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WHO WORKS FOR WHOM AND WHY? INTEGRATING THERAPIST EFFECTS ANALYSIS INTO PSYCHOTHERAPY OUTCOME AND PROCESS RESEARCH

MICHAEL J. CONSTANTINO, JAMES F. BOSWELL, ALICE E. COYNE, DAVID R. KRAUS, AND LOUIS G. CASTONGUAY

There is growing evidence that the individual psychotherapist can have a notable effect on clients' mental health treatment outcomes, with most research to date centered on the outcome of global symptom reduction and functional improvement (Baldwin & Imel, 2013; see also Chapters 2 and 3, this volume). Because the field has been somewhat slow to recognize the importance of these *therapist effects*, research is only beginning to address its complexity and determinants.

As one layer of complexity, symptom- and function-based outcomes can be conceptualized clinically and analyzed empirically at finer-grained multidimensional levels than the more typical global indices. In fact, a multidimensional approach to routine outcome assessment was recommended by the Society for Psychotherapy Research–American Psychological Association Core Battery Conference (Strupp, Horowitz, & Lambert, 1997). Consistent with this perspective, when therapist effects have been examined across

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multiple specific client outcome domains (e.g., depression, anxiety, substance use, sleep, quality of life, sexual functioning) with a measure like the Treatment Outcome Package (Kraus, Seligman, & Jordan, 2005), two main findings have emerged.

First, in large naturalistic samples, therapist effects are evident on specific outcomes; the individual psychotherapist can have a notable effect on clients' depression, substance use, and so forth (Kraus et al., 2016; Kraus, Castonguay, Boswell, Nordberg, & Hayes, 2011). Practically, when assessing a specific outcome domain such as depression, some therapists' clients (on average) achieve consistently better depression reduction than other therapists' clients (on average), with this same notion holding for other specific outcome domains. Although, which therapists are more effective could, and likely would, differ depending on the domain. Interestingly, the degree to which variability in a specific outcome is explained by therapists varies by domain. For example, in the Kraus et al. (2016) study, when accounting for initial severity and other risk factors (e.g., unemployment, divorce), the therapist had a more pronounced effect on outcome domains, like substance abuse (18.28% variance explained) and quality of life (18.72%) than other domains, like psychosis (3.71%) and mania (1.56%). Practically, it appears that the person of the therapist may have a greater influence when treating clients with substance abuse problems than when treating clients with psychosis (for the latter, other factors will explain a greater portion of the outcome variance pie). Others have replicated this finding of differential therapist effects across quality of life, functional, and symptom domains (e.g., Owen, Adelson, Budge, Kopta, & Reese, 2016).

The second finding that has emerged from multidimensional outcome studies focused on the therapists is a pattern of relative strengths and weaknesses within therapists' own practice. In the Kraus et al. (2011) study, results demonstrated a differential pattern of individual therapist performance depending on their clients' problem domain; for example, some therapists demonstrated substantial effectiveness in depression reduction but ineffectiveness or even harm in other domains. Many therapists demonstrated effectiveness over multiple domains, yet no therapists demonstrated reliable effectiveness across all domains. A small but notable 4% of therapists failed to demonstrate positive outcomes on any domain. These findings were replicated in the Kraus et al. (2016) study; even after controlling for significant variance at the client level, therapists demonstrated differential patterns of relative strengths and weaknesses within their caseload. Additionally, hierarchical linear modeling-based correlations demonstrated stability in therapists' domain-specific performance across subsequent clients. As one concrete example, therapists who were particularly effective in facilitating depression reduction in one wave of 30 clients within their caseload remained

above average in facilitating depression reduction with a subsequent wave of 30 clients within their caseload.

Therefore, these studies suggest that globally focused outcome assessment may not capture all of the nuances of therapist effects. Rather, the potency of therapist effects in general may differ depending on the outcome domain, and therapists are differentially (and stably) effective within their own practices depending on the outcome domain. It is important to note, however, that although the outcome instruments in the studies mentioned previously were multidimensional in focus, other potentially important outcome domains were not investigated. For example, from a psychodynamic perspective, it may also be important to assess changes in personality organization or the development of more adaptive defenses. We assume that significant therapist effects would also be observed on such variables; however, we are unaware of therapist effects research that has focused on these constructs. These different types of outcomes (beyond symptoms and functioning assessed globally and specifically) would reflect yet another layer of complexity of the therapist effects.

The studies revealing that there are therapist effects on broad and domain-specific outcomes have far-reaching implications for clients, therapists, administrators, trainers, and policy makers, examples of which are discussed in depth in other chapters in this volume (e.g., Chapter 16). However, therapist effects research has yet to reach its full potential. It remains largely unknown (a) why or how some therapists are more effective than others, or largely comparable to others, in producing *global* client outcomes (e.g., general distress); (b) why or how some therapists are more effective than others, or largely comparable to others, in producing *specific* client outcomes (e.g., anxiety); and (c) why or how therapists are good at treating some conditions within their own caseloads, but not others (i.e., therapists' personal strengths and weaknesses).

To satisfy all stakeholders, especially therapists and those who train them, there is a pressing need for the field to turn its attention to uncovering such determinants of therapist effects, drawing on "big" (e.g., large-scale naturalistic studies), "medium" (e.g., single clinical trials), and "small" (e.g., microprocess comparisons of known good versus poor clinicians) data. To this effect, the remainder of this chapter discusses two main categories of the most promising determinants: individual characteristics of therapists and characteristics of the during-therapy process. More specifically, and expanding on issues covered in Chapter 2 of this volume, our main goals are to identify the determinants that have received empirical support, to suggest potential candidate determinants for future investigation, and to delineate statistical and methodological considerations that are relevant for such future research. For this last goal, we spotlight conceptually how the use of multilevel statistical

modeling can be, and should be, used to assess therapist characteristics and characteristics of the during-therapy process that may promote a better understanding of why and how the individual therapist affects client improvement, lack thereof, or deterioration during psychotherapy. Using examples that reflect complex clinical realities, including different domains of functioning and the interaction between several variables, we also demonstrate that the failure to use multilevel modeling can lead to false empirical and clinical conclusions.

INDIVIDUAL CHARACTERISTICS OF THE THERAPIST

Individual therapist characteristics that might explain the therapist effect could involve a myriad of variables such as personality, attachment style, interpersonal history, history with own psychotherapy, training background, and experience, among others. The keys are to measure such therapist variables (historically a challenging task) and, assuming therapist willingness to be measured, to analyze the data in a way that can reveal determinants (predictors) of therapist effects. As Wampold et al. noted in Chapter 2 of this volume, this involves multilevel modeling to account for inherently nested data and to reveal between-therapist variability and within-therapist (or between-client) variability. Although an in-depth discussion of the statistical details is beyond the scope of this chapter, it may prove useful to outline the levels of a model and the steps to testing determinants of therapist effects with a concrete example in mind.

Consider that we were interested in testing whether therapist attachment anxiety explains between-therapist variability in an outcome (in this case, depression) that was discovered in the data. The first step would be to show that there is variability in clients' depression outcome that needs to be explained. If we had measured depression levels over time, these repeated measures (one form of nesting—measurement occasions within clients) would represent the first level of data in the model. Then, assuming between-client variability in depression change over treatment, at the second level of data we could add client level predictors of depression change. For this discussion, the most important element of this multilevel model is to investigate possible influences of the therapist on client depression change at the third level (another form of nesting—clients within therapists). Setting up this model allows for the proportion of variability in depression change accounted for by clients and therapists to be decomposed. It might be, for example, that the therapist explained 10% of the variability in client depression change, as revealed by an intraclass correlation (see Adelson & Owen, 2012; Chapter 2, this volume). As this is likely a clinically relevant proportion of variance explained by the person of the therapist, true therapist level

predictors (such as therapist attachment anxiety) could be added to try to explain these therapist differences (i.e., reduce unexplained variance in the between-therapist effect). Like any regression model, the goal would be to reduce the unexplained variance (in this case, between-therapist variance) to zero (although, variables will at best decrease only some of the unexplained variance). In this example, it could be that therapists with less attachment anxiety have significantly better average outcomes across the clients on their caseload, implicating attachment anxiety as one, at least partial, determinant of the therapist effect.

We should reiterate that to do this kind of work effectively, researchers should design their studies and analyses with the possibility (or even likelihood) that therapist effects on outcome will exist. With such forethought, they can assess well-conceived putative (therapist-level) predictors of these effects. To date, studies including true therapist level predictors are limited; however, the limited work has revealed at least two promising individual therapist characteristics that likely explain at least part of therapist effects. As reviewed by Wampold et al. (Chapter 2, this volume), these characteristics are facilitative interpersonal skill (FIS) and deliberative practice (DP). FIS encompasses various features of clinical interaction, such as therapist verbal fluency, emotional expression, hope inspiration, and accurate empathy. In one study, therapist FIS (as assessed when each therapist simulated a response to the same video stimulus of a challenging client) predicted between-therapist differences in their *actual* clients' outcomes; that is, part of what made some therapists more effective on average (across their cases) than other therapists was possessing FIS vis-à-vis a standardized challenging therapeutic scenario (Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009).

DP encompasses an intentional effort to improve performance through methodical practice (Ericsson & Lehmann, 1996). In one study, the amount of time that therapists spent in DP predicted between-therapist differences in outcome; part of what made some therapists more effective on average than others was spending more time per week (by their own report) engaging in DP (Chow et al., 2015). Although promising, it is important to point out that research on FIS and DP as determinants of therapist effects requires replication.

In the Anderson et al. (2009) and Chow et al. (2015) studies, client outcome was assessed with a global outcome index. Thus, in addition to uncovering other individual therapist characteristics that predict between-therapist effects on global outcomes, future research also will need to assess what predicts therapists being especially good (or not), compared with others or themselves, at treating specific outcome domains as per multidimensional measures like the Treatment Outcome Package. As a speculative example, "wounded" therapists (clinicians who have experienced a similar mental health problem to the one

that they are now treating) could be particularly effective at treating substance use compared with "nonwounded" therapists; however, these wounded therapists may be less effective at treating depression compared with their nonwounded counterparts who might be effective at treating depression because of interpersonal skill, which in turn might be less important for the most expert practitioners treating anxiety.

CHARACTERISTICS OF DURING-THERAPY PROCESS

Given that processes that occur during a course of psychotherapy can come in many guises, we are adopting a broad definition of a during-therapy process variable as any variable that might help explain how treatment works, whether measured in a moment during a session, following a session, or at some other time after treatment starts but before it ends (Castonguay, Nordberg, Schut, & Constantino, 2010). With this broad definition in mind, during-therapy process characteristics that might explain therapist effects could be explicit dyadic processes such as client–therapist bond, goal agreement, or collaboration. Alternatively, they could be therapist behaviors or attitudes that happen within the context of a treatment dyad (when considering individual therapy, which is our focus here), such as techniques delivered, during-session immediacy, or belief in the treatment. In fact, such variables could even be clients' behaviors or attitudes, such as homework compliance, emotional expression, or expectation for improvement. Implicit in investigating client process factors is the idea that different therapists may have different abilities to facilitate such processes (e.g., certain therapists may evoke more client emotion in session or inspire greater expectation of treatment success), which could then explain between-therapist differences in outcome. Like the individual characteristics of the therapists reviewed in the previous section, there are many possible dyadic process variables and during-therapy process variables (e.g., therapist or client behaviors and attitudes) that could explain some amount of the therapist effect on client outcomes. The keys, again, are to measure such variables and to analyze the data in a way that can reveal determinants of therapist effects (i.e., multilevel modeling).

To date, there is much research that does measure process variables; however, there is, relatively speaking, limited research that has used multilevel modeling, which has implications for how the extant literature is interpreted, empirically and clinically. For example, there is voluminous research on the total correlation between psychotherapy process variables and client outcomes (Crits-Christoph, Connolly Gibbons, & Mukherjee, 2013)—a correlation that does not disaggregate the association into therapist and client contributions. Such process variables include dyadic factors like the quality of

the client–therapist alliance, a variable that has been frequently analyzed as a correlate of client treatment success. In a meta-analysis, the alliance has been shown to be significantly and positively correlated with client improvement ($r = .28$, $p < .0001$; Horvath, Del Re, Flückiger, & Symonds, 2011). Other process variables include therapist behaviors, like adherence to a treatment protocol, which was unrelated to outcome in a meta-analysis ($r = .02$; Webb, DeRubeis, & Barber, 2010). Still other process variables, like client attitudes, can correlate with outcome; for example, clients' early expectation for their treatment's success has been shown to be positively correlated with improvement ($r = .12$, $p < .001$; Constantino, Arnkoff, Glass, Ametrano, & Smith, 2011). These findings suggest that different process variables explain (in total) different amounts of variability between clients' outcomes during or after therapy.

Although these findings provide global information on correlates of client improvement, they say nothing about the therapist's *specific* contributions to the processes or to the role of these processes in explaining between-therapist differences in client outcomes. Without partitioning, or untangling, these between-therapist or within-therapist effects, our understanding of process-outcome correlational analyses will be incomplete at best, and possibly misleading at worst. As noted, to fully understand therapist effects, we need to move beyond a total correlation; even a total correlation between a therapist behavior and an outcome is not a therapist effect (at least not before the untangling occurs). For example, although therapist in-session expressions of hostility may be predictive of client outcomes, this correlation is not, in itself, a therapist effect. It could be that therapists vary within their own caseloads in the amount of hostility they express with clients (i.e., within-therapist variability), and/or different therapists vary in the amount of hostility they express across all of their clients (i.e., between-therapist variability). Either, or both, of these hostility variables could be predictive of client outcomes. This parsing of therapist–client processes into the unique contribution of each dyad member is what differentiates process variables from the individual characteristics fully "owned" by the therapist as possible determinants of between-therapist effects on client outcome. After this initial step, though, the models testing these two general categories of variables as possible predictors of therapist effects on client outcome are largely similar.

To illustrate this point, we continue with the previous example of therapist hostility using depression as the outcome variable, with therapists explaining 10% of the variability in client depression change (as revealed by an intraclass correlation). We can model within-client depression change at Level 1 and add any client level predictors of depression change at Level 2, including the client's contribution to a process predictor (e.g., the within-therapist hostility). Then, at Level 3, we would add therapists' contribution to the process predictor (e.g., the between-therapist hostility). As with any regression model, we

can see how much of the unexplained between-therapist variability in client depression change is explained by between-therapist hostility. In this example, it could be that therapists with higher average hostility expressions across their caseload also tend to have clients with worse average outcomes. This is different from interpreting the within-therapist (or between-client) effect of therapist hostility on outcome, which might suggest that a client whose therapist expressed more hostility toward him or her relative to other clients treated by that therapist would have a worse outcome compared to that therapist's other clients. It is possible that the client in this example might be especially likely to elicit therapist hostility compared to other clients because of his or her personality style. Note from the interpretation of these two effects, that only between-therapist hostility could account for between-therapist differences in depression outcomes. This example of using a process variable (that inherently involves both therapist and client) is another step toward answering the vital question of what accounts for between-therapist differences in client outcomes. This type of work is just emerging, and it remains unclear what will be the best process variables to explain the therapist outcome effect.

However, the limited work to date is compelling. There is some evidence that the between-therapist alliance–outcome correlation is significant, whereas the within-therapist alliance–outcome correlation is not; that is, clients treated by therapists with higher average alliances (among clients in their caseload) had better outcomes than clients treated by therapists with lower average alliances among their clients (e.g., Baldwin, Wampold, & Imel, 2007; Crits-Christoph et al., 2009). This tells us that one reason why some therapists achieve better average outcomes with their clients seems to be that these therapists also achieve better average alliances across all of their clients. Beyond the well-established total correlation between alliance and outcome, this finding says something about the person of the therapist. In other words, having a higher alliance is therapeutic (the typical, yet incomplete implication); however, most important with this finding is that clients are more likely to achieve said alliance quality (no matter who they are) with Therapist A compared with Therapist B. This distinction has important implications. The typical interpretation states that fostering better alliances should be a goal of practitioners; however, the more refined interpretation is that it is important for the field to find out what it is about Therapist A that allows him or her to foster alliances so competently, or what is it about Therapist B that does not allow him or her to foster alliances as competently as Therapist A. It could be, for example, that FIS, and/or DP, actually predict better alliance formation, which then predicts better outcomes. This would reflect a therapist level mediational model, which we see as a next, and essential, wave of therapist effects research.

As researchers continue to search for determinants of the therapist effect, they might draw on research that explores influences on processes serving as

dependent variables in themselves. Process variables that consistently reveal between-therapist differences in their level or development are prime candidates to predict between therapist differences on client outcomes. In fact, there is such variability between-therapists on alliance quality that it made it a logical place to start as a determinant of between-therapist outcomes. On the basis of a meta-analysis of the effects of 15 samples that isolated therapist contributions to the alliance, the person of the therapist accounted for approximately 9% of the variability in alliance ratings (Baldwin & Imel, 2013). With this aggregated result, one might be tempted to conclude that the alliance has the most promise as a determinant of therapist outcome effects. However, Baldwin and Imel (2013) cautioned against this notion given that therapists' contribution to the alliance is extremely variable across studies, meaning that it may not be a very good (or at least consistently good) indicator of how the more versus less effective therapists attain their status. Thus, researchers will need to continue to search for process variables that not only predict between-therapist differences in client outcomes, but also consistently indicate therapists' contribution to the process variable.

Examples of other variables that fit the bill (on the basis of very limited research to date) include client outcome expectation and therapist treatment adherence. In one study that examined between-therapist differences in their clients' outcome expectation (Vîslă, Flückiger, Krieger, Constantino, & grosse Holtforth, 2015), the authors found that the person of the therapist accounted for approximately 9% of the variability in the client outcome expectancy slope over time. In one of the few studies examining between-therapist differences in their adherence to treatment, the person of the therapist accounted for 19% of the variability in adherence ratings (Boswell et al., 2013; see also Imel, Baer, Martino, Ball, & Carroll, 2011). If such works are replicated, consistently revealing between-therapist differences on these processes, it will be important to test therapist-level mediational models like the one proposed previously. For example, is there a characteristic that Therapist A possesses (e.g., persuasiveness) that relates to his or her ability to foster positive outcome expectations in his or her clients (relative to Therapist B) that in turn relates to better outcomes for Therapist A relative to Therapist B? And, in light of the research reviewed previously on therapists' relative strengths and weaknesses, will this mediational path differ depending on the problem domain being treated?

It is important to keep in mind when considering variability in process and outcome variables that between-therapist effects generally explain less than within-therapist (between-client) effects. In other words, although therapist differences are meaningful, client differences are often stronger determinants of treatment outcome. Thus, an ongoing, simultaneous effort is also required to understand between-client effects on process and outcome,

and the multilevel model affords us one opportunity to do this consistently and effectively. Of course, there are challenges to being able to capitalize on multilevel modeling for therapist effects. For example, researchers need to have an interest in the topic and the forethought to measure true therapist level predictors, which has been historically difficult. In addition, a process variable needs to vary across therapists (i.e., therapists need to differ in their average level of the variable); otherwise, the variable could not explain between-therapist differences in outcome.

OTHER COMPLEX CONSIDERATIONS

As noted, there are other complexities as the field searches for determinants of therapist effects on client outcomes. For example, there could be even more nesting than measurement occasions within clients and clients within therapists. It could be that therapists are nested within treatment sites or training locations, which would call for a fourth level in the model. If significant variability existed between such sites/organizations, researchers would then need to search for predictors of such variability (e.g., climate, supervisor quality, training model). This represents even more partitioning of possible determinants of why some therapists' clients outperform, on average, other therapists' clients.

Researchers also need to be aware of a different type of therapist effect, whereby the person of the therapist moderates/changes the nature of a process–outcome correlation. Although not directly explaining a therapist effect on an outcome, there can still exist between-therapist differences on a process–outcome correlation; for example, the extent to which the alliance is associated with outcome may be different for different therapists. If the relation between alliance and outcome varies on the basis of therapists who are in that relationship, then researchers would need to examine why some therapists foster and/or use the relationship to create a therapeutic effect where others do not (Adelson & Owen, 2012). In this case, one implication is not simply to teach everyone how to foster adaptive alliances generically; rather, providers need to learn how to use alliances in the way that effective therapists use alliances to promote client gain. A second implication could be that different therapists use different processes to be effective; Therapist A might use the alliance to promote client gain, although Therapist B's alliance might not relate to his or her clients' outcomes, but use of directive strategies might. This implies that our search is not only what works best for whom with regard to clients and their outcome, but also what works best for whom in terms of therapists and their means to fostering those client outcomes.

CONCLUSION

As Chow et al. (2015) astutely noted, "no longer treated as a nuisance variable, therapist effects have become a serious focus of clinical trials and naturalistic research" (p. 343). Helping to bring therapist variability into focus is the application of multilevel modeling. With this method, and others, the field is evolving to better reveal psychotherapy nuance. Attempting to appreciate this nuance is exciting. Although it may challenge long-standing interpretations of data, or at least reveal incompleteness, we can take comfort in the fact that our field has gone through such evolutions before, and such evolutions are often ultimately embraced and perfected, before giving way to yet other evolutions later. There are certainly things that we are not anticipating now about the psychotherapy endeavor that may seem so apparent 20 years later with newer minds, methods, and milieus. With that in mind, the pursuit of understanding what therapists have the best outcomes when working with which clients in which dyads or contexts and through which processes continues. Once research tells us which process variables, and especially those for which therapists makes a clear and consistent contribution, explain between-therapist effects on outcome, it will be important to be responsive to them in some way to foster success and avoid harm (Castonguay, Boswell, Constantino, Goldfried, & Hill, 2010).

As Boswell et al. (Chapter 16, this volume) noted, one type of responsiveness could involve changing health care systems to match clients to therapists who have a proven track record of success in treating clients with a particular type of presenting problem (and to avoid referring clients to therapists with track records of "unsuccess" in a relevant outcome domain). FIS research also suggests, at least preliminarily, the importance of engaging an individual characteristic at the right time. As a field, we need to find the markers of these right times and therapist and process characteristics that predict therapist variability in responding to them in a way that facilitates improvement. Perhaps these will be in the form of modular trainings built around discovered determinants of therapist effects (Constantino, Boswell, Bernecker, & Castonguay, 2013). For example, therapists could learn to engage in effective DP when they are experiencing an "outcome slump" among their clients. Or therapists could learn to expertly use motivational interviewing when their clients show resistance. Or therapists can learn to be persuasive when their clients' hope for improvement wanes. The key for such "right time" applications, though, is that therapist effects research shows that these applications characterize the most effective therapists and are therapeutic. Of course, these are just a few of the many ways that therapist responsiveness manifests most usefully; others await more discoveries and testing.

In closing, we view the concepts discussed here as being relevant for all psychotherapy researchers, not just those explicitly interested in the therapist effect that typically gets associated with fancy statistics and big data (see Chapter 16, this volume). As we have shown, even those interested in more traditional process–outcome correlations in smaller data cannot simply turn a blind eye to the ambiguity in a total correlation. Given that psychotherapy is an inherently dyadic construct (and in some cases even more complex), it is incomplete to examine the influence of a process variable on an outcome variable without disaggregating the client and therapist contributions. This entire volume pushes us to do so and to be more complete as a field.

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