

Chapter 2

Lines of Evidence in Support of FAP

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What empirical evidence supports FAP? On the one hand, FAP is based on a handful of basic behavioral principles that were theoretically and empirically derived from decades of laboratory experimentation. On the other, FAP has yet to be tested in a randomized controlled trial. Our belief is that the basic tenets of FAP—namely the importance of the therapeutic relationship and the use of natural reinforcement to shape client problems when they occur naturally in the therapeutic relationship—are robust, and lines of evidence in support of these principles converge from multiple and diverse areas of research. In this chapter we review these lines of evidence. It should be clear from the outset, however, that this review by no means seeks to justify the paucity of direct empirical evidence in support of FAP. Rather, we believe that the findings of this review strongly suggest that additional empirical research specifically investigating the efficacy of FAP is warranted, as it was developed from a solid foundation of principles and evidence and represents a convergence of some of the most robust findings in psychological research.

While FAP is a therapy based on behavior analytic principles, at its heart it is an interpersonal therapy. FAP is based on the assumption that both the causes of, and treatment for, psychopathology are intimately related to interpersonal relationships. This assumption has substantial support in the literature with respect to depressive disorders. It is well established that interpersonal problems, troubled relationships, and lack of social support predict the onset (Stice, Ragan, & Randall, 2004), course (Lara, Leader, & Klein, 1997; Miller et al., 1992), duration (Brown & Moran, 1994) and relapse of depression (Hooley & Teasdale, 1989). Conversely, the presence of social support has protective effects (Peirce, Frone, Russell, Cooper, & Mudar, 2000) and predicts recovery from depression (Lara et al., 1997; Sherbourne, Hays, & Wells, 1995). While several alternative therapies focus on the therapeutic relationship and associated processes, FAP utilizes basic learning principles to harness the therapist-client relationship, focusing on the establishment of a more effective

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interpersonal repertoire in order to effect generalization of these new skills to relationships in clients' lives.

Case studies involving FAP as a stand alone treatment have included jealousy (López, 2003), anxiety disorder without agoraphobia (Bermúdez, Ferro, & Calvillo, 2002), chronic pain (Vandenberghe, Ferro, & Furtado da Cruz, 2003), posttraumatic stress disorder (Kohlenberg & Tsai, 1998), aggressive-defiant patterns in a child (Gosch & Vandenberghe, 2004), obsessive-compulsive disorder (Kohlenberg & Vandenberghe, 2007; Vandenberghe, 2007), and depression (Ferro, Valero, & Vives, 2006). Several case studies of other interventions incorporating FAP have also been published. These include case studies using FAP and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) in the areas of fibromyalgia (Queiroz & Vandenberghe, 2006), anorgasmia (Oliveira-Nasser, & Vandenberghe, 2005), and exhibitionism (Paul, Marx, & Orsillo, 1999). A Dialectical Behavioral Therapy (DBT)-FAP combination has also been used in the case of an individual diagnosed with a personality disorder NOS (not otherwise specified) (Wagner, 2005). These reports provide anecdotal evidence and clinical guidance, and suggest the breadth of presenting problems for which FAP and FAP enhancements may be appropriate. This abundance of case literature begs the question—what is the empirical basis of FAP?

Our goal in this chapter is to highlight the converging lines of evidence from multiple disciplines that support key FAP principles. Concurrently, we note the ways in which FAP theory contributes to each of these literatures, and in doing so informs therapists about the promotion of client change using a unique and powerful methodology. To this end, we seek to address not only areas of convergence but also highlight where FAP diverges in either interpretation of findings or their implications for therapy.

The Therapeutic Alliance

FAP is based on the notion that the therapeutic relationship is an important factor in psychotherapy—hardly a controversial notion. Nevertheless, FAP makes the argument that to harness fully the relationship as a mechanism of change, it must be conceptualized in a manner that makes specific the so-called 'non-specific' relationship factor. That is, what are the specific factors that make the therapist-client interaction curative? Before clarifying this position further, we first review the supporting evidence for the relevance of the relationship to psychotherapy.

The concept of therapeutic alliance can be traced back to the earliest writings of Freud (1912/1958), who first addressed the importance of friendly or affectionate feelings between the patient and the therapist as a foundation for any future therapeutic gains. The alliance concept also draws heavily on Rogers' (1957) assertion that therapeutic empathy, unconditional positive regard and genuineness constitute necessary and sufficient conditions for successful

psychotherapy. In the past 25 years, interest in the therapeutic alliance as an essential element in the therapy process has burgeoned, such that contemporary psychotherapy researchers broadly define it as the collaborative and affective bond between therapist and client and their ability to agree on treatment goals and tasks (Martin, Garske, & Davis, 2000).

Evidence for the importance of the therapeutic alliance emerges from two primary sources. First, although researchers from different theoretical orientations have assessed the therapeutic alliance in different ways using an assortment of measures, they consistently have found that the strength of the alliance is predictive of outcome (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000; Horvath, 2001; Martin et al., 2000). Second, researchers unable to find a consistent difference in the effectiveness of psychotherapies across orientations (e.g., Lambert & Bergin, 1994) have conceptualized the therapeutic alliance as a common factor across different therapies. Indeed, some researchers have even begun to argue that the quality of the alliance is more important than the type of treatment in predicting positive therapeutic outcomes (e.g., Safran & Muran, 1995), such that the therapeutic alliance has been referred to as the 'quintessential integrative variable' of therapy (Wolfe & Goldfried, 1988).

Although it is clear from the therapeutic alliance literature that the strength of the alliance is related to treatment outcome, there is evidence that many therapists fail to focus on the therapeutic relationship in-session. Coding all therapist turns at speech during the session, Goldfried and colleagues (Castonguay, Hayes, Goldfried, & DeRubeis, 1995; Goldfried, Castonguay, Hayes, Drozd, & Shapiro, 1997; Goldfried, Raue, & Castonguay, 1998) showed that CBT (Cognitive Behavior Therapy) therapists do not frequently focus on the therapy relationship in-session, yet an increased focus was found during significant, high-impact sessions when master therapists conducted therapy. Similarly, Kanter, Schildcrout and Kohlenberg (2005) have shown that therapists in several studies of CBT for depression rarely focus on the therapeutic relationship for an extended period of session time.

Perhaps the limited focus on the therapeutic relationship may be explained by the lack of consensus as to what therapists must do to secure a strong relationship, how much and what type of attention to pay directly to the therapeutic relationship, the mechanism underlying the relationship or its curative effect. A FAP analysis sheds light on these issues by, (1) behaviorally specifying the 'active ingredients' of the therapeutic relationship that will ultimately facilitate client change, and (2) functionally assessing client behaviors for their clinical relevance in alliance building, rather than looking solely at the form or topography of a behavior. In other words, use of the term 'therapeutic alliance' tends to focus primarily on what the behavior looks like, rather than the function it serves. In contrast, a FAP conceptualization of in-session behavior would focus on how a particular behavior functions for the client, not whether it looks like alliance-type behavior.

To investigate further the above point, imagine a behavior that appears topographically to be associated with alliance building in-session, but may in

fact function as compliance. Consider for example an unassertive male client who dutifully completes his homework but feels that he is not 'getting anything' out of it. What looks like alliance behavior in this case is actually a CRB1, an in-session example of a problematic behavior such that he is not expressing a relevant feeling he is experiencing. If this client were to state his doubts about the validity of the homework, topographically it may look like alliance disrupting behavior, but functionally it is an improvement, and will lead to a strengthening of the therapeutic alliance if the client's concerns are taken seriously by the therapist. On the other hand, if compliant behavior is assessed to be a CRB2 (e.g., in the case of a client whose difficulty in meeting others' expectations interferes with his relationships), then it would be interpreted by a FAP therapist to be alliance building behavior. Thus a FAP perspective allows the explanation and prediction of the means by which an alliance can be enhanced and even harnessed as the result of general contingent reinforcement by the therapist of client CRB2s (Follette, Naugle, & Callaghan, 1996).

In sum, rather than making general statements about the predictive relationship between the therapeutic alliance and therapy outcome, FAP specifies what the therapist needs to do to build alliance and to utilize it as a context for change (Kohlenberg, Yeater, & Kohlenberg, 1998). Specifically, FAP makes three overarching assumptions, namely that (1) clients' CRBs are evoked by the therapeutic context, (2) CRBs can be shaped through application of contingencies in the therapeutic relationship, and (3) these contingencies involve natural reinforcement. The next three sections will review research findings corroborating these assumptions.

Principles of FAP

CRBs are Evoked by the Therapeutic Context

FAP again adopts an uncontroversial position by claiming that clients' problematic interpersonal patterns (CRB1s) will emerge in the therapeutic context. Perhaps millions of pages of psychotherapy theory have been written about this topic, with the theoretical and empirical literature addressing the theory of transference perhaps the penultimate example. Although the term transference hails from a different theoretical perspective, research on it nonetheless is relevant to FAP, as it provides support for the claim that CRB1s may be evoked by the therapeutic context.

Until recently, transference remained a largely theoretical construct and underwent little empirical examination (Connolly et al., 1996). In fact, the ratio of theoretical to empirical articles on transference has been reported to be approximately 500 to 1 (Ogrodniczuk, Piper, Joyce, & McCallum, 1999). Nevertheless, transference has been found to occur in a diverse set of daily social relationships (Andersen & Baum, 1994; Andersen & Cole, 1990; Andersen, Glassman, Chen, &

Cole, 1995) and in the context of the therapy relationship (Connolly et al., 1996; Crits-Christoph, Demorest, & Connolly, 1990; Luborsky, McLellan, Woody, O'Brian, & Auerbach, 1985). Thus there is ample evidence supporting the claim that transference reactions occur in therapy. While this research is relevant to FAP, in that it corroborates the occurrence of CRBs, FAP and psychodynamic theory diverge with respect to the most effective response to transference reactions and CRBs (see *reinforcement contingencies and transference interpretations* sections below).

CRBs can be Shaped Through Application of Contingencies in the Therapeutic Relationship

Is it important to contingently reinforce live, in-session behavior? A fundamental premise of FAP is that the closer in time and place client behavior is to the therapist's intervention (i.e., contingent reinforcement), the stronger the effect of the intervention. In other words, a 'delayed' or far-removed therapist response is expected to be less beneficial than reinforcement of live behavior. For example, some therapists may argue that they reinforce client improvements when they provide praise (e.g., saying 'Good job' in response to a client who reported being assertive in interactions with her employer during the preceding week). FAP contends that such use of reinforcement would be more effective if provided at the same time and in the same place as the behavior it is intended to reinforce (the client being assertive with her employer in the workplace). This belief underlies the focus on similar classes of behavior (CRB2) emerging in the context of therapy that can be immediately reinforced.

What research supports this well-accepted maxim? On one hand, literally thousands of studies have used immediate reinforcement to establish and maintain behavior. Indeed, nothing less than a review of the history of research on learning theory, from cats in Thorndike's puzzle boxes, rats in T-mazes, pigeons in Skinner boxes, to humans in sound attenuation chambers, is required to describe all the evidence (e.g., Catania, 1998). Essentially, the animal literature strongly supports the notion that delay of reinforcement adversely affects subsequent learning, although the relationship between delay and learning is complex and mediated by several factors (Renner, 1964; Tarpay & Sawabini, 1974). In general, studies involving human subjects have generated similar results (Greenspoon & Foreman, 1956; Saltzman, 1951; Bilodeau & Ryan, 1960). The delay effect—that reinforcement becomes less effective as the delay between a response and reinforcement increases—is most clearly demonstrated in humans with complex tasks (Hockman & Lipsitt, 1961) and when intervening behavior occurs between a response and reinforcement (Atkinson, 1969).

The human delay literature, while supportive of the above claim, is difficult to generalize to the psychotherapy situation. This is primarily because the lengths of

delay studied in research preparations (up to 12 seconds) are much too small to be relevant to the question of whether immediate responses to in-session behavior are preferable to feedback about behavior that occurred outside of session, perhaps as long as a week ago. Nevertheless, immediate contingent responding has been found to enhance treatment for hair-pulling clients (Rapp, Miltenberger, & Long, 1998; Stricker, Miltenberger, Garlinghouse, Deaver, & Anderson, 2001; Stricker, Miltenberger, & Garlinghouse, 2003).

Does contingent reinforcement run counter to 'unconditional' positive regard? Reinforcement contingencies and their immediacy may be important in certain experimental situations or with discrete problems such as hair pulling, but are such issues relevant to adult, clinical populations dealing with abstract problems of intimacy, loneliness, anger, heartbreak, and so on? Perhaps these concerns require something more sophisticated than simple contingencies of reinforcement. As we will explain next, FAP theory suggests otherwise, and research on Rogerian, 'non-directive' therapy highlights how contingent reinforcement is relevant to psychotherapy.

FAP's emphasis on the therapeutic relationship and natural responding may lead some to mistake it for a variant of Carl Roger's client-centered, humanistic style of therapy (see Rogers, 1957). While both approaches believe in the power of the therapeutic relationship to produce change, FAP theory diverges significantly with respect to the claim from Rogerian theory that change may occur solely through non-directive or non-contingent therapist behavior. We would argue that a question to ask is whether non-directive or unconditional positive regard really is non-contingent. People may be reinforced readily without awareness (Frank, 1961; Krasner, 1958), and thus a client may feel unconditional positive regard while being unaware of a contingent process. Two studies speak directly to this conditioning phenomenon. In one experiment (Greenspoon, 1955) subjects were asked to list as many nouns as they could. As they did so, an experimenter responded with subtle sounds of approval ('mmm-hm') or disapproval ('huh-uh') to each term. They found that despite being unaware of the contingency, subjects increased their frequency of nouns when they were followed by 'mmm-hm' and decreased them when followed by 'huh-uh.' Such research has led Frank (1961) to conclude, 'This much, at least, seems safely established: One person can influence the verbalizations of another through very subtle cues, which may be so slight that they never come to the center of awareness' (p. 108).

The crucial point emerging from the above discussion is that therapists may be contingently reinforcing client behavior without being conscious of doing so. If that is the case, then therapist responses such as 'mmm-hm' that signal clients to continue speaking may contingently reinforce a favored class of behavior (i.e., improvements) inadvertently. Accordingly, therapy that might 'feel' like unconditional positive regard or non-directive may in fact be contingent. Investigating this possibility, Truax (1966) conducted a process analysis of Carl Rogers himself providing therapy (e.g., non-directive therapy comprised of emphatic understanding, acceptance and unconditional positive regard).

Consistent with FAP, results revealed that despite consciously attempting to respond non-contingently, improvement in therapy was associated with differential, albeit inadvertent, reinforcement of client improvements. Such findings suggest that, while many therapists may not realize it, they are *constantly* shaping their clients' behavior through verbal and non-verbal reinforcement contingencies, punishment and extinction.

Rogsonian theory asserts that unconditional positive regard and empathy are both necessary and sufficient for full recovery. FAP agrees that such an approach is necessary (e.g., a focus on natural reinforcement), however, a non-directive approach is seen not only as rare, but also insufficient. Recognizing the inevitable impact of therapists' behavior on clients, FAP encourages therapists to harness the therapeutic relationship to shape naturally and contingently more effective interpersonal client behavior.

How do transference interpretations differ from contingent responding? In light of findings that transference change has been found to mediate treatment outcome (O'Connor, Edelstein, Berry, & Weiss, 1994), several researchers have examined the transference interpretation as a mechanism of change in relationship-focused treatments (Leichsenring & Leibling, 2007). Transference interpretation occurs when the therapist explains the client's transference in order to provide insight into unconscious conflicts underlying current problematic patterns of behavior. In short, findings suggest that higher levels of transference interpretations are actually associated with poorer outcome in clients with low levels of interpersonal functioning, particularly when the interpretation revolves around the therapeutic relationship (Connolly et al., 1999; Ogrodniczuk et al., 1999).

FAP predicts that any response to in-session problematic interpersonal behavior that fails to take context or function into consideration would miss opportunities to reinforce CRB2s or inadvertently reinforce CRB1s. This may be an explanation for the poor treatment results following large numbers of transference interpretations. For example, in many cases a psychodynamic therapist would ignore noncompliant behavior from a client. For a historically passive client who has trouble asserting needs, however, noncompliance may actually be functioning as a CRB2. Thus, while in practice there may be considerable overlap between psychodynamic and FAP treatment approaches, theoretical differences lead to important clinical implications in terms of responses to problematic interpersonal behavior evoked by the therapeutic relationship.

The Importance of Natural Reinforcement

Will contingent responding undermine intrinsic motivation? In FAP an overriding emphasis is placed on the notion that CRB2s should be reinforced naturally, typically through interpersonal verbal exchanges. Yet an often cited criticism of behaviorism is that when a person's behavior is reinforced the person begins to

emit the behavior specifically to obtain external rewards (external motivation) which impairs the development of self-determinism (Deci, Koestner, & Ryan, 1999; Kohn, 1993). Applying this criticism to FAP leads to the suggestion that perhaps the reinforcement of interpersonal behaviors by FAP therapists extrinsically links motivation for these new behaviors to the therapist, thus limiting the generalization of the gains to other relationships and in fact reducing intrinsic motivation to learn new interpersonal behaviors. Does this critique hold?

Intrinsic motivation generally is defined as behavior believed to be motivated by the activity itself, as opposed to behaviors extrinsically motivated by external rewards such as prizes, rewards, or approval (Cameron, Banko, & Pierce, 2001). Recent findings suggest, however, that it is an oversimplification to mark all forms of external motivation as inherently harmful. Researchers have begun to identify settings and conditions in which external motivation actually may provide important benefits (Dickinson, 1989; Cameron et al., 2001). Nevertheless, the distinction between extrinsic and intrinsic motivation maps roughly to the distinction promoted by FAP between contrived and natural reinforcement respectively. For example, while a meta-analysis conducted by Cameron et al. (2001) revealed that verbal reinforcement may support intrinsic motivation, FAP focuses on whether the reinforcement was delivered in a contrived or natural manner.

Take for example a client in which a CRB2 is taking a risk by stating an opinion in front of the therapist. A response of 'Good job sharing an opinion with me,' would most likely be a contrived reinforcer (e.g., approval from therapist). FAP theory suggests that a more naturally reinforcing response by the therapist, such as taking the opinion seriously, would not only reinforce the CRB2, but would do so in a way that would facilitate generalization to other relationships. In this way, FAP utilizes reinforcement contingencies in order to shape improved interpersonal functioning and support intrinsic motivation.

How can one contingently reinforce and utilize interpersonal expectancy effects? The effects of natural contingent reinforcement in therapy may often be mistaken for common 'non-specific' factors. Research examining the interpersonal expectancy effect helps clarify this issue. In general, interpersonal expectancy effects are the result of one person's expectations on another person's behavior. In a meta-analytic review of research investigating interpersonal expectancy effects, Harris and Rosenthal (1985) provided a list of empirically supported teacher behaviors that have been shown to result in expectancy-confirming responses in students. This list included:

- Creating a less negative atmosphere (e.g., not behaving in a cold manner)
- Maintaining closer physical distances
- Providing more input by introducing more material or more difficult material
- Creating a warmer atmosphere
- Exhibiting less off-task behavior
- Having longer and more frequent interactions

- Asking more questions
- Encouraging more
- Engaging in more eye contact
- Smiling more
- Praising more
- Accepting the student's ideas by modifying, acknowledging, summarizing or applying what he or she has said
- Providing more corrective feedback
- Nodding more
- Waiting longer for responses

This list suggests that the behaviors and cues involved may be quite subtle and operate outside the conscious awareness of both the teacher and the subject.

From a FAP perspective, the above list is a perfect example of natural reinforcers in action, the type of natural reactions people display in everyday interactions that shape and maintain such interactions. It also is noteworthy that items on this list represent some of the most ubiquitous 'non-specific factors' of therapists across a wide spectrum of therapeutic modalities. As discussed earlier, these are undoubtedly the kinds of responses that Carl Rogers himself contingently, and non-consciously, deployed when attempting to be unconditional. Although these subtle cues influence client behavior in all therapy modalities, FAP is unique in that it explicates these subtle interactions and challenges therapists to deliberately and strategically harness them to shape improved interpersonal functioning.

Can contingent, natural reinforcement promote generalization? FAP maintains that interpersonal behaviors naturally shaped in-session will be more beneficial for clients than simply providing rules on how to be more effective. Specifically, FAP distinguishes itself from other psychotherapeutic approaches in terms of its focus on contingency-shaped behavior rather than rule-governed behavior. Compared to contingency-shaped behavior, which is behavior learned through direct contact with reinforcement (i.e., learning to solve a puzzle through trial and error), rule-governed behavior is behavior controlled by verbal descriptions of reinforcement (i.e., following instructions as to how to solve a puzzle) (Hayes, Zettle, & Rosenfarb, 1989; Skinner, 1953, 1957). Thus rule-governed behavior allows for behavioral change to occur without direct shaping. From a behavioral perspective, most psychotherapeutic approaches can be seen as providing rules to clients for how to behave more effectively.

Clients commonly expect their therapists to provide them with more, new or better rules that will lead to symptom reduction. Therapy based on rule specification, however, may obstruct clients' progress in dynamic and evocative contexts (e.g., interpersonal relationships) where the same behavior may be punished by one person and reinforced by another. In this situation, exquisite sensitivity to contingencies, rather than rule-governed behavior, is required. Behavioral research supports this assertion. For example, a large body of evidence suggests that when a person's behavior is contingency-shaped, the

individual is better able to adapt to changing contingencies than when that behavior is rule-governed (e.g. Catania, Mathews, & Shimoff, 1982; Rosenfarb, Bunker, Morris & Cush, 1993; Shimoff, Catanina, & Mathews, 1981).

FAP's focus on natural reinforcement helps therapists avoid the promotion of rule-governed behavior in clients. For this reason, FAP therapists are not provided with formal instructions on how to respond to a CRB but are instead instructed to respond 'naturally.' Natural responding entails the notion that there are an infinite number of responses that all function to reduce CRB1s and increase CRB2s. To accomplish this, FAP therapists must draw on their own private reactions to their clients (thoughts, emotions, physiological responses) and naturally respond to each CRB accordingly. Thus when clients engage in improved behavior (CRB2s)—particularly behavior that breaks the rules they typically adhere to—FAP emphasizes the interpersonal effect of therapist behavior and revealing reactions to clients in the moment. In this way, natural and contingent therapist responses may not only shape improved client functioning but do so in a way that promotes generalization and client adaptability.

Existing Research on FAP Principles

A final line of evidence in support of FAP and FAP's proposed mechanism of action comes from research on FAP itself. The efficacy of FAP as a stand alone treatment has been supported by a single-subject investigation (Callaghan, Summers, & Weidman, 2003; described below). The incremental effectiveness of adding FAP to CBT has been demonstrated both via single-subject (Gaynor & Lawrence, 2002; Kanter et al., 2006) and group design studies (Kohlenberg, Kanter, Bolling, Parker, & Tsai, 2002).

In a non-randomized trial of FAP-enhanced cognitive therapy (termed FECT) for depression, Kohlenberg and colleagues (2002) compared client outcome in 20 subjects treated with CT (Cognitive Therapy) to 28 clients treated by the same therapists following training in FECT. Results revealed that FECT was incrementally more efficacious than CBT, such that 79% of the FECT participants responded (experienced a larger than 50% decrease in depression symptomatology) compared with 60% of the CT participants. Furthermore, FECT participants experienced significant improvements in their interpersonal functioning compared to CT participants. Subsequent process analyses (Kanter et al., 2005) illustrated that rates of FAP interventions (e.g., increased focus on CRBs) increased almost threefold during FECT and that these interventions related to weekly client reports of progress in therapy.

Finally, in the only randomized-controlled study incorporating FAP, Gifford and colleagues (2008) compared a combination of ACT (Acceptance and Commitment Therapy) and FAP to Nicotine Replacement Therapy (e.g. Rigotti, 2002) in a smoking cessation trial. There were no differences between conditions at post-treatment, however participants in the ACT and FAP

condition experienced significantly better outcomes at one-year follow-up. Thus to date the majority of research assessing FAP has focused on the enhancement of other treatments through the addition of FAP interventions. Given this fact, a vital question is whether there is empirical support for FAP's proposed mechanism of change.

Recent investigations examining the mechanism of FAP have been undertaken in a manner consistent with FAP's underlying functional philosophy through the employment of functional analytic research methodologies. Given the flexibility of FAP and the overarching notion that (due to FAP's intense focus on function) application of its mechanism may look very different for different therapists and clients, the first goal of this research was specification of the FAP mechanism. This process involved a specification, in functional terms, that would allow for varying topographies of technique. The mechanism defined for this research was *therapist contingent responding with natural reinforcement to CRBs*. Thus such research aims not to provide empirical support for FAP as a treatment package via a randomized controlled trial, but rather to isolate and identify FAP's purported mechanism of action and demonstrate the effects of this mechanism on the behavior of individual clients.

The first requirement of this research was a reliable and valid measure that would allow for the reliable identification of in-session problems (CRB1s), improvements (CRB2s), and contingent therapist responses. Callaghan et al. (2003) created and applied such a measure, the Functional Analytic Psychotherapy Rating Scale (FAPRS), designed to measure turn-by-turn client and therapist behavior in FAP. To employ the FAPRS, a coder utilizes detailed case conceptualizations to identify instances of CRBs (e.g., CRB1s or CRB2s) while also coding therapist contingent responses to CRBs. Several more codes were used to distinguish FAP and 'traditional' therapist responses, discussion about the therapeutic relationship vs. contingent responding, and so forth (refer to Callaghan, Ruckstuhl, & Busch, 2005 for a full description). A key advantage of this turn-by-turn methodology is that it analyzes the FAP process on the level of the therapist-client interaction (i.e., on a moment-to-moment basis). In this way, the research on FAP's mechanism of change occurs at a level that can directly inform the clinical work of the FAP therapist.

Callaghan and colleagues (2003) used the FAPRS to code segments of therapist-client interactions for the treatment of a personality disordered client with histrionic and narcissistic features. Not only were CRBs identified (supporting the belief in FAP that general interpersonal problems may present themselves in the therapeutic context), but therapist contingent responding to CRBs was identified as well. Crucially, findings also indicated that CRB1s decreased and CRB2s increased over the course of FAP.

Kanter and colleagues (2006) provided single subject data on two subjects who received CBT and then FAP in a within-subject A/A + B design. Results were mixed. Subject 1 demonstrated slight decreases in his targeted behaviors (e.g., communication skills) but dropped out of the study before completion. Subject 2 demonstrated immediate improvements in her targeted behaviors

(e.g., attention seeking, being vulnerable) upon introduction of FAP. Busch and colleagues (in press) applied the FAPRS coding system to Subject 2, replicating previous findings that therapist responding successfully shaped client in-session behavior. Importantly, both out-of-session client behaviors (collected via client diary cards) and in-session behaviors (CRBs) improved following the phase shift. Thus, results garnered using the FAPRS have provided support for the mechanism of change (contingent responding).

Conclusion

This chapter has reviewed several converging lines of evidence in support of FAP principles, including the therapeutic alliance, transference, transference interpretations, ‘unconditional’ positive regard, immediate reinforcement (delay to reinforcement), intrinsic versus extrinsic motivation, interpersonal expectancy effects, and rule-governed behavior. Each of these research areas is uncontroversial and relatively robust. Thus, although not directly providing support for FAP and FAP techniques, these lines of evidence together describe a compelling picture of what a treatment based on such evidence might look like. We believe FAP is just such a treatment.

Research directly examining FAP is, admittedly, in its infancy. Nevertheless, data exist to support both the incremental validity of FAP when combined with other interventions and the proposed mechanism of change in FAP—namely therapist contingent responding with natural reinforcement to CRBs. Combined with the above reviewed converging lines of evidence in support of the principles of FAP, the rationale for FAP appears strong. It remains to be demonstrated, however, that FAP can outperform existing treatments in standard randomized clinical trials. We hope this chapter may inspire researchers to conduct such trials.

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