

ACCEPTANCE AND COMMITMENT THERAPY (ACT) IN PANIC DISORDER WITH AGORAPHOBIA: A CASE STUDY

Francisco Javier Carrascoso López
UNED (Seville)

In recent years, Acceptance and Commitment Therapy (ACT) has gained ground as a radical behaviorist conceptual alternative to cognitive-behavioral models of anxiety disorders, as a theory that considers psychological problems as a set of socio-cultural practices in context. With this in mind, we present a case study illustrating the application of ACT in a male user diagnosed as suffering from panic disorder with agoraphobia. After twelve treatment sessions, the user was observed to have recovered, and discharged. The results obtained are complex and contradictory, and not easily explained in terms of exclusively quantitative perspectives on behavioural change and cognitive-behavioral models of panic disorder. In the light of the results, a series of conceptual and methodological considerations on the process of behavioral change are presented within the framework of ACT, as a conceptual alternative to cognitive-behavioral models of panic disorder.

Recientemente, la Terapia de Aceptación y Compromiso (ACT) se ha desarrollado como una alternativa conceptual conductista radical a los modelos cognitivo-conductuales de los trastornos de ansiedad, considerando que los problemas psicológicos constituyen un conjunto de prácticas socioculturales en contexto. Presentamos un estudio de caso ilustrando la aplicación de la ACT en un varón diagnosticado de trastorno de angustia con agorafobia. Tras doce sesiones de intervención, el usuario fue dado de alta por mejoría clínica de su problema. Los resultados obtenidos fueron de naturaleza compleja y no fácilmente explicables desde los enfoques cuantitativos del cambio conductual y los modelos cognitivo-conductuales del trastorno de angustia. A la luz de los hallazgos obtenidos, se presentan una serie de consideraciones conceptuales y metodológicas desde el marco de la teoría de la ACT sobre el proceso de cambio conductual, como alternativa conceptual a los modelos cognitivo-conductuales del trastorno de angustia.

The proliferation of cognitive models of panic disorder has permitted the development of effective intervention packages for this disorder, which appear to differ in the *theoretical* importance given to one or other of their therapeutic components. Nevertheless, these intervention packages resemble one another apart from certain details in the importance attributed to cognitions about panic as causal agent, and can be described in conceptual terms as *linear* and *eliminative* (Goldiamond, 1974): their *general objective* of change is to help the user to achieve (self-) control over the symptoms, *eliminating* them or, in the worst case, appreciably *reducing* their frequency, intensity and duration, that is, producing

quantitative changes in carefully operativised response topographies.

Despite the notable therapeutic success of these programmes, which has been used to justify the theoretical framework on which they are based, it is possible to consider and treat panic disorder from a radical behaviorist point of view: that of what is referred to as *Acceptance and Commitment Therapy* (ACT) by its authors (*Terapia Contextual* in Spanish – Pérez Álvarez, 1996).

From the perspective of ACT it is assumed that focusing therapeutic efforts solely on operationally-defined response topographies, such as thoughts or hyperventilation, which are attributed a causal role, obscures factors that may be critical in the etiology and maintenance of panic disorder, such as contextual or *setting factors* (Kantor, 1924) or *socioverbal contexts* (Hayes, 1987). That is, catastrophic thoughts related to a sharp acceleration in heart rate acquire their causal role not by them-

The original Spanish version of this paper has been previously published in *Psicothema*, 1999, Vol. 11, No 1, 1-12

.....
Correspondence concerning this article should be addressed to Francisco Javier Carrascoso López, C/Sta. María Magdalena, nº 2, 4º D. 41008. Sevilla. Spain. E-mail: carrascoso@correo.cop.es

selves, but *rather in relation to a conventional framework or setting* (e.g., considering that undesirable emotions, on being the cause of the behavior, must be eliminated in order to change the behavior), which forms a contingent relationship with a class of behavior at a given moment, historically framed in past user-setting interactions

If we develop this argument, the emphasis on the *content* or response topography more than the *form* or function of the behavior leads to the not unreasonable suspicion that therapeutic efforts in panic disorder amount to nothing more than training the user in the development of more sophisticated avoidance strategies. McFadyen (1989) has warned of this problem from cognitive models. In this context, Hayes and Hayes (1992) proposed that psychological intervention should be oriented towards *modification of the context* that transforms in problematic a set of response topographies –that is, in strictly radical behaviorist terms, the objective of change should be a *contextually-controlled class of behavior*.

In consequence, it appears reasonable to assume that an *exclusively* eliminative conceptualisation of the process of behavioral change would be coherent with the culturally dominant forms of conceptualising aversive emotional states as undesirable “things” or “objects” that one has (e.g., Lakoff and Johnson, 1991), and that must be eliminated. Hayes (1994) suggests that the process of behavioral change can be better understood as a balance between *acceptance* and *change*. Thus, change would occur not through eliminating anxiety or sadness, or thinking positively, but through facing or accepting the anxiety and sadness as they are, establishing a commitment to act in spite of them. This equilibrium between acceptance and change would be achieved by altering the socioverbal contexts of explanation, control, literacy and evaluation (Hayes, 1987; see Pérez Álvarez, 1996, for a detailed discussion of these four contexts) that convert in problematic a set of response topographies which, under the control of these contexts, become an undesirable class of behaviors that are to be eliminated.

In order to illustrate the conceptual outline of ACT, the current work describes a case of panic disorder with agoraphobia treated by the author in the context of the public mental health service of the Autonomous Region of Andalucía, from parameters of this therapy itself, that

is: a) not using operationally-defined response topographies as dependent variable; b) emphasis on classes of behavior; c) orientation of the objectives of change towards contexts that make functional a set of behavioral (self-) control practices as the principal dependent variable. In this case study some modifications were made to the standard ACT procedure (see Hayes, McCurry, Afari and Wilson, 1991, and Pérez Álvarez, 1996), derived from the functional analysis of the user's problem.

METHOD

Subject

The user was a 28-year-old male, unmarried and with girlfriend. Educational level was first year of technical school (managerial work specialisation). He alternated periods as a street vendor with temporary contracts in a gardening equipment company. He had no family antecedents of panic disorders or other mental disorders, except for a brother, a rehabilitated intravenous drug-user. The user was a moderate smoker of Virginia-type tobacco, an occasional and moderate drinker (spirits with mixers and beer) and a habitual consumer of caffeine (coffee at breakfast and after lunch).

History and evolution of the problem

His problem began 5 years before the first appointment in our surgery, whilst he was in the second year of the managerial work course at a technical school some 20 km from his home village. He suffered an unexpected panic attack with eight symptoms during the two or three-hour journey to his village from the provincial capital where he was living; after the attack, the user was enormously shocked by what had happened. Two weeks later occurred a second attack of more than four symptoms, beginning a period of practically daily unexpected attacks of four symptoms or less, and at least one attack of more than four symptoms every week. The panic attacks began to cause the user problems for attending the technical school where he was studying, soon becoming generalised to the classroom. The user abandoned his studies before the end of that school year, and immediately began to feel better, on avoiding having to travel or attend class. At no time did he seek either professional help or recourse to drug treatment; he asked his friends, and especially his girlfriend (at that time a psy-

chology student) for advice or to put his mind at rest. During this time a pattern of great apprehension and fear of recurrence of the panic attacks began to establish itself.

Within a few months the panic attacks recurred, rapidly becoming generalised to multiple situations. At the same time there began to develop a mixed pattern of behaviors of avoidance and escape from these situations, consisting in the prior search for and planning of the presence of security signs, such as significant others and the proximity of his vehicle. In the absence of such signs, the user systematically avoided situations that provoked the panic attacks. In contrast, in the presence of these security signs, the user was able to enter these situations, though with limitations, since in the case of the onset of panic attacks, he could escape from them.

Once this pattern of behavior was established the user's condition developed unevenly, with alternate periods of improvement and deterioration, marked by the presence of important life events, such as employment problems and jobs that involved long journeys in his car. In the period preceding the commencement of the treatment he suffered only occasional crises of four symptoms or less (between 2 and 3 per week), mainly unexpected, of variable duration (from a few seconds to half an hour), and whose basic physiological symptoms were tachycardia, pressure in the chest and a feeling of asphyxia. The avoidance and escape behaviors were maintained, as was the fear of new panic attacks. The user continued without seeking professional help, until a friend (who was also a friend of the therapist) recommended the public mental health service, which he attended voluntarily on referral from his GP.

Thus, the user was diagnosed according to the DSM-IV (American Psychiatric Association, 1995) as suffering from panic disorder with agoraphobia (Code 300.21).

Assessment procedure

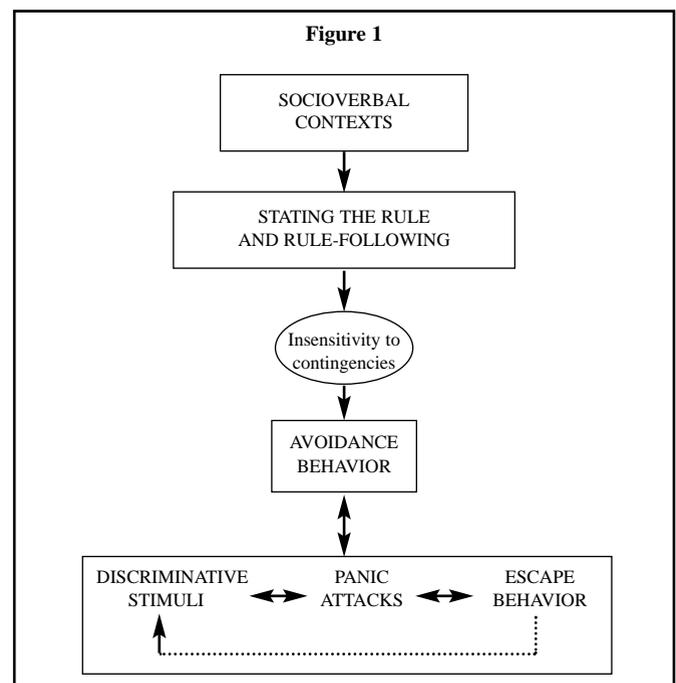
Four semi-structured clinical interviews were carried out with the user. In a parallel way he was administered a battery of tests with the following elements: *State-Trait Anxiety Inventory (STAI)*, *Beck Anxiety Inventory (BAI)*, *Penn Worry State Questionnaire (PWSQ)*, Echeburúa and Corral's *Agoraphobia Inventory (Inventario de Agoraphobia, IA)*, *Wolpe Fears Questionnaire*, *Anxiety Situations and*

Responses Inventory (Inventario de Situaciones y Respuestas de Ansiedad, ISRA), and the *Minnesota Multiphasic Personality Inventory (MMPI –collective version)*. The STAI, BAI and PWSQ were administered during the baseline phase, in the ninth session and on discharge; the rest were applied in the baseline phase and on discharge.

Recordings of frequency of the panic attacks was made using Barlow and Cerny's (1988) *Panic Attack Recording Sheet*. For analysis of general behavior in the problem situations and during the panic attacks, and recording of the frequency of avoidance and escape behaviors, the user was asked to complete a standard self-report with columns referring to situation, thoughts, emotions, behavior and consequences. However, these two assessment instruments were hardly used during the treatment, due to the difficulties they involved for the user. In order to obtain relevant data, part of the time in each session was used to ask the user questions about what happened during the panic attacks or at other times in the week, following the self-report and *Recording Sheet* schemes.

Although scheduled, the follow-up was not carried out, due to the therapist moving to another city. Follow-up has been informal, through telephone conversations with the mutual friend that recommended the user to seek the help of the Mental Health Service.

Functional analysis of the user's behaviour



The functional analysis carried out (see Figure 1) determined that the user's problem could be described as a case of insensitivity to contingencies.

As Figure 1 shows, the panic attacks were provoked by physiological stimuli (tachycardia, pressure in the chest, feeling of asphyxia) and environmental stimuli (waiting in queues, long journeys for work, department stores, travelling by city bus, walking in the city centre, crowded places). In the face of the attacks, the user emitted a pattern of escape responses maintained through negative reinforcement, elements that formed a class of discriminated escape responses. In turn, in order to prevent this contingency, the user emitted a pattern of avoidance responses also maintained by negative reinforcement, a contingency that formed a class of avoidance behaviours. These contingencies were, in turn, controlled by a generalised and consistent class of rule-following behaviors of a *tracking* type, with *track*-type rules (e.g.,

"I won't be able to go home alone if a panic comes on"; "I'm going to have a heart attack") self-generated by the user (Hayes, Zettle and Rosenfarb, 1989), making up a broad class of verbal behavior. The *track*-type rules generated by the user constituted rules of a distorted tacts type (Skinner, 1981), in which there is observed a *strict* (literal) correspondence between rules and events. This class of verbal behavior was, in turn, under the contextual control of (i.e., it acquired its functions of specification of contingencies from) the four socioverbal contexts identified by ACT.

On the basis of this functional analysis, it was considered that the user could benefit from ACT. The insensitivity to functional contingencies detected was consistent with two of the situations proposed by Hayes (1994) as examples of when favouring acceptance is useful at a therapeutic level: a) the user was unable to expose himself to contingencies due to the control by rules (track)

Table 1

SESSION	SESSION ACT OBJECTIVES FUNCTIONAL OBJECTIVES	TECHNIQUES EMPLOYED
1	ACT - Generate creative hopelessness - Abandonment of the struggle against symptoms FUNCTIONAL - Break control by tracking stimuli - Initiate alteration of socioverbal contexts	- Information on the problem - Man in the hole metaphor - Passengers on the bus metaphor - Socratic discussion
2	ACT - Control as a problem FUNCTIONAL - Formulate different rules - Continue with objectives of Session 1	- Diaphragmatic breathing - Polygraph metaphor - Paradoxes
3	ACT - Abandonment of the struggle against symptoms FUNCTIONAL - Initiate elimination of escape and avoidance - Continue with objectives of Session 2	- Pair association task - Hyperventilation experiment - Paradoxes - Review of linguistic conventions
4	ACT - Continue with objectives of Session 3 FUNCTIONAL - Continue with objectives of Session 3	- Same techniques as in Session 3 - Exercises to be carried out voluntarily (live self-exposure)
5	- Same ACT and FUNCTIONAL objectives as in Session 4	- Same techniques as in Session 4
6	ACT - Review control as a problem - Commitment and Acceptance FUNCTIONAL - Same objectives as in Session 5	- Breath control experiment - Exercises to be carried out voluntarily (live self-exposure)
7	- Same ACT and FUNCTIONAL objectives as in Session 6	- Exercises to be carried out voluntarily (live self-exposure)
8	- Same ACT and FUNCTIONAL objectives as in Session 7	- Exercises to be carried out voluntarily (live self-exposure) - The river and the camera metaphor
9-12	- Review of ACT and FUNCTIONAL objectives from previous sessions	- Exercises to be carried out voluntarily (live self-exposure) - Metaphors - Paradoxes

and his tracking; b) his efforts to control the symptoms in the form of anxious apprehension about future attacks or avoidance and escape behaviors led to the avoidance of the direct functions of the feared events. As functional objectives for the intervention the following were selected: a) to break the control by stimuli of the tracking behavior; b) that the user forms rules of a type other than track, or more precise track rules; c) to eliminate the classes of escape and avoidance behaviors; d) to alter the socioverbal contexts that give a function to the classes of behavior operative in the maintenance of the problem. As concrete and ACT-based objectives of change, the five goals specific to this therapy (Hayes, 1987; Pérez Álvarez, 1996) were selected: a) to establish a state of creative hopelessness; b) to make the user see control as a problem; c) to differentiate between the self and the behavior; d) the abandonment of the struggle against symptoms; and e) commitment and acceptance.

Procedure

It was agreed with the user that the intervention would involve a minimum of 12 sessions, negotiable, to take place after the 4 baseline sessions. Sessions 1 to 7 were held weekly, 8 to 10 fortnightly and 11 and 12 monthly, with the user being discharged after Session 12. All sessions lasted one hour. The intervention programme finally executed, its techniques and its functional and specific objectives are shown in Table 1.

During the intervention, modifications to the programme's objectives and the techniques employed were made *ad hoc*, the eventual make-up of the programme being as presented in the table. Thus, the ACT objective of *differentiating between the self and the behavior* was not achieved through the direct intervention of the therapist, given that the user achieved it by himself. Similarly, it can be seen in Table 1 that techniques were used from the intervention programmes of Barlow and Cerny (1988) and Clark (Ballester Arnal and Botella Arbona, 1992), such as live interoceptive exposure, training in diaphragmatic breathing, pair association tasks and the behavioral experiment of holding the breath. However, these techniques were contextualised within the typical procedures of ACT, with the aim of lending them novel functions. Thus, for example, if the training in diaphragmatic breathing is carried out asking the user to shut his eyes and remain as still as possible, this favours contact

with feared physiological sensations, such as heart rate. Likewise, the behavioral experiment of holding the breath was contextualised within the ACT objective of *making the user see control as a problem*. In turn, the pair association tasks were employed as a test to determine whether words had real power to trigger panic attacks, within the frame of the ACT objective *abandonment of the struggle against symptoms*. Also used were metaphors developed by the author himself, such as the *the river and the camera metaphor*, based on William James' metaphor of consciousness as a continuous flow. Current cognitive restructuring procedures were not used, with distancing procedures being employed where necessary, contextualised in the metaphors developed in the course of the sessions.

At all times it was attempted to maintain an empathic and close relationship with the user, using paradoxes, or questions such as "Why...?" or "Why not?", with the aim of distracting him from his perspective on the problem, and as part of the distraction procedure in general. Technical terms were avoided, these being substituted by metaphorical language. Self-revelation was also used as a way of sharing in an intimate way the various relevant experiences of the therapist and user.

RESULTS

The quantitative results obtained are presented in Table 2, in which it can be seen that the instruments employed demonstrated diverse and complex patterns of change. Scores in the T/A scale of the STAI fell appreciably over the course of the treatment, as did the BAI scores and those of all the ISRA scales, especially Factor 3 (phobic panic). The PWSQ scores also fell, though to a much lesser extent. The results of both the MMPI and the *Wolpe Fears Questionnaire* remained practically unaltered on comparing the two application points. Worthy of special mention is the fact that the baseline administration of the MMPI indicated no appreciable psychopathological alterations, except for a relatively high score in the second-order factor *neuroticism*.

The results of the IA merit more detailed consideration. Although overall there is observed a notable decrease in score at discharge, the data presented in Table 2 show that only in *Physiological responses* and *Cognitive responses* did appreciable decreases occur with respect to

the baseline. The other areas of the questionnaire remained virtually unchanged, as can be seen in Table 2. It is interesting to note that, paradoxically, in *Locations*, scores at discharge increased with respect to those of the baseline.

The evolution of the frequency of the panic attacks and the classes of avoidance and escape behavior is presented in Figure 2, where it can be seen that their frequency decreased according to different patterns, relatively dissociated from one another. For example, it is noteworthy that the escape behavior did not reappear in the two attacks recorded in Sessions 6 and 11. Another interesting result is the appearance of a panic attack with three symptoms (tachycardia, pressure in the chest and a feeling of asphyxia), unexpectedly, in the week prior to Session 11 of the treatment, which was not accompanied by any instance of escape behavior, nor preceded by any

instance of avoidance behavior.

The qualitative data obtained from the therapist-user interactions during the sessions and from the therapist's informal contacts with the mutual friend aided understanding of the reasons for and direction of the changes.

Between Sessions 1 and 2 of the intervention phase the user became very interested in the passengers on the bus metaphors, remarking that he was beginning to understand his role in the maintenance of his problem: "(...) *Of course! I'm the one that allows it to grow. I'm the one that's pointing the gun at my head*". In Session 5 of the intervention phase, when it was scheduled to work on the ACT objective of *differentiating between the self and the behaviour*, the user told of how during the week, when he went to the cinema with his girlfriend and to a flamenco concert alone, he had realised that it was one thing to feel uncomfortable in a place full of people and

Table 2

TESTS (Administered at three points)	BASELINE	9th SESSION	DISCHARGE
STAI			
- STATE ANXIETY (S/A)	11	10	3
- TRAIT ANXIETY (T/A)	60	30	15
BAI	32	1	1
PWSQ	43	36	33
TESTS (Administered at two points)	BASELINE		DISCHARGE
WOLPE FEARS QUESTIONNAIRE	92		104
IA			
MOTOR RESPONSES AREA			
Locations			
* Alone	6		10
* Accompanied	2		7
- Transport			
* Alone	9		9
* Accompanied	9		8
- Situations			
* Alone	13		7
* Accompanied	9		6
PHYSIOLOGICAL RESPONSES AREA			
* Frequency	26		3
* Level of fear	26		3
COGNITIVE RESPONSES AREA	11		1
- TOTAL SCORE	111		54
ISRA			
- COGNITIVE ANXIETY	60		10
- PHYSIOLOGICAL ANXIETY	70		20
- MOTOR ANXIETY	80		40
- TOTAL ANXIETY	70		15
- F-I	55		20
- F-II	30		15
- F-III	99		25
- F-IV	50		35
MMPI (Second-order factors)			
- NEUROTICISM	63		57
- PSYCHOTICISM	50		53
- INTROVERSION	50		54

another to avoid it. On posing him the test of the chess board metaphor and asking him whether he was the pieces or the board, he responded without hesitation, “*the board*”, arguing that despite feeling uncomfortable he was nevertheless able to enjoy the film and the concert. Figure 2 shows that it was at that time that the lowest frequency of the avoidance behavior up to that point was recorded. In the following session, on suggesting the commencement of the “exercises to be carried out voluntarily” (live self-exposure to the feared situations), the user freely accepted them (and quite enthusiastically), himself proposing the first items to be achieved: get up at 6 a.m. to make the journey to the provincial capital as though he were going to work (at that time he was unemployed); take his car to the centre of the city one day; another day go by bus to the centre and then walk round the shopping areas at the busiest times; and so on—all situations that had caused him numerous problems until then. From that moment on, the user carried out live self-exposure at every opportunity, beginning to spontaneously do without the security sign (being accompanied, having the car nearby) from Session 6 onwards. In the final session, the IA scores caught the attention of the therapist. On being asked about them, the user responded that, indeed, he didn’t like going to certain places or using public transport, but that if he had to, he didn’t mind at all. Jokingly, he remarked that it was like having to go to work every day: nobody likes it, but you have to do it.

The user’s girlfriend and the mutual friend commented to the therapist in a chance meeting and by telephone that they noticed a progressive improvement, among other things because he no longer needed to be accompanied to the door of the health centre, and he was no longer so worried about having the car nearby or about the possibility of suffering another attack. In the three years since discharge the user has not asked for professional help, and continues to feel perfectly well, according to the occasional reports of the mutual friend.

DISCUSSION

In general, ACT showed itself to be as effective as standard cognitive-behavioral intervention packages in this study of a case of panic disorder with agoraphobia, both in terms of intervention time employed and clinical effectiveness. Taking into account the individual therapy

format of this case study, this conclusion is similar to that drawn by Zettle and Hayes (1986) in a presentation of preliminary results of research on ACT. This conclusion should be considered with due precaution and reserve given the methodological limitations of this case study—mainly the lack of a controlled long-term follow-up and the recourse to basically retrospective measures.

In spite of these methodological shortcomings, the data obtained raise some interesting issues. First, at no time was cognitive restructuring used. Nevertheless, changes occurred in the way the user referred to his problem. *Concurrently* with these changes, the functionality of the escape behavior began to be broken, leading to a reduction in the frequency of the panic attacks and, subsequently, of the escape behavior. This complex pattern of change is not that which is predicted from the perspectives of cognitive-behavioral intervention packages (Durham, 1989). Nor does it appear to fit the model proposed by Salkovskis (1996). It is reasonable to suppose that there are various possible patterns of direction of change, as Kohlenberg and Tsai propose (1991), although research is needed to confirm the usefulness of this hypothesis.

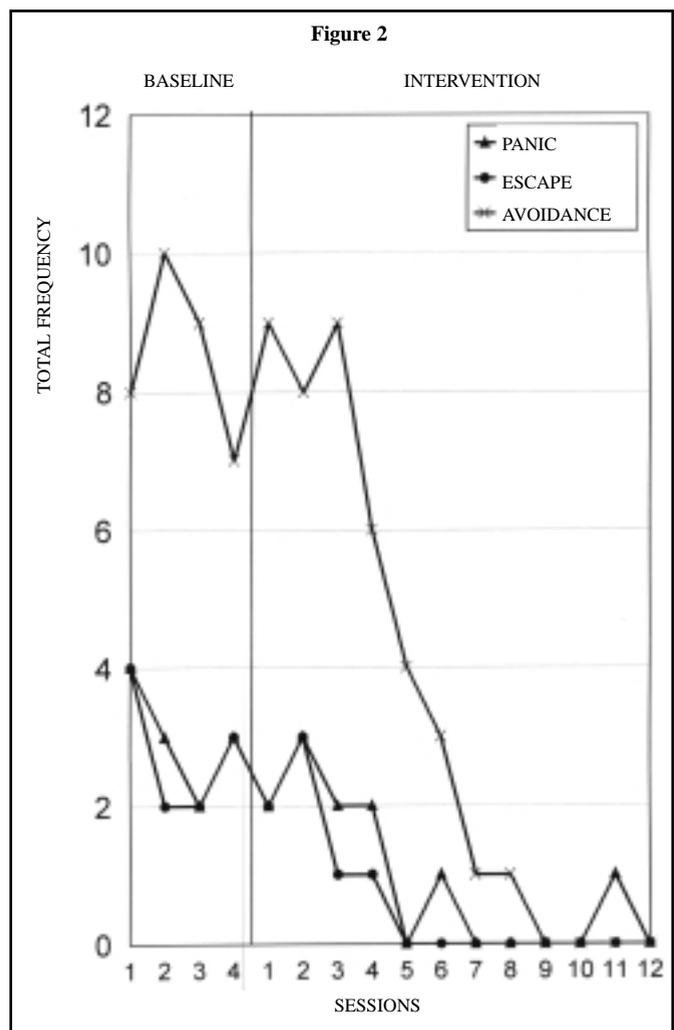
Second, the role of contextual factors in the process of therapeutic change should be considered. Contextual control of behavior appears to be such a powerful factor that it may modulate the effects of the contingencies present (e.g., Steele and Hayes, 1991; Johnson and Sidman, 1993). Such contextual control exercises its influence on the functionality of people’s specific everyday activities. Thus, a part of the therapeutic objectives of this case study was focused on the modification of the socioverbal contexts that gave function to, that is, converted in problematic a set of classes of behavior producing insensitivity to contingencies due to the strong verbal control to which these classes were subjected. Attacking these contexts, clinical improvement of the user was achieved without the need to consider the elimination of particular response topographies. In fact, in this study practically no response has been described operationally, “operational” being understood as the physical operationalism criticised by Kantor (1938) and Skinner (1985): The difference between the radical behaviorist and cognitive-behavioral approaches to the treatment of contextual factors lies in their *conceptual treatment*. Whilst cognitive-behavioral models codify contextual factors,

transforming them into representational entities called *schemas* within a structural model (Alford and beck, 1997), the radical behaviorist looks for relationships between variables in their operative contexts, attempting to identify different behavioral functions, or, in other words, socioculturally mediated and/or contextualised sets of practices.

In this regard, it is appropriate to comment on the methodology for the measurement of behavioral change. Up to now, the eliminative logic followed for behavior modification has often made it difficult to evaluate the changes produced by a psychological intervention, given the exclusively quantitative –and therefore oriented towards the evaluation of operationally-defined response topographies– nature of the available measurement instruments (Follette, Bach and Follette, 1993). This would appear to be the case in this study with the IA, described by its authors as an instrument for assessing the seriousness of the agoraphobia and different types of *response* (Echeburúa, de Corral, García, Páez and Borda, 1992). While it is true that the lack of a structured follow-up precludes the possibility of checking whether the IA scores may have changed over time, if we restrict ourselves to exclusively quantitative criteria, and to the measurement of response topographies, our intervention had no appreciable effect on the user’s problem except in the aspects *Physiological responses* and *Cognitive responses*. In the best of cases, it can only be concluded that the intervention carried out focused solely on the panic attacks and related thoughts, and that it was successful in these areas. Nevertheless, this hypothesis appears incomplete, as it fails to permit the explanation of certain findings: a) the qualitative results obtained; b) the findings in those instruments that showed appreciable decreases in scores; c) the occurrence of a panic attack in Session 11, without the appearance of escape or avoidance behaviors (and by the same token, the very disappearance of the escape and avoidance behaviors). A more plausible explanation might be that the user’s fear of panic attacks appears to have changed *functionally*: before, it was a reason for not acting (escape and avoidance behaviors); now there is only the fear, in spite of which the user acts. It would appear reasonable to hypothesise that the methodology for the measurement of behavioral change currently available is insufficient. There is a need for *continuous* and *dynamic* measurement procedures

capable of detecting contextual factors in operation, individual differences in behavior patterns, and the interaction between the two sets of factors. Only recently have procedures of this type begun to be developed (e.g., Follette and cols., 1993).

In conclusion, it should be pointed out that ACT is not new, in the sense of constituting a set of newly-created techniques. Therapists from quite distinct traditions of behavior modification, such as strategic therapy, may find the ACT procedures familiar (Pérez Álvarez, 1996). The novel aspect of ACT is its radical *conceptual treatment* of old clinical problems posed by the study of behavioral change processes, which may lead to new and previously unimaginable conceptual and empirical developments. In this heuristic sense, ACT is “mould-breaking”, at a time in the history of behavior modification characterised by an exclusive emphasis on “theory-free” empirical research, and the consequent abandonment of the promises of



theoretical and conceptual change it carried with it in the 1970s, leading to the degeneration into a dangerous pragmatism that threatens (if indeed it has not already done so) to turn into a purely blind pragmatic approach dressed up as “modern” science.

REFERENCES

- Alford, B.A. and Beck, A.T. (1997). *The integrative power of cognitive therapy*. New York: Guilford Press.
- American Psychiatric Association (1995). *Manual diagnóstico y estadístico de los trastornos mentales (DSM-IV)*. Barcelona: Masson (Orig., 1994).
- Ballester Arnal, R. and Botella Arbona, C. (1992). Aplicación del programa terapéutico de Clark a un caso con trastorno de pánico, *Psicothema*, Vol.4 (2), 69-88.
- Barlow, D.H. and Cerny, J.A. (1998). *Psychological treatment of panic*. New York: Guilford Press.
- Durham, R. (1989). Cognitive therapy of panic disorder. In R. Baker (Ed.). *Panic disorder: Theory, research and therapy* (pp. 261-280). Chichester: John Wiley and Sons.
- Echeburúa, E., de Corral, P., García, E., Páez, D. and Borda, M. (1992). Un nuevo inventario de agorafobia (IA), *Análisis y Modificación de Conducta*, vol. 18 (57), 101- 123.
- Follette, W.C., Bach, P.A. and Follette, V.M. (1993). A behavior analytic view of psychological health. *The Behavior Analyst*, vol. 16 (2), 303-316.
- Goldiamond, I. (1974). Toward a constructional approach to social problems. Ethical and constitutional issues raised by applied behavior analysis. *Behaviorism*, n. 2, 1- 84.
- Hayes, S.C. (1987). A contextual approach to therapeutic change. In N.S. Jacobson (Ed.). *Psychotherapists in clinical practice. Cognitive and behavioral perspectives* (pp. 327-387). New York: Guilford Press.
- Hayes, S.C. (1994). Content, contexts and the types of psychological acceptance. In S.C. Hayes, N.S. Jacobson, V.M. Follette and M.J. Dougher (Eds.). *Acceptance and change: Content and context in psychotherapy* (pp. 13-32). Reno: Context Press.
- Hayes, S.C. and Hayes, L.J. (1992). Some clinical implications of contextualistic behaviorism: The example of cognition. *Behavior Therapy*, vol. 23, 225-249.
- Hayes, S.C., McCurry, S.M., Afari, N. and Wilson, K. (1991). *Acceptance and Commitment Therapy (ACT). A therapy manual for the treatment of emotional avoidance*. Reno: Context Press.
- Hayes, S.C., Zettle, R.D. and Rosenfarb, I. (1989). Rule-following. In S.C. Hayes (Ed.). *Rule-governed behavior. Cognition, contingencies and instructional control* (pp. 191-220). New York: Plenum Press.
- Johnson, C. and Sidman, M. (1993). Conditional discrimination and equivalence relations: Control by negative stimuli. *Journal of the Experimental Analysis of Behavior*, vol. 59 (2), 333-347.
- Kantor, J.R. (1924). *Principles of Psychology (Vol. I)*. New York: Alfred Knopf.
- Kantor, J.R. (1938), The operational principle in the physical and psychological sciences. *The Psychological Record*, vol. 1 (2), 1-32.
- Kohlenberg, R.J. and Tsai, M. (1991). *Functional Analytic Psychotherapy. Creating intense and curative therapeutic relationships*. New York: Plenum Press.
- Lakoff, G. and Johnson, M. (1991). *Metáforas de la vida cotidiana*. Madrid: Cátedra (Orig., 1980).
- McFadyen, M. (1989). The cognitive invalidation approach to panic. In R. Baker (Ed.). *Panic disorder: Theory, research and therapy* (pp. 281-300). Chichester: John Wiley and Sons.
- Pérez Álvarez, M. (1996). *La psicoterapia desde el punto de vista conductista*. Madrid: Biblioteca Nueva.
- Salkovskis, P.M. (1996). Avoidance behaviour is motivated by threat beliefs: A possible resolution of the cognition-behaviour debate. In P.M. Salkovskis (Ed.). *Trends in cognitive and behavioural therapies* (pp. 25-42). Chichester: John Wiley and Sons.
- Skinner, B.F. (1981). *Conducta verbal*. México, D.F.: Trillas (Orig., 1957).
- Skinner, B.F. (1985). El análisis operacional de los términos Psicológicos. In B.F. Skinner: *Aprendizaje y comportamiento* (pp. 159-173). Barcelona: Martínez Roca (Orig., 1945).
- Steele, D.L. and Hayes, S.C. (1991). Stimulus equivalence and arbitrarily applicable relational responding. *Journal of the Experimental Analysis of Behavior*, vol. 56 (3), 519- 555.
- Zettle, R.D. and Hayes, S.C. (1986). Dysfunctional control by client verbal behavior: The context of reasoning. *The Analysis of Verbal Behavior*, vol. 4, 30-38.