

## FAP-Enhanced Group Therapy for Chronic Pain.

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There is a firm tradition of cognitive behavioral programs for chronic pain and structured treatments for training coping skills have been relatively successful with motivated and cooperative participants. However, what is being trained generally comes down to component skills and ways of thinking that have to be used by the client in complex real life situations. The aim of this paper is to illustrate how the principles of Functional Analytic Psychotherapy (FAP) can be applied in a group therapy program for people with chronic pain, using genuine in vivo occurrences of pain-related or stress-maintaining interpersonal behaviors of the participants during the group interaction. Functional analytic case conceptualizations of two participants with treatment resistant chronic pain are presented. The use of FAP-informed strategies during complex exchanges in the group is shown by means of vignettes. It is argued that FAP offers a way to make group therapy more relevant for real life problems and more effective for some people with treatment resistant pain.

Key words: FAP; group therapy; chronic pain.

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### A Radical Behaviorist Critique of Traditional Treatment of Chronic Pain.

Chronic pain is often maintained as part of a series of vicious circles. Orofacial pain, for instance, can be related to spasms of the chewing muscles, which can be both the cause and the effect of a variety of factors including dysfunctional oral habits, changes in dental occlusion, continuous excessive contraction, and any combination of these. Increasing pain can provoke more muscular tension and vice versa, while muscular irritation may lead to more dysfunctional contraction, which again can increase irritation. Finally, months or years of suffering facilitate pain-focused life-styles that on their turn help maintain the pain.

Psychosomatic models (Melzak, 1998; Grams e Vikis-Freibergs, 1991) refer to the relation between a great array of stressors and physical changes like increased muscular tension or cumulating cortisol releases that can have destructive effects on tissues, laying the immediate basis of pain or leading with later stressors or minor injuries to disproportionably intense pain. In itself, pain may be a severe stressor and can be both the cause and consequence of maladaptive coping behavior.

When the search for causes of chronic pain does not provide any therapeutic advantage, specific behavioral patterns related to the pain have been targeted. Applied behavior analytical (Fordyce, 1976) and cognitive behavioral programs (Turk, Meichenbaum and Genest, 1985) have been designed to reduce various types of chronic pain and to better coping with residual pain. The effects of structured group therapy have been well explored in both operant and cognitive approaches (Turner, 1988; Thorn, Boothby, Sullivan, 2002). However, there are patients who do not improve with traditional treatments. Departing from a radical behaviorist critique of group therapy it was our intention to go beyond the educational format of these approaches.

From a functional analytic point of view, the skills acquired in traditional approaches are still very different from the target behavior, because they are maintained by other contingencies, like approval by the therapist or other group members. The contingencies that act in daily life are often completely different from those that act in treatment settings. What is being modified generally comes down to component skills and ways of thinking that have to be used by the client in complex

real life situations. When the client uses the new skills in a real life setting, he or she will have to remember the steps learned during training to execute them, which means they will be functionally different from genuine interactions.

The aim of the present paper is to illustrate through a number of vignettes the possibility of applying the principles of Functional Analytic Psychotherapy in a group therapy program for patients with chronic orofacial pain.

#### Principles of Functional Analytic Psychotherapy.

Kohlenberg and Tsai (1991) developed Functional Analytic Psychotherapy (FAP) as an effort to comprehend in radical behavioristic terms why certain clients improve in intense therapeutic relations and to delineate the strategies that the behavior analyst can use to facilitate such curative relations. It is a treatment that places the flux of interactions between client and therapist at the center of the process of change.

According to FAP resistance to treatment can be understood when put in the context of the patient's interpersonal relations. Behavior in the treatment setting is analyzed for its own sake and not as a preparation for other behavior in the outside world. As the behavior can have functions that are very similar to those of the dysfunctional behaviors that occur in her or his daily life, treatment interventions that are not specifically tailored to those functions can inadvertently reinforce exactly those behaviors that maintain the patient's problems.

In contrast to the traditional cognitive-behavioral approach, there is no pre-conceived model of rational thinking or acting that has to be acquired by the client and there are no standard techniques. The therapist's interventions can take the form of sharing genuine reactions and interpretations based on a continuously evolving functional analysis.

Instead of discussing beliefs and training skills that can be applied outside the therapy setting, the focus is on what is actually happening that very moment between therapist and client. Three conditions must be fulfilled, to work according to this principle. First, the therapy session must include problem situations that are functionally equivalent to those in which the target behavior occurs (or can occur) outside the session. Second, the actual target behavior has to be possible during the session. And third, the natural reactions of the therapist must be functionally equivalent to consequences that are available in daily life situations.

Functional Analytic Psychotherapists need to identify potentially reinforcing effects of their own reactions on the client's behavior, and to share their interpretations concerning the variables that affect the client's behavior. Often the reactions the client evokes in the therapist are taken as possible examples of how the client's behavior affects other people. They offer cues as to interpersonal contingencies related to the client's daily life problems, and possibilities to bring the client's behavior into contact with some of its interpersonal consequences. Such practice demands fine-grained self-observation skills during the therapy session, as well as a keen capacity to relate one's functional analysis of the client's problems in the outside world to what happens within the therapy relation.

We applied the principles of FAP not on individual therapy, but in a group therapy setting. We started out with a group of three adults that had been referred by dental surgeons for treatment of chronic orofacial pain, and which had not realized any reduction in reported pain-levels after 6 months of weekly cognitive behavioral therapy. The group had been designed for the acquisition

of adequate oral habits, abilities to detect early cues of pain-increases and of muscular spasms, applied muscular relaxation skills, problem-solving and interpersonal skills in order to stop daily life hustles and problems from adding to stress and muscular tension, and occurred in weekly one-hour sessions of which each was led by two therapists.

Instead of interrupting the treatment, which was based on empirically supported techniques, we chose for continuing the work, introducing the principles of FAP (Kohlenberg and Tsai, 1991) in the therapeutic routine. The idea that while applying a technique-oriented protocol, therapists can identify CRBs or the effects these have upon themselves, and handle what happens during the session according to a functional analytic view, is not new. Previously, FAP has been used for example to enhance cognitive therapy of depression (Kohlenberg and Tsai, 1994; Bolling, Kohlenberg and Parker, 1999; Kohlenberg, Kanter, Bolling, Parker and Tsai, 2002) and FAP principles have been used in integrated milieu treatments for chronic distress (Holmes, Dykstra, Williams, Diwan and River, 2003). The present paper extends the idea to the group therapy setting for chronic pain.

#### Method.

The participants of the group were three adults referred for debilitating and treatment-resistant chronic orofacial pain. The group therapy was offered at the faculty of dentistry of the federal university of Goiás as a free service for people with low incomes. The professionals involved all worked on a voluntary basis.

Individual FAP case-formulations were elaborated to access the behavioral patterns in which the pain was captured. Two of these are shortly presented. They resume the client's daily life problems, the relevant learning history, how the client learned to think about her or his problems and behavior, goals for therapy and their translation into CRBs targeted in session. A number of fragments are presented to illustrate how the principles discussed above.

#### Case-formulations.

Sam reported continuous pain during two years and frequent spasms in face and legs. His jaw often dislocated, which caused more intense pain. He had stopped professional and leisure activities and avoided situations in which he would have to talk. Having to take decisions increased orofacial muscle tension, which was often followed by painful spasms. He displayed a pattern of helplessness and tried to avoid noticing his feelings. He could not report or explain his own emotional reactions. He made frantic efforts to avoid being criticized, never questioned opinions of physicians, dentists or others in general, and always agreed with what he was told to do, but followed instructions and suggestions so sluggishly and unconvinced that he could not obtain results.

In his family of origin paternal authority was considered unquestionable and individual initiatives were badly considered. He had a history of catastrophes (spectacular financial losses; divorce; vicious betrayal by friends, colleagues and family), all of them closely following important personal or professional decisions and problem-solving efforts he had made. During these episodes people who were close to him often exposed him to severe and destructive criticism. From all this he had concluded he would fail at almost anything he would try.

Based on this information, learning to talk frankly, allowing for open dialogue, paying attention to his feelings, deciding what he wanted out of situations and doing what he judged right were chosen as goals for treatment. This translated into in-session goals like weakening superficial answers on

questions regarding his opinion; strengthening behavior that consisted of questioning the advice or the assumptions of the therapists, talking about what he felt, wanted or intended to do, reacting in active and constructive ways to criticism, giving advice or taking decisions and initiatives concerning in-group activities.

Lea could not maintain her things in order at home or at work. She left problems to be solved at the last minute or lost opportunities. She could not detect why she acted or felt something and passively accepted humiliating or otherwise intensely stressful conditions like passing every weekend with the alcoholic family of her fiancé to let him have access to free liquor. She avoided asking and thanking for something and she solved her problems by manipulating important others (fiancé, family, boss) and lying to them. Her pain was more intense in social situations and she had difficulties in establishing empathic relations, usually rejecting or ridiculing what people said. She frequently complained making people feel guilty or pity her; giving only indirect cues making them guess what she needed. People in her environment did not give her feedback about how she made them feel, because she always was in pain. This left her with no information about why they avoided or disqualified her.

With similar strategies she had been able to cope with her alcohol-dependent father, the violent conflicts in her family of origin and the false front of a harmonious household her mother forced upon them. In her family of origin expressing desires and feelings was disqualified. Her father was a model of how to make others do what one wants without having to ask them directly and her mother was a model of how to hide feelings and opinions. Since that time on, she learned to obtain caring reactions by refusing to talk, avoid demands from others by making them feel guilty. Colleagues helped her out with the disorganization at her job, without her having to ask and her supervisor hid her errors for her boss. In all environments she is permitted to isolate herself when she's in pain.

Lea believed that asking something for oneself is a sign of weakness, and that she was unable to organize her life but that she always got away with what she wanted anyway.

This conceptualization imposed the following goals for therapy: learning to detect relations between situations and pain, learning to express feelings and desires in words, learning to confide and to share as well as to openly take a stand in interpersonal relations, to explicitly assume shared responsibility for situations, to define priorities, make her values explicit, organize, plan and act in relation to her own wants and goals.

Lea did not participate constructively in the sessions. She fled from questions about herself, forgot about homework and refused to give feedback about the therapy process or to give her opinion about the assignments she failed to do. She frequently made depreciating jokes about the therapists or other participants. This gave cues as to how she probably made other people in close relations feel. In-session goals included: diminishing her manipulative behavior and her avoidance of feelings, strengthening new behaviors of expressing feelings toward group-members and therapists, openly refusing being ordered around, deciding about which homework assignments and in-session activities she wants to do and how she wants to do them, hearing others and taking them seriously, proposing and choosing activities in the group, paying attention to other group members participation in negotiation and dialogue, giving them opportunities to like her.

## Vignettes:

The following transcriptions are illustrations of stress- and pain-maintaining interpersonal behaviors that happen during the session.

An early breakthrough occurred when Lea asked for an explanation about a text the group had read. One of the therapists had asked: "What is your opinion about what we just read?" Lea answered: "I understood that one should accept anxiety. How can one do that?" The group accepted the question and allocated discussion-time to it, which seemed to strengthen the new behavior. However insignificant this interaction may seem, it led to an increasing frequency of behaviors by Lea like proposing a question to be considered by the group or asking something she found important. In subsequent months she gradually took other members' opinions more often seriously, proposed subjects to be considered by the group and asked questions. This was a drastic change in her interpersonal style and allowed her to get more out of her interactions with other people.

Another moment of change happened when one of the therapists had asked Sam's opinion about an occurrence in the group, and he remained silent and recoiled in his chair.

Therapist: "What do you feel?"

Sam: "My hands feel cold and I feel difficulty to articulate my thoughts."

Therapist: "And what do you think in such moments?"

Sam: "I think that people will not understand me."

Therapist: "Were you nervous when I asked for your opinion?"

Sam: "Yes. I am feeling all these bad sensations I just described."

Therapist: "And do you think we can understand you?"

Sam: "I don't know."

Therapist: "What do you think about what Sam just said?"

Lea: "People get nervous when they have to speak, but that doesn't mean they can not speak."

Therapist: "Do you feel like this as well?"

Ruth: "No."

Therapist: "And you, Sam, do you think the group understood what you told us?"

Sam: "I believe so."

Therapist: "What makes you think so?"

Sam: "The discussion went on making sense."

In this fragment the therapist offers prompts for new behaviors in all participants. We see Sam speaking frankly and discriminating his feelings verbally (this is an in-session improvement), Lea listened to him and took him seriously (these are in-session improvements for her and at the same time a potential reinforcer for Sam's emerging behavior) while Ruth went against the general tendency of the discussion (which is one of her problem-behaviors).

When one therapist asked: "Can you see how pain is related to daily life problems?" Lea answered: "In my home all comes down to me. Who has to change a light bulb? Who goes to the supermarket? It's always me. And all of us are adults at home."

Therapist: "What is the relation between these situations and the pain?"

Lea: "I can't stand it anymore, it seems I have to please people all the time."

Therapist: "Your family?"

Lea: "With my boyfriend and his family it's the same thing."

Therapist: "And you see a relation between this and your pain?"

Lea: "That's why I don't have the patience to get to know new people. To have to please people all the time makes me weary."

Sam: "I recognize myself in what L said. We must stop trying to please others too much."

Taken on face value, Lea's first answer contains valuable information, but at the same time it is a problem-related behavior that is due to make people feel sorry for her. Interestingly, while the therapist gently pushed her into talking about her feelings (an in-session goal for Lea), this gave the opportunity for Sam to take the initiative to talk, suggesting a strategy of change for both himself and Lea. For Sam, proposing action is an in-session goal. And at the same time his sensitive reaction could strengthen Lea's new behavior of opening herself up for others.

#### Progress:

After 12 months of FAP, some of Sam's progresses include giving opinions and suggestions to other members in the group, and offering another participant a ride home after the session. Examples of changes in his daily-life environments include starting (and persisting in) a training in a new profession, participation in family reunions which he had been avoiding for many years, doing independent research on orofacial pain, and submitting himself to a dental surgery against which his physician had warned. Reported pain- and stress-levels had dropped strongly and the muscular spasms disappeared.

Lea's progresses include her expression of opinions and desires during the sessions. She started telling what she thought and why, making requests and thanking for what others did for her. She started doing homework assignments and to identify situations that related to pain-increases. She got her work-environment organized and got jobs done before deadline, which changed attitudes to her of people at her work. While reported pain gradually diminished and became situation-specific, she spontaneously stopped her use of painkillers.

#### Discussion.

We believe the fragments discussed above exemplify a genuine functional analytic approach, as what participants say is not analyzed as communication about other topics but as relevant behavior in its own right. This way each act of speech during the session can be a problem-behavior or an in-vivo improvement. The advantage this approach is that, (while clients do not learn "about" how to deal with stress-related issues or other problems, as would be the case in role-play techniques) behavior patterns are modified during genuine live interactions between the five people in the therapy room. The interaction between therapists and group-members is thus allowed to act not as a didactic context, but as a possibility of actual real-life learning and personal change.

Although research is called for, to verify if the interpersonal focus of FAP improves the effectiveness of group therapy for chronic pain, the point we wanted to make is that the group-therapy format easily allows for the application of FAP principles. As group interaction allows for evoking a variety of clinically relevant behaviors and people's genuine reactions serve to reinforce or weaken other's behaviors, a functional analytical management of the group process to enhance in-session behavior change is a clear option.

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