Development and Preliminary Evaluation of a FAP Protocol: Brief Relationship Enhancement

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Abstract

The purpose of this study was to develop a brief Functional Analytic Psychotherapy (FAP) protocol that will facilitate reliable implementation of FAP interventions, thus supporting research on FAP process and outcome. The treatment was a four-session individual therapy for clients who were interested in improving their relationship with their romantic partner. Data were collected from both the client and their partners. The treatment development process was conducted across two clinical case series. The first case series (n = 7) provided preliminary evidence of the feasibility and acceptability of the treatment, but rates of FAP interventions were low. Subsequently the treatment protocol and training and supervision procedures were revised. The second clinical case series (n = 6), based on the revised protocol, produced significantly higher rates of FAP interventions and further evidence of the acceptability and feasibility of the treatment. The study provides preliminary evidence that FAP interventions may be reliably implemented in the context of a brief, structured treatment.

Keywords

Functional Analytic Psychotherapy, brief therapy, relationship enhancement, therapy relationship
couple at pre- and post-treatment. A FAP rationale was delivered in the first session. The initial session was to focus on rapid functional assessment of the client's romantic relationship problems, based on client's report of their relationship patterns and observation of client in-session behavior. This functional assessment lead to selection of goals expected to improve relationship satisfaction, which were refined and revised over the course of treatment. Clinically Relevant Behavior (CRB; in FAP terminology, examples of client problems or improvements occurring in the therapy interaction) were subsequently identified on the basis of this ongoing functional assessment and goal definition. To target anticipated 'commonly-occurring-problems/goals,' to evoke CRB, and to provide structure for sessions, we created a procedure for opening sessions (the Greeting and Opening), a procedure for closing sessions (Sharing of Appreciations), and a menu of procedures that might be used in-session or assigned as homework, based on functional assessment of the client's problem. The Greeting and Opening involved client and therapist mindful and open sharing of feelings and experiences and mindful and open listening to the other's feelings and experiences. Sharing of Appreciations involved client and therapist exchanging several rounds of appreciations regarding the session and course of treatment, providing among other functions an opportunity for the therapist to reinforce any CRB-2 (CRB that represent improvements). The remainder of session-time was focused on implementation of FAP principles. The overarching theory of therapeutic mechanism was that decreased frequency of CRB1 (CRB that represent problems) and increasing frequency/strength of CRB2 would lead, via generalization (e.g., by means of homework assignments), to decreased frequency of problems occurring in the client's romantic relationship and increased frequency of positive (defined functionally as increasing relationship satisfaction) interactions, and this would in turn lead to increased global relationship satisfaction.

This preliminary manual was then evaluated in a clinical series involving 8 couples. Participants were recruited via print and online ads placed locally. All study procedures were approved by the UW IRB committee.

THERAPISTS
The first author and three other graduate students with 1+ years of FAP training served as therapists in this first series. Initial cases were conducted one after another; the final three cases were conducted simultaneously. Therapists and the authors of this paper met regularly to discuss cases and the protocol.

CLIENT AND PARTNER DEMOGRAPHIC AND RELATIONSHIP DATA
Clients were 7 females and 1 male. All couples were heterosexual, male-female couples. Average age was 29.6 years (range: 18-57 years; SD = 10.7), and participants had completed an average of 4.5 years of post-HS education (range: 2-8 years; SD = 1.8 years). Mean relationship duration was 49 months (4.1 years; SD = 51.5 months) and ranged between 8 months and 168 months (14 years). Three of the 8 couples were married. No participant had ever been in couples therapy prior to this study.

ASSESSMENTS
Participants completed a battery of assessments at pre- and post-treatment, including several relationship satisfaction questionnaires, including the Dyadic Adjustment Scale (Spanier, 1976) and the Quality of Relationship Inventory (Pierce, Sarason, Sarason, Solky-Butzel, & Nagle, 1997).

Participants also completed a daily diary card throughout the study period, on which they rated levels of connection ('how close you feel to your partner') and respect ('how much mutual respect you feel in the relationship') occurring in their relationship and indicated whether conflict had occurred (yes or no). Following definition of treatment goals after the first session, clients also provided a goal-attainment rating (Kiresuk, Smith, & Cardillo, 1994) for each goal daily.

Finally, immediately before each session, clients reported progress on their goals for the previous week overall and over the whole course of treatment, and after each session clients completed a questionnaire on which they provided several ratings (e.g., their degree of connection with the therapist and the helpfulness of the session) and answered questions about events relevant to FAP process (e.g., What issues came up for you in the session/with your coach that are similar to your daily life interactions with your partner? What risks did you take in the session/with your coach or what progress did you make that can translate into your interactions with your partner?) Following each session, therapists reported whether CRB1 and/or CRB2 had occurred and whether they had responded effectively or ineffectively to these CRB.

To further assess implementation of FAP interventions, each session was coded using the Cumulative Record of In-Vivo Interventions (CRIVI; Kanter, Schildcrout, & Kohlenberg, 2005), a count of the frequency of therapist speech focused on the in-vivo (IV) (i.e., immediate or ongoing) therapy interaction. The assumption is that greater frequency of IV focused interventions indicates greater implementation of FAP interventions. In previous research, greater frequency of such focus was related to greater likelihood of the client reporting improved relationships in the subsequent week (Kanter et al., 2005). Ratings were performed by a group of research assistants who were trained to adequate reliability with a criterion rater on a previous project.

Finally, for each session in which the therapist reported that CRB occurred, two FAP experts (the first and second authors) viewed the session and either confirmed or disconfirmed that sufficient evidence that a CRB had occurred was present in the session. This judgment was based on a protocol that specified types of evidence for the occurrence of CRB and criteria for confirmation/disconfirmation. This method is obviously potentially quite biased; results of this coding are offered here as exploratory with this significant caveat.

RESULTS FOR THE FIRST CLINICAL SERIES

BASELINE ASSESSMENT DATA
All clients (n = 7) and partners (n = 7) completed baseline assessments. Clients and partners had on average comparable satisfaction scores at baseline, and their DAS scores were representative of non-distressed couples (Spanier, 1976).

RETENTION
One couple dropped out of the study before the post-treatment assessment. The client reported that she had started a new job...
that prevented her from continuing participation in the study. This client is therefore excluded from the following presentation of results.

**PRE TO POST-TREATMENT CHANGES**

There was no consistent pattern of improvement on the standard relationship satisfaction measures at post-treatment for clients or partners.

**DIARY CARD RATINGS OF CONNECTION AND RESPECT AND GOAL ATTAINMENT**

Weekly mean ratings of connection and respect increased in 4 of the 6 cases presented here. The average ratings increased approximately 1 standard deviation across the treatment period, from 5.5 ($SD = .9$) to 6.8 ($SD = 1.2$) for connection and from 5.4 ($SD = 1.1$) to 6.6 ($SD = 1.1$) for respect. Ratings of connection and respect tended to correlate across the entire treatment period ($r = .87, p < .01$).

**CLIENT PRE-SESSION RATINGS OF GOAL ATTAINMENT**

Before each session, clients rated their past week and overall (i.e. throughout the entire study period) progress on between 1 and 3 specific goals. Goal attainment was rated on a scale from 1 to 10, where 10 indicates perfect or complete goal attainment, 5 indicates no progress, and scores below 5 indicate regression or worsening of the goal behavior. The average overall goal attainment reported at Session 2 (the first rating point) was 6.2 (corresponding to the ‘neutral’). The average overall goal attainment was 6.7 at Session 3 and 7.6 at Session 4 (indicating ‘some progress’).

**THERAPIST RATINGS OF IN-SESSION GOAL RELATED BEHAVIOR OCCURRENCE**

Following each session, the therapist provided ratings of whether he/she believed that CRB had occurred in session. The response scale included the rating ‘Unsure’. With the exception of one session, the first therapist rated ‘Unsure’ for all sessions. For the remaining two therapists, who treated the remaining two clients, therapists reported that CRB occurred in three out of eight sessions.

**CRIVI RATINGS**

For each session, the average percentage of IV hits ranged from .7 to 3.6. Across all four sessions, the mean percentage of IV hits was 2.5.

**EXPERT RATING OF OCCURRENCE OF CRB**

For the Phase 1 sessions in which therapists reported that CRB occurred ($n = 4$), expert raters failed to confirm the occurrence of CRB in all cases except for one.

**DISCUSSION OF THE FIRST CLINICAL SERIES**

Based on the first clinical series results, it is warranted to conclude that the protocol was feasible and acceptable. Recruitment goals were met and there was satisfactory adherence to the assessment protocol. Six out of seven clients completed all four sessions and provided generally high ratings on post-session rating forms. Daily diary card ratings of relationship quality (connection and respect) as well as ratings of goal attainment increased modestly across the treatment period, however no improvements were reported on the standard measures of relationship satisfaction.

It was evident, however, that the treatment protocol as implemented in the first series did not adequately support implementation of FAP interventions, indicated by absence of therapist report that CRB occurred in many sessions, by the failure of FAP experts to confirm the occurrence of CRB in sessions in which therapists reported that CRB did occur, and by the low rates of IV interventions recorded in the CRIVI ratings.

Consequently, the most important result of the first clinical series was the identification of obstacles to FAP implementation, informing subsequent improvement of the treatment protocol. Specifically, to explain the low level of IV interventions and to guide subsequent treatment development, based on review of sessions from the first clinical series, the following hypotheses were generated: (1) The goal identification process was too open ended and required too much session time; (2) behavior analysis of goal-related behavior was not adequately implemented, leading to vagueness or narrowness in goal definition and lack of functional understanding of goal-related behavior, which in turn undermined conceptualization of CRB; (3) in-vivo behaviors were not adequately assessed throughout each session, and even when significant in-vivo process was clearly present, it was often ignored if it did not relate closely to the identified (narrow) treatment goals.

Accordingly, we updated the treatment manual in the following ways: (1) We streamlined the goal setting procedure, requiring clients to select from a list of standard goals; (2) we expanded procedures for functional definition of problematic and goal-related behavior and created several worksheets to facilitate identification of context, behaviors, and consequences associated with problems and improvements; (3) we greatly expanded and elaborated procedures for noticing/evoking CRB across all treatment elements (e.g., listing commonly occurring CRB in relation to the goal setting process, the Greeting and Opening, etc.), and (4) we emphasized identification of CRB on the basis of much more broad, flexible assessment of functional similarity with romantic relationship behaviors. The result of these modifications was a 46-page treatment manual, accompanied by two 60-minute training sessions, and a protocol for weekly group supervision focused on the above features of the protocol.

It should be noted that these hypotheses for treatment development were generated in a context in which multiple confounding variables were present: there are numerous explanations for the observed phenomena in the first case series. These include the inexperience of the therapists in conducting brief FAP, as well as, more generally, the unsuitability of FAP for a brief therapy context in general. However, if the second clinical series (presented below) resulted in improved outcomes on the key criteria for treatment development success, this was to be taken as limited evidence of the validity of these treatment development hypotheses for reaching the desired goals.

**METHODS FOR THE SECOND CLINICAL SERIES**

Methods were as in the first case series, with these exceptions: (1) the use of the revised treatment manual; (2) addition of
RESULTS OF THE SECOND CLINICAL SERIES

CLIENT AND PARTNER DEMOGRAPHIC AND RELATIONSHIP DATA

Clients were 3 females and 3 males. Partners were 3 females, 2 males, and one transgendered individual. Two couples were same-sex couples: one male-male couple, one female-female couple. One couple was female and transgender. Average age was 30 years (range: 21-41 years; SD = 7.3), and participants had completed an average of 5.6 years of post-HS education (range: 2-12 years; SD = 3.2 years). Mean relationship duration was 21.2 months (SD = 8.4 months) and ranged between 8 months and 11 years. Two of the 8 couples were married; one couple was in domestic partnership. One of the couples has previously participated in couples therapy together prior to this study.

BASELINE ASSESSMENTS DATA

At pre-treatment, client and partner DAS scores were 111.8 (SD = 6.0) and 116 (SD = 9.0) respectively. As in Phase 1, these baseline DAS scores are closely representative of non-distressed couples.

COMPLETION

All six couples/clients who entered the clinical series completed all study procedures.

PRE- TO POST-TREATMENT CHANGES

At post treatment, there was no clear pattern of improvement on any of the standard relationship satisfaction scales for clients or partners.

DIARY CARD RATINGS OF CONNECTION AND RESPECT

Clients completed the daily diary card for a variable baseline period of 1 to three weeks. One client completed the card for one week; three clients completed the card for two weeks; two clients completed the card for three weeks.

As in first clinical series, weekly mean ratings of connection and respect increased in all cases over the treatment period. Weekly mean ratings of connection increased from 6.3 (SD = .7) to 7.1 (SD = 1.0) and ratings of respect increased from 6.6 (SD = .8) to 7.1 (SD = 1.3). Again, ratings of connection and respect tended to correlate across the entire treatment period (r = .89, p < .01).

CLIENT PRE-SESSION RATINGS OF GOAL ATTAINMENT

As in Phase 1, before each session, clients rated their past week and overall (i.e. throughout the entire study period) progress on between 1 and 3 specific goals. All clients rated two goals. The average overall goal attainment reported at Session 2 (the first rating point) was 6.8 (corresponding to ‘neutral’; SD = 1.0). The average overall goal attainment was 7.0 (SD = .9) at Session 3 and 7.4 (SD = .6) at Session 4 (indicating ‘some progress’).

CLIENT RATINGS OF IN-SESSION GOAL RELATED BEHAVIOR OCCURRENCE

Following each session, clients provided ratings of the occurrence of behaviors related to their relationships goals in the interaction with their therapist (i.e., CRB). Examples of problem behaviors and relative improvement were rated separately. In addition, for occurrence of problem behaviors, clients rated how similar the behaviors were to behaviors that occur with their partner, how aware the therapist seemed of the occurrence of these behaviors, and whether the therapist prompted the client to respond differently (in line with the identified treatment goals). For occurrence of relative improvements, clients rated how aware the therapist was of these behaviors, whether the therapist made the client feel appreciated or acknowledged for the improvement, whether the improvement was discussed in relationship to the client’s behavior in their romantic relationship, and whether the therapist discussed how to generalize improvements to the romantic relationship. All of these ratings were made on a Likert-type scale ranging from 1 to 5, where 1 indicates ‘not at all’ and 5 indicates ‘extremely’.

In all sessions, clients reported that issues similar to their issues with their partner had occurred in session with either high (more than three times) or low (3 or less times) frequency.

Ratings of the similarity of issues occurring in session to the issues occurring in the client’s romantic relationship ranged from 3 (indicating ‘somewhat similar’) to 5 (indicating ‘extremely similar’). The mean ratings for Sessions 1 through 4 were 3.3 (SD = .7), 3.6 (SD = .5), 4.6 (SD = .5), and 4.3 (SD = .5) respectively.

Client ratings of therapist’s awareness of the occurrence of issues ranged from 3 (indicating ‘somewhat aware’) to 5 (indicating ‘extremely aware’). The mean ratings for Sessions 1 through 4 were 4.3 (SD = .5), 5 (SD = 0), 4.8 (SD = .4), and 4.8 (SD = .4) respectively.

Client ratings of whether the therapist prompted them to respond different given the occurrence of issues ranged from 2 (indicating ‘a little’) to 5 (indicating ‘extremely’). The mean ratings for Sessions 1 through 4 were 2.8 (SD = 1.1), 4.3 (SD = .7), 4.2 (SD = .7), and 4 (SD = 1) respectively.

Clients reported that improvements with respect to the target issues (i.e., improvements rather than issues) occurred in all sessions with either ‘high’ (indicating more than three times) or ‘low’ (indicating three or less times) frequency.

Client ratings of the therapist’s awareness of improvements ranged from 3 (indicating ‘somewhat aware’) to 5 (indicating ‘extremely aware’). The mean ratings for Sessions 1 through 4 were 4 (SD = .8), 4.3 (SD = .7), 4.6 (SD = .5), and 4.7 (SD = .7) respectively.

Client ratings of whether the therapist responded to improvements in a way that helped the client feel appreciated or acknowledged ranged from 3 (indicating ‘somewhat aware’) to 5 (indicating ‘extremely aware’). The mean ratings for Sessions 1 through 4 were 4.3 (SD = .5), 4.5 (SD = .5), 4.8 (SD = .4), and 4.2 (SD = .9) respectively.

Client ratings of whether the therapist discussed the relationship of in-session improvements to patterns in the romantic relationship ranged from 2 (indicating ‘slightly’ discussed) to 5 (indicating ‘extremely’ discussed). The mean ratings for Ses-
The percentage of IV hits for each session ranged from 0 to 46.7. Across all four sessions, the mean percentage of IV hits was 17.2.

**THERAPIST RATINGS OF CRB OCCURRENCE**

In all sessions except for two (the first sessions for the first two clients), therapists reported that client behavior similar to the client’s clinically significant behavior with their partner had occurred with either ‘low’ (indicating three or less occurrences) or ‘high’ (indicating more than three occurrences) frequency. Following session 1, all therapists indicated that issues occurred with high frequency in all sessions, with only two exceptions – Sessions 2 and 4 for the second client.

Therapist ratings of the similarity of issues occurring in session to issues occurring in the client’s romantic relationship increased from a mean of 3.25 (indicating ‘somewhat similar’; SD = .43) in Session 1 to a mean of 4.8 (indicating ‘moderately’ to ‘extremely similar’; SD = .4) in Session 4. Therapist report that they effectively reinforced or punished behaviors representative of issues (CRB1) increased from a mean of 2.3 (indicating ‘slightly’ punishing/extinguishing; SD = 1.3) to a mean of 4.4 (indicating ‘moderately’ to ‘extremely’ punishing/extinguishing; SD = .5) in Session 4. Therapist report that they (ineffectively) reinforced the occurrence of issues decreased slightly from a mean of 1.75 (indicating ‘slightly’ reinforced; SD = 1.1) in Session 1 to a mean of 1.4 (SD = .5) in Session 4.

In all sessions, therapists reported that client improvements in goal-related behavior had occurred with either ‘low’ (indicating three or less occurrences) or ‘high’ (indicating more than three occurrences) frequency.

Therapist report that they effectively reinforced such improvements increased from a mean of 4.2 (indicating ‘moderately reinforced; SD = .6) in Session 1 to a mean of 5 (indicating ‘extremely reinforced’; SD = 0) in Session 2, where it remained for the subsequent two sessions. Therapist reported that they (ineffectively) punished in-session improvements at a mean level of 1 (indicating ‘not at all’; SD = .6) in Session 1, followed by a mean 1.6 (SD = .8), a mean of 1 (SD = 0), and a mean of 1.2 (SD = .4) in Sessions 2 through 4 respectively.

Therapists rated their discussion of the functional similarity between in-session and romantic relationship behavior at a mean of 3.2 (indicating ‘somewhat’ effectively discussed; SD = .7) in Session 1, increasing to a mean of 4.2 (indicating ‘moderately’ effectively discussed; SD = .7) in Session 4.

Therapists rated their discussion of generalization of in-session improvements to the romantic relationship at a mean of 2.4 (indicating ‘slightly’ effectively discussed; SD = 1.0) in Session, increasing to a mean of 4.6 (indicating ‘moderately’ to ‘extremely’ effectively discussed; SD = .5) in Session 4.

**CRIVI RATING**

The percentage of IV hits for each session ranged from 0 to 46.7. Across all four sessions, the mean percentage of IV hits was 17.2.

**DISCUSSION OF THE SECOND CLINICAL SERIES**

As in the first clinical series, standard measures of relationship satisfaction did not demonstrate improvement, though again clients reported modest progress on idiographic measures. More importantly, however, the second clinical series provided much greater evidence of implementation of FAP interventions, as evidenced by client, therapist, and observer ratings. In particular, the frequency of in-vivo hits rated by the CRIVI increased from 2.5% in the first clinical series to 17.2% in the second clinical series. This data lends support to the hypothesis that the improved protocol and/or training/supervision procedures used in the second clinical series more effectively supported implementation of FAP.

**GENERAL DISCUSSION**

This study aimed to develop and test a brief FAP treatment protocol. The protocol was developed across two clinical series. Following the first clinical series, given data that the protocol did not adequately support implementation of FAP interventions, the protocol was refined. Subsequently, the second clinical series provided much stronger evidence of successful implementation of FAP interventions. In particular, rates of in-vivo interventions in the second clinical series exceeded rates found in the largest study of a FAP intervention to date (Kohlenberg, Kanter, Bolling, Parker, & Tsai, 2002): 17.2% for our second clinical series vs. 9.2% in the previous FAP study. Client and therapist self-reports immediately after each session provided further evidence that FAP principles were implemented effectively, with expert raters confirming the occurrence of 20 out of 22 therapist reported CRB in the second clinical series. Notably, client and therapist ratings generally changed across sessions in ways predicted by FAP theory (Weeks et al., 2011): e.g., CRB2 increased in frequency and CRB1 decreased in frequency. Taken together, this data provides preliminary evidence that FAP may in fact be implemented in a brief treatment setting.

Despite these promising findings, neither clinical series produced improvements on standard measures of relationship satisfaction. There are a variety of factors that might explain this lack of change (e.g., clients were already highly satisfied and measures are not sensitive to change in the high satisfaction range; the treatment period was not of sufficient duration to produce global change in satisfaction; specific treatment goals were not adequately linked to global satisfaction; the samples treated in these clinical series were small and somehow not representative), however it may also be that 4 individual sessions of FAP are not an effective way to improve overall relationship satisfaction.

In addition, several significant limitations of the study reported here should be noted. First, the self-report of clients and therapists and the ratings of our experts (authors of the current paper) are susceptible to bias, following the expectations of the researchers. Second, the changes to the protocol between the
first and second clinical series co-occurred with the addition of group supervision sessions for therapists, and in general it is not clear which factors, if any, of those discussed in this paper may have produced the observed effects.

This work represents a preliminary study of the utility of a brief, focused FAP protocol for relationship improvement with a single client. Despite the limitations of this work, we hope that it provides some inspiration for the study of similar brief, structured FAP protocols and that this study in turn advances the scientific study of FAP.

REFERENCES

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