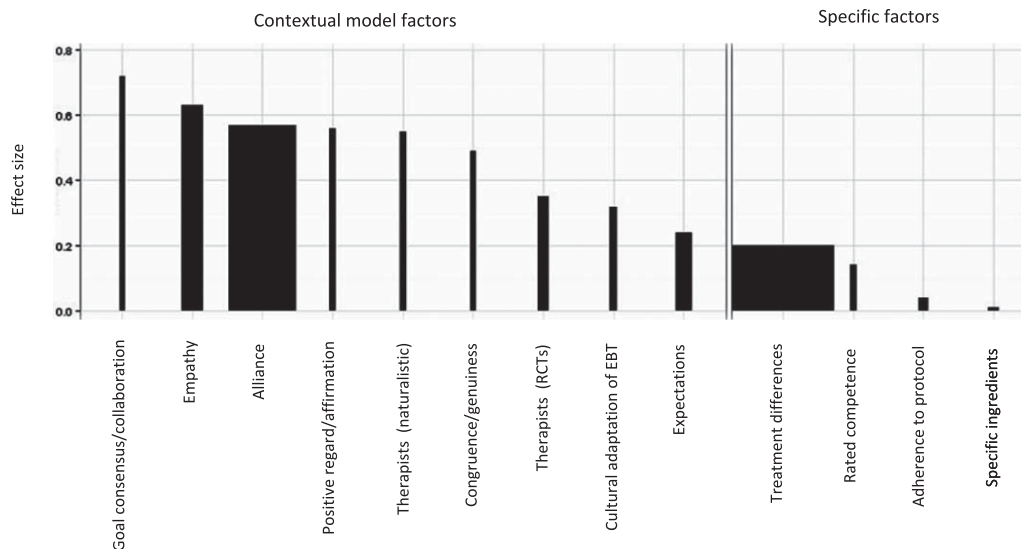


Figure 1 Effect sizes for common factors of the contextual model and specific factors. Width of bars is proportional to number of studies on which effect is based. RCTs – randomized controlled trials, EBT – evidence-based treatments

made between the bond, as defined as a component of the alliance, which is related to purposeful work, and the real relationship, which is focused on the transference-free genuine relationship (8,16). There is some evidence that the real relationship is related to outcome, after controlling for the alliance (16), and, although the evidence is not strong, it does support the first pathway of the contextual model.

A second construct related for the alliance is labeled goal consensus/collaboration. Although related to agreement about the goals and tasks for therapy, goal consensus/collaboration is measured with different instruments. As shown in Figure 1, the effect for goal consensus and collaboration is strong ($d=0.72$), based on a meta-analysis of 15 studies (43).

Empathy and related constructs

Empathy, a complex process by which an individual can be affected by and share the emotional state of another, assess the reasons for another's state, and identify with the other by adopting his or her perspective, is thought to be necessary for the cooperation, goal sharing, and regulation of social interaction. Such capacities are critical to infant and child rearing, as children, who are unable to care for themselves, signal to the caregiver that care is needed, a process that is then put to use to manage social relations among communities of adult individuals. Therapist expressed empathy is a primary common factor, critical to pathway 1 of the contextual model, but which also augments the effect of expectations.

The power of the empathy in healing was beautifully revealed in a study of placebo acupuncture for patients with irritable bowel syndrome (44). Patients with this syndrome were randomly assigned to a limited interaction condition,

an augmented relationship condition, or treatment as usual (waiting list for acupuncture). In the limited interaction condition, the acupuncturist met with the patient briefly, but was not allowed to converse with him or her, and administered the sham acupuncture (a device that gives the sensation of having needles pierce the skin, but they do not). In the augmented relationship condition, the practitioner conversed with the patient about the symptoms, the relevance of lifestyle and relationships to irritable bowel syndrome, as well as the patient's understanding of the cause and meaning of her disorder. All this was done in a warm and friendly manner, using active listening, appropriate silences for reflection, and a communication of confidence and positive expectation. For the four dependent variables (global improvement, adequate relief, symptom severity, and quality of life), the two sham acupuncture conditions were superior to treatment as usual. However, the augmented relationship condition was superior to the limited interaction condition, particularly for quality of life.

The above study is noteworthy because it was an experimental demonstration of the importance of a warm, caring, empathic interaction within a healing setting. Unfortunately, experimental manipulation of empathy in psychotherapy studies is not possible, for design and ethical reasons. Nonetheless, there have been numerous studies ($n=59$) that have correlated ratings of therapist empathy with outcome, which have been meta-analytically summarized (45), resulting in a relatively large effect ($d=0.63$; see Figure 1). Constructs related to empathy have also been meta-analyzed and found to be related to outcome, including positive regard/affirmation ($d=0.56$, $n=18$; see Figure 1) (46) and congruence/genuineness ($d=0.49$, $n=18$; see Figure 1) (47).

It should be recognized that several of the threats to validity for the alliance are also present with regard to empathy. For example, it is clearly easier for a therapist to be warm and

caring toward a motivated, disclosing and cooperative patient than to one who is interpersonally aggressive, and the former types of patients will most likely have better outcomes than the latter, making the empathy/outcome correlation an artifact of patient characteristics rather than therapist action. Unfortunately, studies such as the ones conducted to rule out these threats to validity for the alliance have not been conducted for empathy and related constructs.

Expectations

Examining the role of expectations in psychotherapy is difficult. In medicine, expectations can be induced verbally and then physicochemical agents or procedures can be administered or not, making the two components (creation of expectations and the treatment) independent. In psychotherapy, creating the expectations, through explanation of the patient's disorder, presenting the rationale for the treatment, and participating in the therapeutic actions, is part of therapy. It is difficult to design experimental studies of expectations in psychotherapy (not impossible, but not yet accomplished in any important manner).

The typical way to assess the effect of expectations in psychotherapy is to correlate patient ratings of their expectations with outcomes, but we have seen that such correlational studies produce threats to validity. Furthermore, in many studies, expectations are measured *prior* to when the rationale for the treatment is provided to the patient, when it is the explanation given to the patient that is supposed to create the expectations. Assessing expectations after the explanation has been given (i.e., during the course of treatment) is also problematic, as those patients who have made significant progress in therapy will naturally respond that they think therapy will be helpful.

Despite the difficulties with investigating expectations in psychotherapy, this is a topic of much interest (48-50). Recently, a meta-analysis of expectations showed that there was a relatively small, but statistically significant, relationship between rated expectations and outcome ($d=0.24$, $n=46$; see Figure 1) (49). The best evidence for expectations in the context of healing is derived from studies of the placebo effect, where exquisite care has been taken to experimentally manipulate variables of interest and to control for threats to validity, by using physiological and neurological variables as well as subjective reports. A summary of this literature is beyond the scope of this article, but many excellent reviews are available (8,27,28).

Cultural adaptation of evidence-based treatments

The contextual model emphasizes that the explanation given for the patient's distress and the therapy actions must be acceptable to the patient. Acceptance is partly a function of consistency of the treatment with the patient's beliefs, par-

ticularly beliefs about the nature of mental illness and how to cope with the effects of the illness. This suggests that evidence-based treatments that are culturally adapted will be more effective for members of the cultural group for which the adapted treatment is designed. There are many ways to adapt treatments, including those involving language, cultural congruence of therapist and patient, cultural rituals, and explanations adapted to the "myth" of the group.

A recent meta-analysis demonstrated that adapting evidence-based treatments by using an explanation congruent with the cultural group's beliefs (i.e., using the cultural "myth" as the explanation) was more effective than unadapted evidence-based treatments, although the effect was modest ($d=0.32$, $n=21$; see Figure 1) (51).

Therapist effects

Therapist effects are said to exist if some therapists consistently achieve better outcomes with their patients than other therapists, regardless of the nature of the patients or the treatment delivered. Therapist effects have been studied in clinical trials and in naturalistic settings. In both designs, the measure of therapist effects is an intraclass correlation coefficient. Technically, this coefficient indexes the degree to which two patients from the same therapist have similar outcomes relative to two patients from two different therapists. To compare therapist effects to other common factors, the intraclass correlation coefficient is converted to Cohen's d .

The contextual model predicts that there will be differences among therapists *within* a treatment. That is, even though the therapists are delivering the same specific ingredients, some therapists will do so more skillfully and therefore achieve better outcomes than other therapists delivering the same treatment. Evidence for this conjecture is found in clinical trials. A meta-analysis of therapist effects in clinical trials found modest therapist effects ($d=0.35$, $n=29$; see Figure 1) (52). Keep in mind that the therapists in clinical trials generally are included because of their competence and then they are given extra training, supervised, and monitored. Moreover, the patients in such trials are homogeneous, as they have a designated diagnosis and are selected based on various inclusionary/exclusionary criteria. In such designs, patients are randomly assigned to therapists. Consequently, consistent differences among therapists in such trials, although modest, are instructive.

Not surprisingly, therapist effects in naturalistic settings are greater than in clinical trials. In the former settings, therapists are more heterogeneous, patients may not be randomly assigned to therapists, patients are heterogeneous, and so forth. A meta-analysis of therapist effects in such settings found a relatively large effect ($d=0.55$, $n=17$; see Figure 1) (52).

The finding of robust therapist effects raises the question about what are the characteristics or actions of more effective therapists. Recent research has begun to address this

question. Studies have shown that effective therapists (vis-à-vis less effective therapists) are able to form stronger alliances across a range of patients, have a greater level of facilitative interpersonal skills, express more professional self-doubt, and engage in more time outside of the actual therapy practicing various therapy skills (8).

SPECIFIC EFFECTS

Evidence for the common factors is also collected by examining the evidence for specific aspects of psychotherapy. The contextual model makes several predictions about specific effects, which will be discussed as each specific effect is considered.

Treatment differences

When pathway 3 of the contextual model was discussed earlier, it was emphasized that the model contends that all therapies with structure, given by empathic and caring therapists, and which facilitate the patient's engagement in behaviors that are salubrious, will have approximately equal effects. That is, the specific ingredients, discussed in pathway 3, are not critical because they remediate some psychological deficit.

The question of whether some treatments are superior to others has long been debated, with origins at the very beginning of the practice of psychotherapy (think about the disagreements amongst Freud, Adler and Jung, for example). Today, there are claims that some treatments, in general or for specific disorders, are more effective than others. Others, however, claim that there are no differences among psychotherapies, in terms of their outcomes.

The literature addressing this issue is immense and summarizing the results of relative efficacy is not possible. Nevertheless, the various meta-analyses for psychotherapies in general or for specific disorders, if they do find differences among various types of treatment, typically find at most differences of approximately $d=0.20$, the value shown in Figure 1.

Specific effects from dismantling studies

To many, the dismantling design is the most valid way to identify the effects of specific ingredients. In this design, a specific ingredient is removed from a treatment to determine how much more effective the treatment is in total compared to the treatment without the ingredient that is purportedly remedial for the psychological deficit.

Two meta-analyses have examined dismantling designs and both found minimal differences between the total treatment and the treatment without one or more critical ingredients ($d=0.01$, $n=30$, see Figure 1) (53,54). The most recent of these meta-analyses did find that adding an ingre-

redient to an existing treatment increased the effect for targeted variables by a small amount ($d=0.28$) (53).

Adherence and competence

In clinical trials, it is required that adherence to the protocol and the competence at delivering the treatment are rated. This makes sense: if the goal is to make inferences about a particular treatment, then it is necessary to ensure that the treatment was delivered with the necessary components and not with extraneous components (i.e., with *adherence* to the protocol) and that the treatment components were delivered skillfully (i.e., given *competently*).

It would seem logical theoretically that adherence to the protocol and competence would be related to outcome. That is, for cases where the therapist followed the protocol and did so skillfully, there should be better outcomes. However, this is not the case. In a meta-analysis of adherence and competence (55), effects were small ($d=0.04$, $n=28$ for adherence; $d=0.14$, $n=18$ for competence; see Figure 1).

The results for adherence and competence demand further explanation. If the specific ingredients of a treatment are critical, then adherence should make a difference – actually delivering those ingredients should be related to outcome. There is evidence that rigid adherence to a protocol can attenuate the alliance and increase resistance to the treatment (i.e., failing to accept the treatment, a contextual model tenet) (8), and that flexibility in adherence is related to better outcomes (56), results consistent with prediction of the contextual model.

The findings for competence are a bit more difficult to understand. Competence in these trials typically is rated by experts in the treatment being given, based on watching therapy sessions. Why can't experts differentiate between "good" therapy and "bad" therapy? If this were indicative of experts' abilities to judge competence, then the notion of psychotherapy supervision would be turned upside down, because what is observed and evaluated would have no relation to outcomes – how could the supervisor then make a case for providing input to the supervisee? But the clue to the resolution of this mystery is found in the definition of competence. Most psychotherapy trials rate the competence *for a specific treatment*. That is, what is rated is the skill in providing the elements of the treatment protocol, rather than common factors, such as empathy, alliance, affirmation, and so forth – aspects of therapy that do predict outcome and seem to differentiate more effective therapists from less effective therapists.

CONCLUSIONS

Although the common factors have been discussed for almost a century, the focus of psychotherapy is typically on the development and dissemination of treatment models. If

not discounted, then the common factors are thought of as perhaps necessary, but clearly not sufficient. The evidence, however, strongly suggests that the common factors must be considered therapeutic and attention must be given to them, in terms of theory, research and practice.

One of the criticisms of the common factors is that they are an atheoretical collection of commonalities. In this paper, the contextual model was presented to convey a theoretical basis for these factors.

References

- Rosenzweig S. Some implicit common factors in diverse methods of psychotherapy: "At last the Dodo said, 'Everybody has won and all must have prizes'". *Am J Orthopsychiatry* 1936;6:412-5.
- Frank JD. *Persuasion and healing: a comparative study of psychotherapy*. Baltimore: Johns Hopkins University Press, 1961.
- Frank JD. *Persuasion and healing: a comparative study of psychotherapy*, 2nd ed. Baltimore: Johns Hopkins University Press, 1973.
- Frank JD, Frank JB. *Persuasion and healing: a comparative study of psychotherapy*, 3rd ed. Baltimore: Johns Hopkins University Press, 1991.
- Barlow DH. Psychological treatments. *Am Psychol* 2004;59:869-78.
- Laska KM, Gurman AS, Wampold BE. Expanding the lens of evidence-based practice in psychotherapy: a common factors perspective. *Psychotherapy* 2014;51:467-81.
- Wampold BE. *The great psychotherapy debate: model, methods, and findings*. Mahwah: Lawrence Erlbaum Associates, 2001.
- Wampold BE, Imel ZE. *The great psychotherapy debate: the research evidence for what works in psychotherapy*, 2nd ed. New York: Routledge, 2015.
- Baker TB, McFall RM, Shoham V. Current status and future prospects of clinical psychology: toward a scientifically principled approach to mental and behavioral health care. *Psychol Sci Publ Int* 2008;9:67-103.
- Wampold BE, Budge SL. The 2011 Leona Tyler Award address: the relationship – and its relationship to the common and specific factors of psychotherapy. *Couns Psychol* 2012;40:601-23.
- Orlinsky DE, Howard KI. Process and outcome in psychotherapy. In: Garfield SL, Bergin AE (eds). *Handbook of psychotherapy and behavior change*. New York: Wiley, 1986:311-81.
- Bordin ES. The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice* 1979;16:252-60.
- Willis J, Todorov A. First impressions: making up your mind after a 100-ms exposure to a face. *Psychol Sci* 2006;17:592-8.
- Heppner PP, Claiborn CD. Social influence research in counseling: a review and critique. *J Couns Psychol* 1989;36:365-87.
- Connell J, Grant S, Mullin T. Client initiated termination of therapy at NHS primary care counselling services. *Couns Psychother Res* 2006;6:60-7.
- Gelso C. A tripartite model of the therapeutic relationship: theory, research, and practice. *Psychother Res* 2014;24:117-31.
- Bowlby J. *Attachment and loss*. New York: Basic Books, 1980.
- Baumeister RF. *The cultural animal: human nature, meaning, and social life*. New York: Oxford University Press, 2005.
- Cohen S, Syme SL. *Social support and health*. San Diego: Academic Press, 1985.
- Cacioppo S, Cacioppo JT. Decoding the invisible forces of social connections. *Front Integr Neurosci* 2012;6:51.
- Lieberman MD. *Social: why our brains are wired to connect*. New York: Crown Publishing Group, 2013.
- Holt-Lunstad J, Smith TB, Baker M et al. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci* 2015;10:227-37.
- Holt-Lunstad J, Smith TB, Layton JB. Social relationships and mortality risk: a meta-analytic review. *PLoS Med* 2010;7:e1000316.
- Luo Y, Hawkey LC, Waite LJ et al. Loneliness, health, and mortality in old age: a national longitudinal study. *Soc Sci Med* 2012;74:907-14.
- Kirsch I. *How expectancies shape experience*. Washington: American Psychological Association, 1999.
- Plassmann H, O'Doherty J, Shiv B et al. Marketing actions can modulate neural representations of experienced pleasantness. *Proc Natl Acad Sci USA* 2008;105:1050-4.
- Price DP, Finniss DG, Benedetti F. A comprehensive review of the placebo effect: recent advances and current thought. *Annu Rev Psychol* 2008;59:565-90.
- Benedetti F. *Placebo effects: understanding the mechanisms in health and disease*, 2nd ed. New York: Oxford University Press, 2014.
- Boyer P, Barrett HC. Domain specificity and intuitive ontologies. In: Buss DM (ed). *The handbook of evolutionary psychology*. Hoboken: Wiley, 2005:96-118.
- Molden DC, Dweck CS. Finding 'meaning' in psychology: a lay theories approach to self-regulation, social perception, and social development. *Am Psychol* 2006;61:192-203.
- Thomas RM. *Folk psychologies across cultures*. Thousand Oaks: Sage, 2001.
- Lieberman BL. The role of mastery in psychotherapy: maintenance of improvement and prescriptive change. In: Frank JD, Hoehn-Saric R, Imber SD et al (eds). *Effective ingredients of successful psychotherapy*. New York: Brunner/Mazel, 1978:35-72.
- Bandura A. Self-efficacy: toward a unifying theory of behavioral change. In: Baumeister RF (ed). *The self in social psychology*. New York: Psychology Press, 1999:285-98.
- Crits-Christoph P, Connolly Gibbons MB, Crits-Christoph K et al. Can therapists be trained to improve their alliances? A preliminary study of alliance-fostering psychotherapy. *Psychother Res* 2006;16:268-81.
- Horvath AO. The alliance in context: accomplishments, challenges, and future directions. *Psychotherapy: Theory, Research, Practice, Training* 2006;43:258-63.
- Hatcher RL, Barends AW. How a return to theory could help alliance research. *Psychotherapy: Theory, Research, Practice, Training* 2006;43:292-9.
- Walsh R. Lifestyle and mental health. *Am Psychol* 2011;66:579-92.
- Cohen J. *Statistical power analysis for the behavioral sciences*, 2nd ed. Hillsdale: Erlbaum, 1988.
- Horvath AO, Del Re AC, Flückiger C et al. Alliance in individual psychotherapy. *Psychotherapy* 2011;48:9-16.
- DeRubeis RJ, Brotman MA, Gibbons CJ. A conceptual and methodological analysis of the nonspecifics argument. *Clin Psychol Sci Pract* 2005;12:174-83.
- Baldwin SA, Wampold BE, Imel ZE. Untangling the alliance-outcome correlation: exploring the relative importance of therapist and patient variability in the alliance. *J Consult Clin Psychol* 2007;75:842-52.
- Del Re AC, Flückiger C, Horvath AO et al. Therapist effects in the therapeutic alliance-outcome relationship: a restricted-maximum likelihood meta-analysis. *Clin Psychol Rev* 2012;32:642-9.
- Tryon GS, Winograd G. Goal consensus and collaboration. In: Norcross JC (ed). *Psychotherapy relationships that work: evidence-based responsiveness*, 2nd ed. New York: Oxford University Press, 2011:153-67.
- Kaptchuk TJ, Kelley JM, Conboy LA et al. Components of placebo effect: randomised controlled trial in patients with irritable bowel syndrome. *BMJ* 2008;336:999-1003.

45. Elliott R, Bohart AC, Watson JC et al. Empathy. *Psychotherapy* 2011;48:43-9.
46. Farber BA, Doolin EM. Positive regard. *Psychotherapy* 2011;48:58-64.
47. Kolden GG, Klein MH, Wang CC et al. Congruence/genuineness. *Psychotherapy* 2011;48:65-71.
48. Greenberg RP, Constantino MJ, Bruce N. Are patient expectations still relevant for psychotherapy process and outcome? *Clin Psychol Rev* 2006;26:657-78.
49. Constantino MJ, Arnkoff DB, Glass CR et al. Expectations. *J Clin Psychol* 2011;67:184-92.
50. Arnkoff DB, Glass CR, Shapiro SJ. Expectations and preferences. In: Norcross JC (ed). *Psychotherapy relationships that work: therapist contributions and responsiveness to patients*. Oxford: Oxford University Press, 2002:335-56.
51. Benish SG, Quintana S, Wampold BE. Culturally adapted psychotherapy and the legitimacy of myth: a direct-comparison meta-analysis. *J Couns Psychol* 2011;58:279-89.
52. Baldwin SA, Imel ZE. Therapist effects: finding and methods. In: Lambert MJ (ed). *Bergin and Garfield's handbook of psychotherapy and behavior change*. New York: Wiley, 2013:258-97.
53. Bell EC, Marcus DK, Goodlad JK. Are the parts as good as the whole? A meta-analysis of component treatment studies. *J Consult Clin Psychol* 2013;81:722-36.
54. Ahn H, Wampold BE. Where oh where are the specific ingredients? A meta-analysis of component studies in counseling and psychotherapy. *J Couns Psychol* 2001;48:251-7.
55. Webb CA, DeRubeis RJ, Barber JP. Therapist adherence/competence and treatment outcome: a meta-analytic review. *J Consult Clin Psychol* 2010;78:200-11.
56. Owen J, Hilsenroth MJ. Treatment adherence: the importance of therapist flexibility in relation to therapy outcomes. *J Couns Psychol* 2014;61:280-8.

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