Reflecting on Homework in Psychotherapy: What Can We Conclude from Research and Experience?

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This article examines the empirical basis of using homework in psychotherapy and then offers a synthesis of the research literature with the preceding clinical articles. We provide a practitioner-friendly review of psychotherapy process and outcome research literature, concluding that there is now sufficient evidence to support the assertion that homework assignments enhance psychotherapy outcomes. It is also clear that homework compliance is a consistently significant predictor of treatment outcome. Limitations of existing studies and future research directions are outlined, and we suggest that more specific questions are required regarding the integration of homework into therapy process. Clinical recommendations and issues in homework administration described in preceding articles are also synthesized. The research evidence and contributors to this issue converge in recommending homework within the broad context of psychotherapy and using creative ways of administering homework that is customized to the client. © 2002 Wiley Periodicals, Inc. J Clin Psychol/In Session 58: 577-585, 2002.

Keywords: homework assignments; process and outcome research; psychotherapy practice

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One of the things that therapists observe in their daily practice of psychotherapy is that clients are more likely to improve if they apply skills learned in treatment to situations outside treatment (i.e., homework). As the concluding article to this issue of *In Session*, this article provides a review of the empirical research on homework, then offers an integration of the research evidence with the preceding clinical articles. It is concluded that we now have sufficient evidence to support the inclusion of homework assignments into psychotherapy.

Results from Outcome Research

In the past two decades, there have been more than 30 separate treatment-outcome studies that have examined the effects of homework assignments in psychotherapy (Kazantzis, 2000). Despite this increasing interest in examining homework's effects, researchers have only sought to answer two broad empirical questions. The first question attempts to clarify whether psychotherapy outcomes are enhanced when homework is included as part of the treatment protocol; the second attempts to clarify whether homework compliance represents a predictor of treatment outcome. These different research questions demand different research methodologies. Questioning the causal effects of a particular treatment component is something best examined by comparing multiple groups of clients, using either experimental or quasiexperimental designs. The relational effects of a particular treatment component can be examined with a single group of clients in a correlational design (see discussion in Kazantzis, Ronan, & Deane, 2001).

On the surface, the experimental research has produced inconsistent support for the assertion that homework enhances psychotherapy outcomes. Some experimental studies have found a significant enhancement effect (e.g., Kazdin & Mascitelli, 1982; Marks et al., 1988), whereas other studies have failed to obtain effects that achieve statistical significance. For example, Blanchard et al. (1991) demonstrated that clients who received homework assignments as part of treatment showed a trend toward improving more than clients without homework, but the difference between groups was not statistically significant, with α set at .05. The frequent interpretation here is that there is insufficient evidence, and that "more of the same research is needed" to determine whether homework can enhance psychotherapy outcomes.

An alternative explanation that was raised in a recent statistical power survey of the literature by Kazantzis (2000) is that researchers have not designed their studies to be sufficiently *sensitive* to detect homework effects. Design sensitivity refers to a study's probability of detecting an effect, given that one exists. When design sensitivity is low, the likelihood of obtaining a null result increases, and the interpretation of obtained results is decidedly problematic (Cohen, 1988). The survey found that researchers attempting to demonstrate homework effects on psychotherapy outcome had, on average, only given themselves a 58% chance of detecting a significant effect of homework on psychotherapy outcome (based on Cohen's conventional value for a large effect size, with α set at .05).

A recent study (Kazantzis, Deane, & Ronan, 2000) aggregated the seemingly inconsistent findings of experimental studies that were designed to examine whether homework can enhance treatment outcomes. Fortunately, the use of meta-analysis to summarize the findings from a series of studies bypasses the limitations of design sensitivity. The meta-analysis found that homework assignments produced a positive mean effect size in the medium range (homogenous effect size r = .36). The homogeneity in the effect size suggests that, across all samples and types of homework assignments, psychotherapy with homework produced greater outcome than psychotherapy consisting entirely of in-session work. To understand this effect size, it would be expected that 68% of clients would improve when therapy involved homework, compared to only 32% when therapy involved no homework (percentages were calculated using the binomial effect size display formula = [.50 + (r/2)], where r is the index of effect size).

The correlational research has unanimously shown that homework compliance is highly associated with positive treatment outcome. This finding has been demonstrated for clients presenting with depression and anxiety, as well as in marital therapy and therapy for older adults. The previously mentioned meta-analysis (Kazantzis et al., 2000) aggregated these positive findings with the few studies that have failed to find significant compliance-outcome correlations. The meta-analysis clarified that the relationship between client compliance and treatment outcome is reliable and robust, and does not differ significantly when compliance is rated by different sources (client, therapist, independent observer), measured in different ways (regularly throughout therapy; retrospectively), or across different client problems (anxiety, depression, other outpatient). However, the meta-analysis was unable to determine whether the compliance-outcome relationship was influenced by the type of homework activity (exposure, relaxation, social skills, thermal biofeedback, video), because most studies used a wide variety of homework activities as part of treatment.

Limitations of Empirical Research

Both internal and external validity require attention when reviewing the psychotherapy research literature on homework assignments. With regards to internal validity, there is the issue of failing to consider client-instigated therapeutically relevant activities. In previous studies where investigators have sought to compare control conditions of therapy that used homework to no-homework, researchers have not examined the extent to which clients in control conditions have engaged in activities of their own accord. The potentially confounding effect of unmeasured activity among controls is illustrated in the 1983 study by Kornblith, Rehm, O'Hara, and Lamparski. Their study failed to obtain homework effects despite obtaining high levels of compliance in the homework condition. At the end of the study, however, a number of clients in the control group reported having designed and implemented their own homework, thereby raising the possibility that conditions were comparable in their levels of between-session activity. Although a measure for the assessment of client-instigated between-session activity has been constructed (Orlinsky, Tarragona, Epstein, & Howard, 1989), no prior research on homework effects has sought to measure the extent of client-instigated homework.

In addition to the problem of assessing client-instigated activity, there are problems with methods of assessing homework compliance. Research has not accounted for the possibility that clients may engage in homework activities that are slightly different from those assigned by the therapist or completely different (productive as well as nonproductive). Further, researchers have generally failed to consider the *quality* of homework compliance.

With regard to external validity, a limitation of the homework research is that the empirical evidence has been conducted solely within the contexts of cognitive and behavioral therapies. This is not particularly surprising given that the regular use of homework has a long history with behavioral, cognitive, and rational-emotive psychotherapy formulations. However, recent short-term formulations of dynamic psychotherapy explicitly advocate the use of homework as a useful component of therapy (e.g., Carich, 1990; Halligan, 1995). In fact, one recent review argued that acquisition of adaptive skills through work done between sessions is a common attribute of both cognitive and dynamic

therapies (Badgio, Halperin, & Barber, 1999). (This seems intuitive, considering that the ultimate goal of all therapies is for clients to make use of gains made in therapy outside the formal consultation setting.) Specifically, homework has received enthusiastic support in experiential therapy (e.g., Greenberg, Watson, & Goldman, 1988), marital and family therapies (e.g., Carr, 1997), and solution-focused therapy (Beyebach, Morejon, Palenzuela, & Rodriguez-Arias, 1996). Despite this broader emphasis of homework as an important feature of psychotherapy practice, there is no current empirical support for its use outside of cognitive and behavioral therapies.

What Can We Conclude?

Research has demonstrated that psychotherapy involving homework assignments yields a greater treatment outcome than psychotherapy without homework. In addition, it is clear that compliance with homework assignments—as rated by different sources, as measured in different ways, within different client problems—is a significant predictor of treatment outcome. Therefore, we conclude that, all other things being equal, therapists who use homework assignments, and who observe adequate client compliance with homework, are likely to observe better treatment outcomes.

Convergence between Research and Practice

In the preceding articles of this issue, therapists working with a range of client populations have described their approaches to using homework in psychotherapy. Although some of the approaches have features in common, there are important differences in the way they are applied to different populations. In this section, we will integrate the research evidence with this issue's preceding clinical articles.

One of the most basic premises to the use of homework concerns its ability to enhance psychotherapy outcomes. There is substantial agreement among contributors that homework provides the opportunity for the client (and therapist) to check their grasp of session content and, more generally, see how they will cope with problematic situations when therapy has finished. Homework extends therapy time by allowing the client to carry out therapeutic tasks in problematic situations, which promotes experiential learning at emotional and cognitive levels. As homework is carried out in the client's everyday life, it assists in generalizing learning and gains made in therapy. For example, Hudson and Kendall (2002) note that homework enables children to increase their experience of mastery of the information/skills covered in each session, through practice and rehearsal in their natural environment. There was also substantive agreement among contributors' clinical articles and the research evidence that homework enhances the outcomes of psychotherapy. However, all of the research, and most of the clinical application, stems from the cognitive-behavioral tradition. For this reason, we have focused this integration on process factors related to setting up homework so that therapists across a broad range of theoretical approaches may implement them.

The effectiveness of any given homework assignment depends on the extent that the client actually engages in the task. However, homework noncompliance is a considerable problem for practitioners. The interventions that Tompkins (2002) suggests for enhancing homework compliance are based on the assertion that therapists have far more control over the homework assignment and the manner with which it is presented (i.e., homework administration) than they do over client factors (i.e., symptom severity and level of functioning). We do not yet have empirical evidence to guide decisions about which methods of administering homework are most effective, but contributors to this issue

have provided early suggestions to addressing noncompliance that may guide psychotherapy practice and future research. These suggestions can be categorized into three stages of homework administration: homework design, assigning homework, and homework review.

Homework is best used as a central feature of psychotherapy process rather than an add-on or adjunctive procedure to be used occasionally. As a means of making this clear to the client, therapists are advised to integrate homework into all sessions (Freeman & Rosenfield, 2002; Garland & Scott, 2002). Routine review of homework at the beginning of a session and assigning of homework at the end of a session, perhaps through the use of a session agenda, helps to build continuity between sessions (Coon & Gallagher-Thompson, 2002).

Homework Design

Presenting a coherent rationale for homework is important for its efficacy. Tompkins explains that clients are more likely to complete a homework assignment if they understand the reason for doing it. Contributors were united in that the rationale for homework needs to incorporate clarification of how each homework activity is relevant to the client's treatment goals and therapy session content, thereby reinforcing the homework's meaning and value to the client (see empirical support in Conoley, Padula, Payton, & Daniels, 1994).

Separate from the homework's rationale and how it matches with therapy goals, therapists should consider client views or perceptions that might prevent them from engaging in the homework (Freeman & Rosenfield, 2002). For example, Dattilio states that couples and family members who avoid completing homework assignments may be providing the therapist with important information about their difficulties with communication or in working together as a unit, or they may be simply conveying awkwardness about change in the relationship. Similarly, Leahy suggests that some clients with generalized anxiety may hold the belief that "writing down my thoughts will make me more anxious," a belief that may obstruct the use of thought records in cognitive-behavioral therapy. At the same time, clients with personality disorders may often be baffled as to why they have to be the ones to change and to do things differently, and why they have to do homework (Freeman & Rosenfield, 2002).

The specific content of the homework should be as clear and simple as possible, starting small and increasing difficulty as therapy progresses (Garland & Scott, 2002; Tompkins, 2002). In this way, homework needs to be appropriate to the stage of therapy and take into consideration several client factors: (a) engagement in therapy and readiness to change, (b) skill level, and (c) degree of impaired functioning. The homework may also need to be modified so that it is suitable for a child's developmental level (Hudson & Kendall, 2002) or broken down into further smaller steps so that it is realistic for older adults (Coon & Gallagher-Thompson, 2002). In addition, therapists should ensure that the homework is carefully tailored to the client and their cultural background (Coon & Gallagher-Thompson; Tompkins, 2002).

Assigning Homework

Homework assignments should be as clear and specific as possible. As Tompkins illustrates in a number of examples, it is most helpful for the homework to be tied to a specific situation, time, and place. Additionally, the client should clearly understand exactly how to undertake the assignment, assisted through therapist modeling or the use of examples (Garland & Scott, 2002), in-session practice (Tompkins, 2002), and frequency and length of time required to complete it (Dattilio, 2002). While the relationship between psychotherapy outcome and this level of specificity remains an empirical question, the recommendations offered by this special issue's contributors may need to be carefully noted, as existing data suggests the recommendations are not consistently practiced in the field (see Kazantzis & Deane, 1999).

As a means of targeting barriers to homework completion, the use of a confidence rating was endorsed by contributors, in which clients are asked how confident they are, on a 0–100 scale, that they will be able to complete the homework assignment (Freeman & Rosenfield, 2002; Tompkins, 2002). Barriers may include features of the clinical presentation or practical problems, such as bad weather or transportation. Contributors to *In Session* also agreed that homework assignments should be written down for clients and should include a concrete description of the task and how it is to be completed. The suggestion is that written homework serves as a public statement of the client's intention to comply with the assignment while also serving as a memory prompt (see empirical support in Cox, Tisdelle, & Culbert, 1988). Tompkins also underscores the importance of soliciting feedback from clients regarding their acceptance of the rationale, understanding of the content, and willingness to undertake the task as discussed (see empirical support in Worthington, 1986).

Homework Review

During homework review, it is important to leave sufficient time for client feedback about homework (5–10 minutes). Homework review includes asking the client what they have learned through completing their task (Garland & Scott, 2002), regardless of the task outcome (Coon & Gallagher-Thompson, 2002). There was also substantive agreement among contributors that exploring noncompliance provides valuable information about the client's difficulties, as well as his/her view of the homework activity in assisting with their problem (Leahy, 2002), while also identifying unpredicted obstacles to homework completion (Dattilio, 2002; Tompkins, 2002). As clients will have usually spent a reasonable portion of time on homework, a therapist's failing to review homework can be demoralizing to the client and reduce interest in future homework (Garland & Scott, 2002) or could be interpreted by the client to mean that the homework has been undertaken incorrectly (Dattilio, 2002). For example, Hudson and Kendall suggest that if the client has not completed the homework task, doing so during the session's homeworkreview portion can be beneficial. As an additional step, various contributors emphasized the utility of using social reinforcement (e.g., praise) for completion or even partial completion of homework tasks: for example, Coon and Gallagher-Thompson describe the utility of clients' recognizing and rewarding themselves for progress. Given these various components in homework review, it may be necessary to spend up to 20 minutes reviewing homework at the beginning stage of psychotherapy (Garland & Scott, 2002). Evidence suggests that therapist competency in reviewing homework is an important predictor of psychotherapy outcomes (e.g., Bryant, Simons, & Thase, 1999; Shaw et al., 1999).

Client Role

The administration of homework ideally involves a jointly agreed or collaborative process rather than a task simply allocated at the end of the session (Freeman & Rosenfield, 2002). While the specific content of homework may be central to the empirically supported treatment approach, client input is critical to considering the practical details of how the homework will be completed and why it will be helpful at that particular time (Coon & Gallagher-Thompson, 2002; Garland & Scott, 2002). Indeed, offering the client a choice of ways and times to complete the homework or allowing them to choose among equivalent homework tasks can further increase commitment, responsibility, and compliance (Freeman & Rosenfield, 2002). Where appropriate, homework may be most effective when significant others, parents (Hudson & Kendall, 2002), additional family members (Dattilio, 2002), or other professionals (Coon & Gallagher-Thompson, 2002) are also included in this discussion.

Therapist Role

In outlining recommendations detailed in this issue, we have focused on the particular strategies that therapists can utilize to maximize homework compliance. Separate from the strategies, however, are the *ways* in which these strategies are implemented. Tompkins suggests that therapists can further enhance homework compliance if they are curious, collaborative, reinforce all pro-homework behavior, emphasize homework completion over outcome, and reinforce successful homework approximations. In adopting this approach, therapists should present each homework assignment as a "no-lose" scenario by explaining that all information is useful, including information about why the homework did not work (Freeman & Rosenfield, 2002; Garland & Scott, 2002). This approach also aims to counter a client's self-imposed standards of trying to be sure that they "get it right" for their therapist (Coon & Gallagher-Thompson, 2002; Hudson & Kendall, 2002).

General Issues

Contributors to this issue were undivided in emphasizing that clients may have negative perceptions of the term "homework." The term may have negative connotations for adults who have unpleasant schooling histories, associate it with negative evaluation or concerns about perfection (Dattilio, 2002; Hudson & Kendall, 2002), or find it demeaning (Coon & Gallagher-Thompson, 2002). Therapists may choose to consider changing the term "homework" to either "task" or "experiment."

Since the interventions that clients use to prevent relapse are learned through completing the homework tasks between sessions, homework compliance is essential for relapse prevention. The final few therapy sessions should be spent collaborating with clients to consolidate particular skills learned in therapy. This can be done by listing a variety of homework strategies that effectively supported skill development and maintenance, by problem-solving difficulties that might occur, and by deciding what strategies to use (Coon & Gallagher-Thompson, 2002; Freeman & Rosenfield, 2002). Skill consolidation may also involve reutilization of various homework tasks that were helpful in order to help reinforce what was learned in therapy. In addition, it is helpful to schedule booster or check-in sessions at 3, 6, and 12 months after the last session to see how well clients continue to use the skills taught in therapy (Coon & Gallagher-Thompson, 2002; Dattilio, 2002; Freeman & Rosenfield, 2002).

Conclusion

In this article, we have integrated the empirical support for using homework in psychotherapy. We have also provided an integration of the suggested methods of homework administration (which have all treated homework compliance as a central focus of therapy) offered by contributors to this issue. While there is some overlap by contributors in suggesting strategies for different populations, there is also a considerable degree of consistency. When taking into account the empirical evidence indicating that homework can enhance cognitive behavior therapy outcomes, it would seem important to develop strategies for homework administration in order to guide practice and research in the broader context of psychotherapy. This issue of *In Session: Psychotherapy in Practice* provides the first step toward this aim and will be followed by future efforts.

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