Chapter 1

BEHAVIOR THERAPY

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Behavior therapy is an empirically based treatment approach that has demonstrated efficacy across numerous psychological disorders including mood disorders, anxiety disorders, eating disorders, and substance use disorders (Hersen & Bellack, 1999). Behavior therapy has also proven effective with numerous "problems with living" including weight management, smoking cessation, and childhood behavior problems. In behavior therapy, the therapist and patient work together to understand the factors that maintain problematic behaviors, and strategies are then initiated to help patients discontinue problematic behaviors and/or initiate new more, adaptive behaviors. Many treatment techniques fall under the umbrella of behavior therapy, from self-monitoring, to behavioral activation, to exposure, but all are meant to accomplish these same goals.

Behavior therapy is unique from other therapies in a number of ways. First, behavior therapy is time-limited. Some reasonably simple problems, like a specific phobia of spiders, can be treated in just a few hours (e.g., Öst, Ferebee, & Furmark, 1997). Even the most complex problems can often be treated in less than 20 sessions. Behavior therapy works efficiently because it is problem-focused and present-focused. Rather than spending a lot of time questioning where the problem came from, the focus is placed on the factors that currently maintain the problem and on changing these maintaining factors to ameliorate the problem. Another reason that behavior therapy can proceed relatively quickly is that much of the work of therapy actually occurs outside of sessions. Patients are typically assigned homework, and are generally encouraged to embrace opportunities to work on their difficulties in between sessions even beyond set homework assignments.

The concept of homework illuminates another important quality of behavior therapy—the patient and therapist are viewed as partners who each play an important role in treatment. Early on in treatment, the task of patients is to teach their therapists about the problems that they are experiencing; it is the therapist's task to teach patients about the behavioral model of understanding and treating their problems. Once the therapist and the patient are "on the same page" so to speak, they are ready to embark on the process of therapy together. While it is typical for the therapist to set session agendas and to assign homework early in treatment, patients are encouraged to take an increasingly active role as treatment progresses. This ensures that patients can

serve as their own therapists once treatment is over, thereby facilitating continuing improvement as well as preventing relapse.

In this chapter, we will: 1) discuss the purposes of homework in behavior therapy; 2) describe different kinds of homework assignments; 3) show how to design and assign homework; 4) discuss how to ensure homework compliance and how to deal with noncompliance; and 5) describe how to adapt homework assignments when working with children and teenagers.

WHY HOMEWORK SHOULD BE ASSIGNED IN BEHAVIOR THERAPY

Empirical Support for the Use of Homework in Behavior Therapy

There are a number of reasons for why homework should be assigned in behavior therapy. Perhaps the most compelling reason is that homework compliance has been found to be associated with good treatment outcome across many disorders (see meta-analysis by Kazantzis, Deane, & Ronan, 2000). Homework compliance has also been associated with long-term maintenance of gains once treatment is over (Park et al., 2001).

Clinical Rationale for the Use of Homework in Behavior Therapy

A good way to communicate to patients the importance of homework is to share the research findings described above. It can also be helpful to share some hypotheses on the relationship between homework compliance and outcome. A simple explanation for the relationship is the old adage, "The more effort you put in, the more you get out." If patients only work on their difficulties during an hour-long, weekly therapy session, it is likely that they will get *something* out of treatment, but not nearly as much (and not nearly as efficiently) as if they put in time on their own in between sessions.

From a behavioral perspective, problematic behaviors are maintained because of learned associations between stimuli and responses. Behaviorally based treatment involves learning new, more adaptive responses; repeated practice strengthens this new stimuli-response association, while weakening the old, maladaptive responses. There are a number of reasons why these new associations are not learned as well if practice only occurs during sessions. The most obvious is that in-session time is limited. In order for these new associations to form, patients must practice them more frequently than would be afforded by a weekly therapy session. Patients might relate to the idea that behavior change is very much like learning a new language. Simply taking a language class would not lead to fluency. Rather, between classes, students should listen to language tapes, read newspapers or watch TV in the language, and practice conversing with a fellow student or someone fluent in the language. Students would probably benefit most from visiting a country where the language is spoken. This "extra" work outside the classroom is perhaps even more important than what is learned in the classroom.

Another advantage of homework is that it allows patients to try out new behaviors in different contexts, likely resulting in different learning experiences than what is gained from in-session work. Interestingly, animal models suggest that providing opportunities for learning in a variety of contexts promotes retention of new learning (e.g., Bouton, 1994). Take for example a patient with bulimia nervosa who had a long list of foods that she considered to be forbidden. This patient feared that if she ate these foods, she would lose control, overeat, and gain an immense amount of weight. She also feared that if she ate "bad" foods, even in moderation, other people would judge her negatively. At the time she came for treatment, she felt proud of her self-control and believed that her friends also placed value on this. During early therapy sessions, the therapist and patient worked through a hierarchy of forbidden foods, and homework assignments involved eating these same foods at home during the week. These exposures helped the patient learn that eating these foods in moderation would not lead to uncontrolled weight gain. Doing the exposures at home helped her to see that she would not lose control and overeat if the therapist were not present. Later homework assignments involved eating these same foods in the presence of friends in order to work on the belief that doing so would lead them to think less highly of her. In fact, when doing these homework assignments, the patient actually received positive feedback from her friends who were relieved to see her eat something besides salads and felt more at ease eating with her under these conditions. These very important learning experiences could not have occurred during sessions because the patient believed that the presence of the therapist would stop her from overeating and because she was not nearly as concerned by what the therapist thought of her as by what her friends thought of her. The combination of in-session and homework exposures helped her to set up a new association with her forbidden foods. Rather than associate them with fear and loss of control, she came to see that she could get some pleasure out of eating them in moderation—both from the food itself and from the improvement in her social relations that came about by being less restrictive around eating.

As was just mentioned, another important contextual difference between in-session work and homework is the presence/absence of the therapist. Sometimes patients believe that they were only able to engage in a new behavior because the therapist was present, offering reassurance and providing safety. For example, a patient with panic disorder who greatly feared riding the subway successfully did so with his therapist for the first time in 20 years. He had avoided doing so because he feared that he would have a panic attack while in the subway tunnel and that if he could not get out of the subway, he might go crazy. After the in-session exposure, the therapist asked the patient whether he was surprised that he did not have a panic attack (or go crazy). The patient responded, "Because you were there and I was distracted, I didn't get anxious enough to have a panic attack." The therapist then suggested that they get back on the subway, but that the therapist ride at one end of the car and the patient ride at the other so that the patient would not be distracted from his panic symptoms. During this exposure, the patient experienced some panic symptoms but they did not develop into full-blown panic, because he kept reminding himself that the therapist was there to help him if he needed it. It was essential in this situation for the patient to do this exposure on his own again for homework. Such an exposure would teach him two things: that the probability of him having a panic attack was lower than he expected and that if he were to have a panic attack, he could

manage on his own, even if he could not get off the subway. Such experiences have a more powerful effect on feelings of self-efficacy than those that occur in the presence of a therapist.

Finally, homework is beneficial because it teaches patients to be their own therapists—a very important goal in behavior therapy which likely accounts for its good long-term efficacy. Over the course of therapy, patients have the opportunity to design homework assignments and carry them out while still receiving formal coaching from an expert. This means that patients will know not only how to maintain their treatment gains, but also how to deal with new problems once treatment is over. In other words, behavior therapy seems to have a preventative effect for the recurrence of problems once therapy formally ends.

TYPES OF HOMEWORK ASSIGNMENTS

There are several different kinds of homework assignments that can be given in behavior therapy. Most behavior therapy programs include psychoeducation, information gathering and treatment planning, and instruction on the core techniques of behavior therapy that are aimed at ameliorating the patient's problems. Homework can be integrated into all of these treatment components.

Early Homework: Psychoeducation and Self-Monitoring

When psychoeducational material is covered in the first few sessions of treatment, patients can be given handouts to read for homework that cover this same material. Because patients can sometimes be overwhelmed in the first few sessions of treatment, it can be very beneficial to review psychoeducational materials at home. Homework handouts can be used to educate patients about the nature of their problems and the behavioral approach to treatment. When the patient is calmer and working at his own pace, it is likely that he will absorb more of this important information. In order to ensure that patients actively read handouts, they should be integrated into the subsequent session by inviting questions and asking patients to explain how the material covered in the handouts applies to their own situation.

Another excellent homework assignment for early on in treatment is self-monitoring of behaviors. In addition to psychoeducation, the first few sessions of behavior therapy are typically dedicated to gathering information about the patient's difficulties. Because many patients have a difficult time reporting their own behavior, self-monitoring serves as a means of accurately gathering information that will help the patient and therapist to understand the nature of the problem and how to treat it. Patients can be asked to monitor many different behavioral indices. Patients with depression are often asked to record their activities for a week, rating how much mastery they feel and how much pleasure they experience from each activity. Patients with bulimia nervosa can be asked to monitor episodes of binge eating, keeping track of the thoughts, feelings, and behaviors associated with binges. Similarly, patients with panic disorder can be asked to keep track of panic attacks for a week, also noting the thoughts, feelings, and behaviors associated with attacks. The information gathered from self-monitoring can then be reviewed and discussed during sessions so that the

therapist and patient can come to an understanding of the factors maintaining the problematic behaviors. For example, when reviewing self-monitoring that was done for homework with a patient with bulimia, the therapist noted that the patient always binged at night and that she always noted feeling lonely before bingeing. When asked by the therapist how she feels *after* bingeing, the patient reported feeling disgusted in herself and convinced that no one would ever want to be friends with her or date her. This knowledge suggested that the patient binged in response to loneliness, but that by continuing to engage in binge eating the patient felt that it was even more likely that she would be alone forever. The insight gained from this self-monitoring homework informed the goals of treatment. The therapist and patient decided that the patient must find other behaviors to engage in when she was feeling lonely in the evenings besides bingeing. Establishing some social contacts was seen as a reasonable goal and one that would also resolve the feelings of loneliness that brought on binge eating behavior in the first place.

Assigning Specific Behavior Therapy Techniques

Once the patient and therapist come to an understanding of the maintaining factors for the problematic behaviors, specific behavior therapy techniques are taught to help patients break these patterns and establish new, healthier behaviors. These therapy techniques are assigned for homework along with continuing self-monitoring for the duration of treatment. As was already noted, many techniques lie under the umbrella of behavior therapy and, as such, homework assignments will look very different depending on the difficulties that each patient is having. A depressed patient might be asked to engage in a certain number of activities each day that provide a sense of mastery and/or pleasure. A patient with social phobia might be asked to attend a party and initiate conversations with two new people. A patient with marital difficulties might have a conversation with his spouse using assertive communication skills that he had learned and practiced in therapy. And, a patient with a high level of stress in his life might be asked to practice relaxation techniques like progressive muscle relaxation or positive imagery. Regardless of the specific technique, the key is that patients practice the skills in between sessions that they have learned during sessions to move them more effectively and efficiently through the therapeutic process.

DESIGNING AND ASSIGNING HOMEWORK

Before discussing the logistics of designing homework in behavior therapy, it is important to emphasize that homework should be a part of therapy right from the first session. Assigning homework at this stage sets the tone for therapy. It communicates to patients that therapy is a collaborative process. Behavior therapy is not a mysterious process—it is based on simple tenants that therapists teach to patients and that patients can then apply on their own. This ability to work on problems outside of the formal confines of the therapy sessions ensures that behavior therapy produces meaningful changes in a limited time frame. Another advantage of assigning homework right from the start of treatment is that patients leave the first session with something to work on that has a clear purpose—namely, to help them change the behaviors that

they find troubling. They see that therapy has goals and that specific tools exist to propel them toward these goals—this sense of structure can be comforting and can "hook" patients into the therapy process.

Early homework assignments are simple to design—they tend to be consistent from patient to patient and do not involve a great deal of creativity on the part of the therapist. As noted above, these assignments typically include reading handouts and completing self-monitoring. Once a treatment plan is in place, however, homework will vary quite a bit from patient to patient depending on their idiosyncratic concerns. A general rule of thumb is that homework should mirror, or follow naturally from, what occurred in a treatment session. Approximately 10 minutes should be left at the end of a session to design homework and work out a plan for implementing it.

For the patient with panic disorder described above, homework for the week following this session in which he rode the subway with the therapist should also involve riding the subway. If it is too difficult for him to ride the subway alone right away, he could replicate the in-session exposure, going on the subway with a friend or family member who would gradually sit further and further away from him. If he felt quite confident after the in-session exposure, he could simply ride the subway alone or even try another mode of transportation that makes him anxious such as taking a taxicab. Having continuity between in-session work and homework solidifies learning.

Another key to effective homework design is that the assignment is clearly defined. Rather than sending the patient off to "take the subway a few times," it is best to specify how many times and under what conditions. For patients who have trouble following through with homework, this planning might even involve scheduling the homework at specific times, on specific days. Our patient and his therapist might decide that he will ride the subway to and from work at least twice in the upcoming week. They might further agree that he will ride the subway to work with his friend who lives and works in the same areas as him, but that he will ride the subway home from work alone. Structuring homework in this way makes it more likely that a patient will follow through than if assignments are left more open-ended.

The purpose of homework is not just for patients to *do* something, but to do something that will move along the therapy process. With this in mind, when homework is assigned, specific goals should be set and predictions advanced. Goals should be behavioral in nature—for our panic disorder patient, the goal should be to ride the subway to and from work on at least two days. This is very different from setting a goal of "not feeling anxious." Riding the subway might indeed make a patient feel anxious, but the goal of behavioral treatments is behavior change. While riding the subway repeatedly *will* make the patient feel less anxious, if he were to judge the success of his homework on this feeling, it is likely that many homework experiences would be considered a failure.

It is also helpful to have patients advance specific predictions about the assigned homework. While the goal of behavioral treatment is behavior change, behavioral change typically results in shifts in beliefs and feelings as well. Making specific predictions and then evaluating them once the homework is over makes patients more cognizant of these shifts and reinforces behavior change. Our panic patient predicted that there was an 80% chance that he would have a panic attack on the subway in the morning with his friend present and a 100% chance that he would have a panic attack at the end of the day when riding alone. After riding the subway to and from

work on two days, he was amazed to see that he did not have a panic attack at all. This experience not only shifted his beliefs (that subways lead to panic attacks), but also reinforced his new behavior—riding the subway to work. Learning experiences are most powerful when patients have generated hypotheses before doing homework and evaluated their veracity afterward.

As we will discuss in more detail in the following section, an essential part of homework is reviewing it in the following session. If homework is assigned, but then never reviewed, patients will not view homework as an integral part of therapy. Approximately 10 minutes should be spent at the beginning of a session reviewing the homework, discussing whether or not the patient's goals were accomplished, and evaluating predictions. An excellent question to ask at the end of this review is: "What did you learn from the homework?" These learning experiences can be maintained on a running list that patients can refer to when they are having difficulties engaging in other behaviors. For our panic patient, he might write: "I don't *always* have panic attacks on subways; being alone on the subway isn't scarier than being with a friend; people look nice on the subway—if I did have a panic attack, I bet people would help me." These learning experiences could help him when confronting other feared situations, like going to see a movie or attending a sporting event.

Just as in-session work informs homework, homework can inform in-session work. While therapists will usually have a tentative agenda set prior to each session, they should be sufficiently flexible to adjust it based on what has happened with homework in the previous week. If our panic patient was supposed to ride the subway for homework, but was unable to, it would not be useful to move along to exposures to taxicabs in the following session. Rather, it might be best to re-do the exposure from the previous session, and add in an additional component to ensure homework compliance the following week. For example, the session might begin with the patient and therapist riding the subway together, then riding together but on opposite ends of the subway car, then in separate cars, and then on separate trains with a plan to meet a few stations down the line. This gradual exposure to riding alone might facilitate homework compliance the following week.

As has already been alluded to, the design of homework assignments should be a collaborative effort. While therapists will take a more active role early in treatment, they should gradually shift responsibility to the patient. When it is time to assign homework, the therapist can ask, "What do you think would be a useful homework assignment for you to do this week?" The therapist must balance involvement on the part of the patient with design of a useful assignment. In other words, if the patient designs a homework assignment that the therapist does not consider optimal, he or she should not criticize, but rather should use Socratic questioning to help the patient arrive at a better plan.

HOMEWORK COMPLIANCE

When determining homework assignments, the way that homework is assigned and the way in which it is integrated into the subsequent treatment session can facilitate compliance (see Bryant, Simons, & Thase, 1999). Patients will be most likely to comply if homework is reflective of the principles worked on during the session and relevant with their long-term goals. This will allow the patient to see the connection

between the principles they have learned in session and the realization of their long-term goals in their "real lives." As we have already mentioned, patients will also be more likely to comply with assigned homework if it is reviewed carefully at the beginning of the next session. This demonstrates that homework is important, and reinforces the principles and lessons learned in the previous session. In our clinical experience, using and/or reviewing homework in the early sessions of treatment significantly facilitate later homework compliance.

Barriers to Completion of Homework Assignments

Homework noncompliance can take many forms, and can end up being a major treatment issue. Overall, the behavior therapy approach to noncompliance is to try to determine how to better set up the contingencies in the therapy session such that patients will be reinforced for their compliance both by the therapist and, even more importantly, by the outcome of the homework. Noncompliance usually occurs because there was not a clear relationship between the assignments and the benefits of the therapy. We will address four common types of noncompliance that occur in behavior therapy: 1) misunderstanding the homework assignment; 2) outright refusal to do homework; 3) finding repeated excuses for why homework was not completed; 4) partial compliance. We will briefly discuss how to address each of these types of non-compliance.

Misunderstandings About Homework

When a patient does not complete his or her homework, there are many potential interpretations of such behavior. As behavior therapists, we assume that patients have various obstacles that are interfering with completing the homework, not that they are being resistant or passive aggressive. By determining whether the patient understood what was assigned to them and taking some responsibility for not having been clearer if the assignment was misunderstood, the therapist can avoid an accusatory stance and reinforce the collaborative stance of the therapeutic relationship. After determining what the patient did not understand, the therapist can then explain the assignment while clarifying the misunderstandings and even role-playing it with the patient in order to ensure the patient understands the assignment and the rationale for it. In addition, it can help to decrease misunderstanding if the patient repeats what the assignment is and describes how it is connected to the goals of the session and the treatment.

For example, a posttraumatic stress disorder (PTSD) patient came in after his first imaginal exposure homework assignment and stated that he did not feel anxious when repeatedly listening to the tape of the self-description of the trauma. The therapist asked about what the patient was doing while listening to the tape and for how long he listened to it. The patient reported that he had listened to the tape while driving to and from work. The therapist apologized for not having described the method of doing imaginal exposure for homework more carefully. Then, the therapist explained that the patient should do the imaginal exposure in a quiet place where he would not have any distractions for an extended period of time. The therapist asked the patient why that might be, and the rationale for imaginal exposure was reviewed. After this

review, the patient completed the homework as planned and at the next session, the patient reported having felt engaged in the imaginal exposure and had habituated to the less intense parts of the tape.

Refusal to do Homework

There are a number of reasons why patients refuse to complete homework assignments in behavior therapy. Three of the most common reasons are misunderstanding the assignment, being assigned too much or too difficult homework, and overvalued ideation. Misunderstanding was addressed above. If a patient reports that she cannot do the homework, trying to convince the patient to comply by insisting or persisting until they give in is unlikely to lead to compliance once she gets home. Therefore, after making sure that the rationale is understood (if necessary), the therapist should try to strike a compromise with the patient that still helps her apply the principle that the other homework assignment was trying to achieve, even if at a lesser level. For example, a patient with obsessive-compulsive disorder (OCD) with contamination concerns conducted an exposure of putting items from the office trashcan on her body and clothing. However, she refused to take a contaminated paper home and touch her bed or other personal objects. She said she understood that it would help her if she did it, but that she was too overwhelmed to do it on her own at home, even if she had been able to contaminate herself in the office. Ultimately, she agreed to put the paper in the car the first day, then to bring it to one area of the house that was already thought to be contaminated on the third day. Bringing the paper to the rest of the house did not happen for homework during that week. However, after a scheduled home visit by the therapist (planned to generalize treatment from the office), the patient was able to continue to contaminate personal items as homework.

There are times when patients hold on to their beliefs so strongly about the consequences of confronting their thoughts or feared objects that they appear close to delusional. Such beliefs have been labeled as overvalued ideation in OCD (see Kozak & Foa, 1994), and likely apply to a range of psychopathology including eating disorders (Williamson, 1996), body dysmorphic disorder (Phillips, Kim, & Hudson, 1995), and other anxiety disorders besides OCD. Overvalued ideation can be a predictor of poor outcome in OCD, and is likely to be a predictor of poor outcome in other disorders as well. If a patient refuses to engage in an exposure for homework because he or she believes it will truly have significant negative consequences (e.g., he or she will really get fat from eating a single square of chocolate), these exposures can be emphasized during sessions where the therapist can model the exposure, and challenge the patient's motivation for change. For patients with overvalued ideation, the noncompliance is a reflection of a greater therapy issue that needs to be addressed carefully in session. For example, a patient concerned about getting AIDS from touching the sink in a public bathroom reluctantly engaged in the exposure with the therapist's guidance. However, the patient refused to do the exposure for homework. Further discussion led the patient to state that he believed that the sinks that the therapist selected must have been safe; the therapist would never put the patient (or himself) in harm's way. However, he believed that most bathrooms are contaminated and would lead to AIDS. At the next session, the therapist asked the patient to randomly pick five bathrooms around the area and then the therapist accompanied the patient to the first bathroom, modeling the exposure and having the patient engage in it after.

The next two exposures were done in the therapist's presence without modeling, and the last two were done with the therapist waiting outside the bathroom. During the following week, the patient was more willing to do the previously assigned exposures for homework.

Repeated Excuses for Noncompliance

If a patient repeatedly gives excuses for not completing the homework, the therapist should carefully consider this so as to give the patient the benefit of the doubt while still helping the patient understand that it is a problem. The therapist should discuss the patient's choices and motivation for change. A patient with social phobia came in stating that he had not conducted any of the homework exercises assigned to him regarding asking strangers questions such as directions or the time. The therapist asked what prevented him from asking any questions. The patient reported that he was too tired because he worked late every night. The therapist acknowledged that when one works extremely hard, it is hard to find time to do exposures. Then the therapist said, "So, it must be hard working so much that you don't have any time for yourself. Did you do anything outside of work this week?" The patient replied that he had gone running, watched a football game, and read a sports magazine. The therapist then asked how the patient could have incorporated the homework into his busy workday or his pleasure activities. After the patient generated some ideas, the therapist reinforced the patient for his creative thinking and suggested that the more the patient could problem-solve about doing his homework independently, the more likely it would be that his social anxiety would improve. The patient understood after this session, and completed most of his homework over the next few sessions and improved significantly.

Partial Completion of Homework

Partial completion of homework is very common. Some patients will only complete the monitoring and easier parts of homework (e.g., reading handouts); others may engage in some parts of the homework, but continue to engage in avoidance or other behaviors that may limit their success. Partial compliance can be due to a combination of the factors discussed above (misunderstanding, lack of motivation, anxiety, etc.). It is important to reinforce the part of the homework that was completed and then to carefully conduct an analysis of the factors that prevented completion of the rest of the assignment. For example, one patient completed all of his exposures but continuously refused to complete any monitoring. English was his second language, and even in his native language, completing the forms was difficult. However, the patient also became anxious when not doing things perfectly, and he did not think that he could complete the monitoring forms perfectly. The therapist asked the patient to complete the forms imperfectly, which lead to significant anxiety and continued noncompliance. The therapist therefore determined not to emphasize the completion of monitoring forms and only focused on the completion of exposure exercises for homework. The patient improved significantly. Another patient reported completing all of the exposures on her hierarchy, but was not habituating. The therapist carefully analyzed the way that the patient was engaging in exposures at home and determined that the patient was repeatedly telling herself that she was "ok" immediately

after engaging in exposures. Engaging in this kind of safety behavior led to continued high levels of anxiety between sessions. After reviewing the rationale for eliminating avoidance behaviors including rehearsing positive reassurances and checking her anxiety, the patient was asked to do an exposure in session and refrain from all safety behaviors. The patient noted that this exposure felt different than when she had tried it previously, and habituation occurred between homework exercises once she did it the same way she did it in the office.

HOMEWORK ASSIGNMENTS WITH CHILDREN AND TEENAGERS

Designing Homework for Children and Teenagers

When treating younger patients, it is important that the process of assigning homework maintains a collaborative spirit, as children and adolescents are often sensitive to additional demands being placed upon them by adults in authority. Furthermore, children often view the notion of "homework" as aversive, or even a punishment. In order to prevent this from happening, the collaborative process should be emphasized early on in behavior therapy, encouraging young patients to be part of a team with the task of working toward goals that are viewed as desirable and rewarding (e.g., being able to play with friends without worrying). For children (ages 6–11), we try to make the session and homework engaging by phrasing it in the context of a game or challenge as much as possible. For example, a 9-year-old girl who had OCD concerns about "evening things" by touching things with her left hand if she touched them with her right was taught a game of "hot and cold" where the therapist would think of an object in the office and the girl had to touch different objects (with only one hand) until she guessed which one was selected. The therapist taught the game to the child's mother, and homework was to play the game each day.

In addition to making homework "fun," other strategies can increase homework compliance with young patients. Patients can be given the choice of homework assignments that are all equally "acceptable" to the therapist, ensuring that they feel they have some control over the therapy process. For example, a child with separation anxiety can be asked to choose from going to soccer, swimming, or piano one day after school the following week. As therapy progresses and children understand the approach to treatment, they can take an active role in designing their own homework assignments, just like adult patients. Therapists can take a less active role, serving as a "coach," who provides support and offers suggestions.

Teenagers typically do not need homework to be "fun" per se, but might respond to slightly different approaches than adults. When homework needs to be recorded (e.g., self-monitoring, activity monitoring), teenagers often like to do homework on the computer or sometimes in a nice journal with colored markers or pens. Because teenagers have their schoolwork to balance with therapy homework, they can also benefit from some help with time management. Because neither schoolwork nor therapy homework will be terribly fun for teenagers, they should be encouraged to break up tasks with rewarding activities. For example, patients can be encouraged to hold off on "instant messengering" their friends until they finish a difficult homework

assignment or plan to do a difficult homework assignment in the half-hour prior to their favorite TV program.

Both children and teenagers can also benefit from one of the most commonly used procedures in behavior therapy—the reward chart. The use of monitoring charts at home, whether for completion of homework, for applying principles from the therapy, or for prosocial or otherwise positive behaviors, can be quite effective for both enhancing compliance and reducing opposition, even in externalizing disorders. However, the reward system to be used at home should be tailored and managed with full collaboration of the patient for best results. While stickers work for some children, points that add up to money or specific rewards (e.g., dinner in their favorite restaurant) are better for others, particularly teenagers. In addition to selecting effective reinforcers and coming up with a sufficient number to avoid habituation to the rewarding effects, consistent application by parents is one of the most important aspects of behavioral charts done at home. Rewards should be awarded as soon as possible after the completion of the goal, and should be applied on a daily basis. Oftentimes, parents will complain that such a system is not working, and it is because they have stopped applying it consistently. Finally, we find that positive reinforcement for most goals (rewarding positive behaviors) substantially increases patient motivation and participation in treatment more than negative reinforcement through removal of privileges or other positive aspects of a daily routine (punishing negative behaviors). However, there are times that removal of positive reinforcers is the only way to have the patient learn how their behaviors impact on others. The latter is especially the case when families have built whole systems of reward for the patient that require little effort for the patient to change (e.g., the whole family serving the child in order for him/her to avoid being contaminated).

The Role of Parents in Homework

When working with children, a common issue that arises is the role that parents should play in homework. Generally, younger children need more help with homework than older children and teenagers. Regardless of age, parents (and sometimes siblings) can serve as "allies" in the "battle for change." Just as the therapist does in session, parents can remind patients to do homework and can offer encouragement and support as it is completed.

One area in which parental involvement is essential with children (and partner involvement in adults) is reassurance seeking. Given that reassurance is a common method of avoiding feared outcomes for many individuals with anxiety and other disorders, it is essential to have strategies to apply at home to help modify this behavior. Once the patient and parent are clear about the role that reassurance plays in maintaining the disorder, we ask the patient and parents to come up with responses to use when patients ask for reassurance. These responses should not be critical nor angry, but helpful. Such responses as, "Your anxiety must be pretty strong right now," "Is that question an OCD question?," or "We agreed in the doctor's office that I shouldn't answer questions about how you look, right?" can be helpful.

When Parental Involvement Is Detrimental

Parents can play an enormously important role in facilitating homework compliance, but, at times, parental involvement is more detrimental than helpful. One

common problem occurs when parents push their children past their point of competence and confidence. This pressure is often based in parents' desire for their children to get better very quickly. For example, parents of children with eating disorders often want them to be able to eat "normal" amount of a wide range of foods very soon after beginning treatment. This is incongruent with an approach to treatment that involves integrating feared foods gradually and learning that feared consequences from doing so will not occur. When children succeed at integrating a few feared foods, but are then criticized at home for not being able to eat anything, this denies children a very important success experience. Therapists must teach parents how to deal with their frustration in a more effective way (e.g., talking to their spouse in private) and how to support their children as they make difficult behavioral changes. If parents cannot hold back their criticism and frustration, it is often best for children to complete homework independently or with the help of another trusted adult (e.g., an older sibling or relative).

CASE EXAMPLES

Using Homework to Prevent Relapse

Leah was a 21-year-old woman who came for treatment of bulimia nervosa. Throughout high school, she had been worried about shape, weight, and eating, but it was not until college that she began to binge and purge. When she first came to college, she joined a sorority where thinness was highly valued. Like many other girls in her sorority, Leah went on a very restrictive diet, limiting her intake to fruit, vegetables, and whole grains. She also began to run five miles per day. After a few months on this highly restrictive diet, Leah began to binge eat periodically, typically in the company of her sorority sisters. She would become so upset after bingeing that she began to induce vomiting and also increased her exercise on days following binges to 8 miles of running, instead of 5. By the time Leah presented for treatment during the summer between her sophomore and junior years, she had been binging and purging at least once a day (and sometimes up to three times a day) for many months. She came for treatment after starting to get heart palpitations and worrying that this erratic eating behavior had become detrimental to her health.

Leah was compliant with treatment. She gradually normalized her food intake, learned to fight off urges to binge and to tolerate the feeling of fullness, and reduced her exercise to a three mile run, three days per week. For the most part, she was compliant with homework assignments, gradually integrating previously "forbidden foods" into her diet and practicing strategies for warding off her urges to binge or engage in compensatory behaviors. After a four-month course of treatment, Leah was eating a healthy range of foods, and had greatly reduced her binging and purging behaviors. In fact, the only trigger that remained for purging was eating at restaurants. If Leah cooked her own food, she felt comfortable because she knew what was in it, but despite repeated efforts, Leah refused to do exposures to eating restaurant food. When forced to eat at restaurants (e.g., when her parents came to visit her at school), she would come home and purge. For quite some time during treatment, Leah insisted that she could, for the most part, avoid eating out. She repeatedly told her therapist that it just was not important to her to work on this.

Near the end of treatment, Leah came to her therapy session with excellent news—she had been accepted to a semester abroad program in France. However, she would

have to live in a dormitory with no cooking facilities and Leah was considering not going to France because she was so afraid of what she would eat there. She and her therapist agreed that if she did go to France with her continuing concern about eating out, she was at great risk for relapse after all of the hard work she had done during treatment. Therefore, they agreed that they would spend a few weeks intensely working on this concern. For the first few days, Leah's homework was to eat breakfast outside the home. This meal was the least anxiety-inducing for her because she could go to the local coffee shop and get coffee and a bagel, not much different from her breakfast at home. Once her anxiety to this habituated, her next homework assignment was to eat lunch out of the home. On the first day, Leah ordered a salad in the school cafeteria and it came with dressing, which she assumed was loaded with fat. She threw the salad out and left without eating. She called her therapist and they agreed that she should go back the next day and order the same salad and try to eat at least half of it. Leah did this, but came home and purged. Again, she called her therapist and without being prompted, Leah suggested she go back the next day to have the same lunch, but use the strategies she had learned during therapy to resist purging. She asked a trusted friend to join her for lunch, and after eating the salad, Leah and her friend went for a long walk until her urges to purge had dissipated. The following day, she returned to the cafeteria, had the same lunch, and again practiced resisting her urges. For another week after this successful exposure, Leah continued to eat lunch out, selecting different venues each day and trying to eat a variety of foods. Once she felt that she had a handle on lunch, she moved on to dinner. Again, she had some challenges at first, but persevered, and gradually could eat dinner out and not purge afterward. At this point, Leah's treatment was coming to a close, but she and her therapist worked out a plan to keep her on this good path until she left for France. While it was too expensive for her to eat out every day, she and her therapist agreed that she should eat a couple of lunches and dinners out each week to help her maintain her gains before she left for her semester abroad.

In this case, it would have been expensive and time-consuming for Leah and her therapist to work out this remaining problem together. Furthermore, if Leah's therapist had joined her for all of the exposures, she might have believed that she could only manage them because of the therapist's supportive presence. By assigning the exposures for homework, and by permitting contact with the therapist following difficult exposures, Leah was able to confront her fears many times a day, in different settings. She was also able to see that she had the skills to manage her anxiety about eating on her own. These last few weeks of homework-based exposure at the end of Leah's course of treatment were invaluable in terms of preventing a relapse of her eating disorder once she arrived in France.

The Relationship Between Homework Compliance and Progress in Treatment

David was a 37-year-old married man with panic disorder and agoraphobia. David was very concerned in situations that involved movement. Being on escalators, elevators, moving walkways, and so forth caused him to experience significant physical symptoms that often escalated into full-blown panic attacks. David found these feelings very uncomfortable and was also concerned that he might fall and hurt

himself in these situations. This led David to avoid many situations. Another trigger for his panic was driving any faster than 25 miles per hour, restricting him to driving only on side streets in his neighborhood. This avoidance limited his work opportunities, prevented him from driving his children to activities, and put a strain on his marriage.

When David first came to treatment, he was resistant to working on his driving, but agreed to work on other "motion-related concerns." Five sessions were dedicated to riding escalators, elevators, moving walkways, and fast trains, and crossing busy streets, with the same tasks assigned for homework that were accomplished in the session. David experienced a great deal of anxiety in all of these situations, but did experience within-session habituation. However, when confronting the same situation the following week, David's anxiety was somewhat reduced, but still very significant. When reviewing his hierarchy during the sixth session of treatment, David reported that his anxiety about the situations he had confronted had only decreased a little bit.

There was a very simple explanation for David's lack of significant progress in treatment—he had done only minimal homework in between sessions. Each week, he had been asked to repeat the in-session exposure for homework, but in six weeks time had only managed to ride one escalator and go in a few elevators. David found it difficult to make time for exposures, and was also restricted because of his fear of driving. Therefore, he did not have the opportunity to learn that these situations were not dangerous, nor that his anxiety would go away with repeated exposure. He also believed that the exposures he had done were made easier by the presence of the therapist. In fact, his anxiety was so severe that he could not begin exposures without significant encouragement and prodding by the therapist. It remained unclear whether he could even initiate difficult exposures on his own at this point in therapy.

David's therapist shared her concerns with him, and questioned whether this was the right time for him to come to therapy. He explained that he very much wanted to get over his panic disorder, but that time was a real issue. He and his therapist then considered how he could seamlessly integrate exposures into his daily life. It turned out that this would be more easily accomplished with driving, rather than with the other situations he feared. They decided that for homework, he would drive his children to school using a different route each day and then go for a 15-minute drive on his way back home on a busy street with a speed limit over 25 miles per hour. He also agreed to begin taking more of the responsibility for driving when he and his wife went out. His therapist helped him prepare some coaching tips for his wife, so that she could be supportive during exposures and not push him to do things he was not yet ready to do.

David was able to start doing progressively more difficult driving exposures for homework. As he became more accustomed to the feeling of driving quickly, he became less afraid of other "motion-related" situations. As treatment progressed, he was able to take his children on a merry-go-round and on a train ride at the local zoo. In other words, exposure to one feared situation generalized to other situations that David feared. When David began to put effort into his treatment in between sessions, his progress greatly accelerated and by the end of treatment, he was able to drive anywhere on his own and manage a whole host of other situations that he previously feared and avoided.

CONCLUSION

Homework is an essential component of behavior therapy. Homework affords patients the opportunity to be their own therapists and to solidify the learning that took place during sessions. This opportunity to practice being one's own therapist likely plays an important role in maintaining treatment gains and preventing relapse once treatment is over. Given the relationship of homework to outcome, it is essential that therapists are careful about the way that they assign and review homework and take care of issues of noncompliance as soon as they arise.

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