JEALOUSY: A CASE OF APPLICATION OF FUNCTIONAL ANALYTIC PSYCHOTHERAPY

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Jealousy is currently defined by some authors in clinical behavioural psychology as an atypical form of obsessive-compulsive disorder. Treatment for this disorder usually includes in vivo exposure and response prevention. However, there are also some empirical and conceptual alternatives in the field of jealousy, such as functional contextualism. In order to demonstrate these conceptual and pragmatic alternatives, a case study with successful discharge using Kohlenberg and Tsai's (1991) functional analytic psychotherapy is presented. Two years after discharge, results were maintained.

Los celos son definidos actualmente por algunos autores dentro de la psicología clínica conductual, como formas atípicas de presentación del trastorno obsesivo-compulsivo, basándose en la información disponible sobre su respuesta al tratamiento con los procedimientos de exposición en vivo y prevención de respuesta. Sin embargo, son posibles conceptualizaciones y tipos de intervención alternativas, de naturaleza contextual, sobre esta problemática. Para ilustrar estas alternativas conceptuales y pragmáticas, se presenta un caso tratado con éxito empleando procedimientos conductuales típicos concurrentemente con la psicoterapia analítica funcional de Kohlenberg y Tsai (1991). Los resultados se mantienen dos años después del alta.

INTRODUCTION
The literature on the behavioural treatment of jealousy is scant, especially in Spanish, and, in conceptual terms, quite unsystematic. The data available show that in vivo exposure plus response prevention (Cobb & Marks, 1979: Albuquerque & Soares, 1992) and certain cognitive-behavioural procedures, such as self-instructions training (Dolan & Bishay, 1996) and cognitive restructuring, constitute a promising alternative for the treatment of jealousy (Echeburúa & Fernández-Montalvo, 1999, 2001). This literature has treated as secondary issues conceptual problems such as whether or not jealousy is abnormal – a question closely linked to the social and interpersonal context in which it occurs as emotion –, focusing either on defining jealousy as an atypical presentation of obsessive-compulsive disorder (the case of Cobb & Marks and Albuquerque & Soares) or on treating it from a cognitive model (the case of Dolan & Bishay).

According to Mullen (1991), jealousy is currently considered as an undesirable emotion, the sign of an individual pathology that should be eliminated – a questionable point of view if we take into account a recent community-based pilot study by Mullen and Martín (1994), in which jealousy emerged as a facet of other, highly complex interpersonal problems. As Mullen notes, in previous times jealousy fulfilled a recognized (and prestigious) social function in the area of family and man-woman relationships, being associated with aspects such as honour, religious precepts or property legislation. Conceptualizations of jealousy have been transformed according to the belief systems and practices in use at a given historical moment – indeed, the same kind of transformation has occurred with practically all aspects of the so-called pathology of erotic passion (Berrios, 2000). Thus, in our view, the description and treatment of jealousy cannot be removed conceptually from the contexts in which it occurs.

In this regard, a consideration of the socio-historical and interpersonal context in which jealousy is found permits us to look at new conceptual and empirical alternatives for its description and treatment. Taking into account the preliminary data available on the effectiveness of in vivo exposure, response prevention and self-instructions training, defining jealousy as a natural emotional event, made up of a set of different behavioural episodes that become disruptive, organized around its consequences (Luciano, 1993), permits us to develop complementary treatment alternatives with the advantage of being conceptually and philosophically more systematic. This approach of achieving conceptual and philosophical systematization as a means of making technical and
empirical progress has been mentioned elsewhere as a distinctive characteristic of contextual perspectives in the panorama of behavioural clinical psychology (Hayes, Strosahl & Wilson, 1999; Carrascoso López, 2001).

This contextual point of view considers first and foremost that what is anomalous, disruptive or unpleasant about jealousy are its consequences, not the jealousy itself (Molina Cobos, Gómez Becerra & Molina Moreno, 1998). Thus, it is argued that the behaviour of therapist and client are naturally linked in the therapeutic relationship, if we bear in mind that the therapist fulfills stimulus functions of evocation, discrimination and reinforcement – a claim that enjoys a degree of empirical support (Sweet, 1984). Thus, the therapeutic relationship itself comes to be considered as a powerful and active vehicle of change, rather than as a mere expi- pient of the procedures (Pérez Álvarez, 1996).

The new, explicitly contextual behavioural therapies, especially functional analytic psychotherapy, place great emphasis on the therapeutic relationship as a context in which the client’s problems can manifest themselves, thus providing the opportunity to modify them “live.” For functional analytic psychotherapy, clients’ problems occurring in the context of the therapeutic relationship are functionally equivalent to those that take place in their everyday life (Kohlenberg & Tsai, 1991). In this regard, the most important of the therapist’s tasks consists in the detection of these behaviours of the client occurring in the session and their functional analysis. These behaviours, functionally equivalent to those in everyday life, are called clinically relevant behaviours (CRB), and may be of at least three types: CRB1, CRB2 and CRB3 (Kohlenberg & Tsai, 1991).

CRB1 are the problematic behaviours occurring in the session, and whose frequency it is attempted to reduce in therapy. CRB2, on the other hand, are improvements that take place in the context of the session, while CRB3 basically refer to verbal behaviour of clients in which they describe or establish cause-effect relationships between their behaviour and the environmental factors related to it. These three types of CRB are considered to form broad response classes based on functions. All CRBs are generic classes that cannot be defined on the basis of specific response topographies. For example, a CRB cannot be identified on the basis of a simple verbal report by the client or a single occurrence of a behaviour in the session. What the therapist identifies as a CRB should be a class, not a specific episode. At the same time, CRBs are under the control of situational and contextual variables, basically the therapist’s behaviour in the session, with its evocative, discriminative and reinforcing functions.

The main role of the therapist in functional analytic psychotherapy, according to Kohlenberg and Tsai (1991), is to identify the occurrence of any of the three types of CRB in the client, make a functional analysis of them and act in consequence. The therapist designs a strategy to apply systematically with a view to achieving a highly intense therapeutic relationship, with the double objective of fomenting the appearance of CRBs and modifying them. In this sense, functional analytic psychotherapy constitutes above all, as well as a new package of procedures, a new approach for behavioural therapists (Pérez Álvarez, 1996), providing them with a set of five rules (R) for orienting them in the task of detection and modification of CRBs. Functional analytic psychotherapy is seen to be a natural way of proceeding in the sense that the therapist, more than empathizing with clients, forms a relationship with them.

Kohlenberg & Tsai (1991) define the five rules the therapist should follow in the session. R1 consists in developing the repertoire for looking for the CRBs. R2 refers to the crucial need to create a therapeutic environment that evokes CRBs, that is, to create a close and intense therapeutic relationship. R3 indicates the need to reinforce in a systematic and natural way all the CRBs observed in the session, bearing in mind that, rather than teaching new behaviour, the therapist should tend to shape it. R4 refers to the repertoires necessary in the therapist for administering and identifying the reinforcers relevant for the CRBs. R5 stresses the need to generate in clients a repertoire of description of functional relations between the control variables and their responses.

The function of these strategic rules is to generate a therapeutic relationship that constitutes a context of acceptance of the client’s behaviour, given the recognition that this behaviour has an important function for the client. In certain cases, the intense therapeutic relationship generated through the application of these rules may in itself prove curative, as shown by Ferro García, Valero Aguayo and Vives Montero (2000) in a case of depression, though it can naturally also be used in conjunction with typical cognitive-behavioural procedures with the aim of improving their effectiveness. Kohlenberg & Tsai (1994a) reported a depression case treated successfully, in which the application of Beck’s cognitive therapy was complemented with functional analytic psychotherapy. The pragmatic advantage of this integration of techniques lies in the fact that a functional contextual conception of human behaviour permits the
that intensified progressively. After a heated argument over the matter they decided to break up. From then on, F had a series of short relationships with other girls that always finished because of his jealousy. In this regard, F comments: “I was fine on my own. (...) I looked for a girlfriend who could put up with me the way I was, with the jealousy and all that.”(...) “Very often I would go to the countryside to walk, to think, to unwind and to pray to God for the whole thing to sort itself out.”

F finished his FPII studies and took a competitive examination for a public-sector job, but was unsuccessful. His mother was his counsellor in all matters, including the problems his jealousy caused him in the past and in the present. She always told him not to trust others, “(...) who don’t always want the best for you like I do.” He began working as a seasonal worker on the olive harvest and in an olive oil processing cooperative, and handed his entire wages over to his mother, including the income supplement he received as an agricultural worker. She gave him back a small amount of money for his expenses. If F showed reluctance to give his mother all his wages, she screamed, wept, insulted him and threatened him, always alleging financial difficulties and reminding him of the efforts she had made to give him an education and maintain him. His father always supported his mother on this matter “(...) because he didn’t want any problems.” Ironically, the family’s financial situation was actually sound. Despite having had the possibility of seeking more stable work with his qualifications, he was always reluctant to do so: “(...) because I had to give my mother all the money. So why would I want to get any other job?” F complained of having no projects for the future with his partner, seeing as he lacked financial resources because of his mother, [CRB1: inadequate repertoire of description of relationships between his behaviour and the control variables] about whom he said: “she is really suspicious but very good to me, and she loves me a lot.”

The response topographies of F’s jealousy in relation to S were similar to those of other relationships. The couple met at a swimming pool, but they stopped going there because it was there that F started to become jealous. They avoided crowded places such as bars, discoteques and parties, so as to avoid other men looking at S. On entering a place full of people, F studied the men there to see whether there were any that S might find attractive. If there were, F would leave, obliging S to go

**METHOD**

**Client description**

The client (F) was a 31-year-old male, resident in a village in the province of Sevilla (southern Spain). He was a non-smoker and consumed alcohol occasionally (beer or wine) in small quantities. He was educated to age 18 (Formación Profesional II, FPII) with a specialization in office skills. At the time of the first consultation he had a temporary job in an olive-canning factory. Since leaving school he had worked sporadically in agriculture or in the same factory. He lived in the family home with his parents and his unmarried sister. He came to our consulting room with his girlfriend (S), aged 28 and a hairdresser by profession, “(...) Because S is a very good woman and I don’t want to lose her, and I’m making her suffer. Because when I’m alone I’m the most normal man in the world, one of the crowd. It’s when I’m with her that I start to feel bad.” Both wanted to solve the problem. F was the first man with whom S had had a serious relationship, and she was very much in love with him. Before coming to us the client had received relaxation training for three months. It was unsuccessful, and he decided to give it up. Both the relaxation treatment and that which we describe here were paid for by the client’s partner, whom he had met eight months before our first interview.

**History and evolution of the problem**

F’s problem began at the age of 19 when he began a stable relationship with a girl, which lasted approximately one year. In this relationship F began to feel jealousy for reasons of simplicity, each CRB identified will be indicated, as an instance forming part of a class, in square brackets and in italics, with the name we gave it (e.g., “[CRB1: jealousy]”).
with him. They nearly always went out alone to quiet places. Sometimes, F would subject S to tests such as the following: he would say that it was normal to have had sex with previous partners, in order to see whether she was telling the truth when she told him (when they first met) that she had not had full sexual relations with other men before meeting him. F often interrogated S insistently about the reasons why she had done something, "(...) trying to catch her out." F continually looked at S to see whether “she was giving men the eye” or was staring at them. It also bothered F tremendously if S had conversations with other men, even with close friends. Three or four times a day F phoned S at home or at work, and insisted on picking her up from the hairdressing salon when she was working. He would arrive 15 minutes before she finished at the salon, and would not allow her to go out with her colleagues after work. During the day, F would start thinking about what S might be doing. Most of F’s telephone calls were made at times when he felt overwhelmed and “beside himself” with thoughts that S was being unfaithful to him or had lied about her past relationships. These thoughts, always related to doubts and mistrust over S’s faithfulness, tended to occur when F had time on his hands or on hearing comments with sexual content from his workmates at the factory. Nevertheless, neither F’s work performance nor his other daily activities appeared to suffer. It was only in the area of interpersonal relations that he seemed to be clearly affected by jealousy since meeting S.

At no time in the assessment interviews or in those which followed did we observe instances of the use of negative self-assessment. F did not consider himself less attractive than other men or an essentially bad person [CRB2: absence of disqualifying factors]. On describing his problem he defined the jealousy as absurd and stupid, and went into great detail on the response topographies involved in the episodes of jealousy and their temporal structure. In this regard, when he was asked to describe specific aspects of his problem, F responded rapidly and without “beating about the bush” [CRB2: adequate description of the behaviour-behaviour relationships]. Nevertheless, we observed no instances of verbal behaviour in which F established relationships between his behaviour and the control variables [CRB1: inadequate repertoire of description of relationships between the behaviour and its control variables].

In response to F’s jealousy, S always gave in to his wishes, agreed to them going out on their own and reluctantly tolerated not going out with other couples or to friends’ parties. When this situation brought her down, S would reproach F about how unjustified his jealousy was, and would cry. When F questioned her about something, S tried to give reasons for her behaviour and to reason with him about the unjust nature of the jealousy. Such situations occurred not only in everyday life but also in the episodes of jealousy that occurred in session. F would generally calm down, but both admitted that these periods of calm were quite short: in the same evening F might experience more than one jealousy episode. At the time of the first interview, the episodes were occurring between 1 and 4 times a day.

At this first interview in our consulting room, attended by the couple, F showed clear signs of jealousy. Whenever S spoke to us or looked at us for any length of time, F turned towards her and stared intently at her; at times, he even interrupted our conversation. The couple acknowledged that these jealousy episodes in the consulting room were identical to those that took place elsewhere, except that they were shorter, and did not end in an argument there and then. In the second interview, F and S admitted that the argument had begun as soon as they had left the consulting room [CRB1: jealousy]. F told us that at that time he thought we were attractive to S, and that he found such a thought unbearable [CRB1: jealousy]. That was why he was monitoring her gaze and what she was doing all the time [CRB2: adequate description of the behaviour-behaviour relationships]. Sometimes these responses began just before the repeated jealous thoughts, and on other occasions as a consequence of them. In session, 1 or 2 episodes of this type would occur spontaneously.

F judged his jealousy as absurd: “It think they’re absurd (his jealous ideas). Loads of things are untrue, they’re absurd, but I can’t help it.” However, this judgement did not appear to help him modify his problem. He could imagine S was looking at someone, and this would trigger the behaviours described above, together with an intense emotion described by F as “feeling beside myself” (pent up with frustration), with a high level of unease, an angry facial expression and fast and heavy breathing. Usually, if the situation that caused the jealousy was avoided or escaped from, or if F telephoned S, this emotion receded. If he tried to control S by staring intently at her, the intense, pent up feeling did not recede. Judging the jealousy as absurd did not translate into a systematic struggle against the jealous thoughts. F simply acted in accordance with them or the emotions evoked in the situations described. After the first interview we asked F to carry out at home a brief experiment of prevention of the response of repeatedly interrogating
S after a jealousy episode, to see whether, on resisting this impulse, his feeling of being “beside himself” receded. The result was positive, with rapid habituation within half an hour. Nevertheless, this experiment did not appreciably modify his behaviour; nor did it transform into effective actions his judgements about his jealousy. Only after one episode, and when S began to cry, did F criticize his jealous thoughts and his behaviour, feeling guilty, moreover, at having made S suffer. In this regard, F acknowledged that he often provoked S so that she would cry, “because that way I know she’s not deceiving me.” Despite reporting frequent feelings of nervousness, F scarcely spoke about his emotions, and only when we were talking about the jealousy during the assessment interviews.

Assessment procedure
Four semi-structured interviews with the couple took place, in which we obtained information on the history, evolution and current state of F, as well as S’s behaviours in response to his jealousy.

At baseline (Session 2) and at discharge (Session 36), we applied a battery of questionnaires made up of the State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch & Lushene, 1970), the Beck Depression Inventory (BDI) in its Spanish version by Conde and Useros (1975), and the Penn State Worry Questionnaire (PSWQ) (Meyer, Miller, Metzeger & Borkovec, 1990), with the aim of assessing F’s mood in a quantitative manner.

We designed a simple register in which F and S were to record the date, time and situation of all jealousy episodes. The couple were to fill in this register every day. We explained in detail the system of responses involved and their relationships and effects.

On detecting in the first interview that jealousy episodes were taking place during the sessions, we decided to apply several of the rules of functional analytic psychotherapy for the therapist’s behaviour. In this way a therapeutic context favourable to the appearance of CRBs was prepared, and an intense therapeutic relationship was fomented from the outset. Every time a jealousy episode was observable or F alerted us to the fact that one was taking place, we asked him “what’s happening to you at this precise moment?”, applying R5 with the aim of obtaining descriptive information on response topographies and systems, the behaviour-behaviour relationships established, and the consequences. At random points in the sessions we also showed especially friendly behaviour towards S in order to elicit complete episodes of jealousy in F, openly applying R1 and R2 (maintaining a conversation whilst ignoring F, smiling at S, staring at her). We had previously requested the couple’s consent to use this procedure, and explained its nature and objectives. The systematic application of R1, R2 and R5 did not produce significant changes during the assessment interviews, but it did permit us to detect several relevant CRBs, execute the functional analysis, create a therapeutic relationship that provided opportunities for change, and continuously monitor the CRBs, laying the bases for a systematic use of functional analytic psychotherapy.

Functional Analysis
During the assessment, various important CRBs were evident. The jealousy episodes that occurred during the sessions (CRB1) were functionally equivalent to the episodes occurring in F’s daily life. Specifically, F’s jealousy consisted in a persistent pattern of escape and avoidance behaviours maintained mainly because of S’s behaviour. The temporal organization of the jealousy episodes was quite varied. While some episodes began after intense rumination evoked in a given situation (e.g., inactivity, or on hearing sexual comments), others took place in direct contact with the situations themselves, as an emotional reaction and with the simultaneous appearance of thoughts about the jealousy and other effective behaviours such as looking at S, and others were constituted by behaviours evoked by situations about which F thought afterwards.

In this complex behavioural pattern, S’s behaviour was directly involved as a source of positive consequences (attention contingent upon F’s verbalizations about the jealousy and about other responses involved in the episode; punishment of the verbalizations and of other responses) and negative consequences (giving reasons and proof – security – to F about her faithfulness). In this regard, S’s behaviour with respect to F’s jealousy maintained a functional relationship with the behaviour of F’s mother, in the sense that the latter had previously reinforced behaviours of dependence on her. Thus, the function of the jealousy episodes appeared to be basically to achieve security with regard to F’s faithfulness, in some cases to reduce the intense unease generated in contact with the jealousy-provoking situations, and to obtain attention (dependence) from S.

Another important CRB was related to F’s verbal behaviour, specifically the inadequate repertoire of descriptions of relationships between his behaviour and the variables of which it is a function (CRB1). On referring
to the jealousy, F always judged it or described it, but his verbal analysis of the episodes did not lead to any effective behaviour for attempting to achieve any of his life aims, such as improving the relationship with his partner, getting married or finding work. Even so, among F’s verbal behaviour in session there were some appropriate CRBs (absence of self-disqualificatory terms and adequate description of the behaviour-behaviour relationships) that could constitute sound pre-requisites for the shaping of adequate descriptions of contingencies (CRB3). Both F and S considered that the jealousy itself was the cause of their problems, identifying its elimination as the solution. This CRB represents a psychological problem insofar as they are both inadvertently renouncing their responsibility in their behavioural interactions. Thus, the couple were unable to recognize any function in the jealousy, orienting all their efforts to change towards its elimination. This constituted an aversive establishing operation that altered the motivational value of the couple’s relationship. Not only was it necessary to eliminate F’s jealousy as the principal problem: in addition, making the change involved the loss of many important things in the couple’s life, such as the relationship with their friends, going out with workmates, going to parties, and so on. Moreover, and without F being fully conscious of the problem, F began to show considerable signs of anxiety, moderately intense symptoms of sadness, and a high degree of worry – serious consequences of a relationship focusing exclusively on the jealousy experienced.

The medium- and long-term consequences of the jealousy for the couple were considerable. Not only could it bring their relationship – which both rated as very important – to an end, but also, the jealousy and the dependence from which it had emerged as a set of functional units systematically prevented F from achieving goals valuable to him, such as a steady job and a future with S. In turn, S paid the price of having to renounce many important things in the couple’s life, such as the relationships between the target behaviours and their control behaviours, in order to promote effective actions aimed at achieving their goals as individuals and as a couple.

The intervention was implemented as an A-B design. During the sessions the procedures outlined in Table 1 were instructed and employed, reviewing any problems that may emerge in their application between sessions. In vivo exposure plus response prevention were implemented without first grading them in a hierarchy of ascending difficulty; we preferred to allow the practice of these procedures to delimit the difficulty of the items shown in Table 1. The rest of the procedures shown in the table, with the exception of assertiveness training, were employed from the beginning of the intervention. Specifically, postponement and substantivization had the function of allowing F to distance himself from the content of his jealousy thoughts, without trying to eliminate them. This distancing, as we understood it, could favour the emergence of an adequate repertoire of description of behaviour-control variables relationships. Extinction and differential reinforcement of other responses (DRO) had the purpose of altering the functions of aversive establishing operation of S’s behaviour.

Concurrently, the therapist applied the five procedural rules of functional analytic psychotherapy. First of all, the therapist developed, during the assessment interviews, a repertoire of identification of the CRBs, in order to subsequently evoke them, identifying their reinforcers, administering them consistently every time CRB2 and CRB3 appeared, and shaping repertoires of verbal behaviour that could promote effective actions. In all the sessions the therapist systematically sought the presence of any CRB, bearing in mind that the experience with the couple during the four assessment interviews had permitted the development of a repertoire for see-

Procedure

It was agreed with the couple to carry out an intervention with an initial frequency of one session per week, up to Sessions 17 to 29, which were carried out fortnightly. In all sessions the therapist and the couple participated. This format was suggested in view of the fact that the jealousy was not exclusively the problem of F. It was explained to the couple that the jealousy would not constitute the focus of the intervention. Our main objective was not its elimination. According to the functional analysis it was not the jealousy that was the principal problem, but rather what they did with them (i.e., their function). Thus, it was important that from the beginning of the intervention phase the couple tried to describe the relationships between the target behaviours and their control behaviours, in order to promote effective actions aimed at achieving their goals as individuals and as a couple.

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king CRBs, involving knowing how to evoke [CRB1: jealousy], or how to identify the effects of his behaviour on the couple. For reasons of brevity, and even then at the risk of providing excessively anecdotal information, we present below relevant examples of the application of functional analytic psychotherapy at various critical points of the intervention.

The homework tasks were prescribed with the dual function of allowing the couple to put the session work into practice in their everyday life and to evoke the CRBs (application of R1 and R2). From the outset, F found it difficult to perform the tasks, always coming up with excuses for not doing them. In order to evoke the CRBs and identify possible reinforcers, we interrogated F systematically about the reasons why he had not performed the tasks (application of R1 and R4). F would usually claim that he could not remember the task prescribed, or that he had not had time. He typically asked S what he had to do, or asked her to explain the tasks, immediately receiving instructions and explanations. These relationship behaviours were interpreted functionally as members of the class [CRB1: jealousy], bearing in mind the function of this class according to the functional analysis, and that speaking in this way about the homework tasks implied, without mentioning it, referring once more to the jealousy. We asked S to consistently avoid providing F with additional instructions and explanations, restricting herself to simply mentioning the tasks (application of R4). In this way, it was avoided that the time they spent together were devoted to talking about the jealousy. If during the sessions F asked us about the tasks or asked S to pay attention so as to explain to him later what he had to do (a highly frequent behaviour), the therapist threw the question back to F, asking him to explain what he understood he had to do, with the objective of shaping a descriptive repertoire of functional relations (application of R2, R4 and R5). Likewise, we offered F a functional interpretation of his behaviour of asking S and the therapist for instructions and explanations about the tasks, which affected its consequences, with a view to modelling the appropriate descriptive repertoire and generating CRB2s that could be reinforced (application of R4 and R5).

The behaviour [CRB1: jealousy] could be evoked explicitly by the therapist during the session in various ways: paying more attention to S than to F, smiling at S, or being friendlier with her than with F. In all the sessions we tried to use this procedure randomly for eliciting jealousy, but this CRB could also be evoked in the consulting room without our explicit participation. Sometimes, this CRB would occur at points when F appeared to be lost in his own thoughts while we were talking to S about something. This CRB was managed with the following pattern of behaviour:

- We did not reason with F about the absurdity of his jealousy, and at the same time blocked the efforts of S in this direction. In this way we avoided generating aversive conditions (judgements) in relation to the jealousy episode, applying R4.

| Table 1 |

| Behaviour modification procedures used concurrently with functional analytic psychotherapy |

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<thead>
<tr>
<th>Procedures</th>
<th>Description</th>
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<tr>
<td>In vivo exposure</td>
<td>1. (applied as a couple) Wear miniskirt or provocative clothes</td>
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<td>2. Go together to places full of people (bars, shopping centres, discos, etc.); go to parties</td>
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<td>3. Go out with other couples</td>
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<td>4. S should talk to other men</td>
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<td>5. S should look at other men</td>
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<td>6. S should go out with her workmates</td>
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<td>7. F should go out with his friends</td>
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<td>8. Go out in F’s village</td>
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<td>Response prevention</td>
<td>1. (applied by F) Phone S only once a day</td>
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<td></td>
<td>2. Not subject S to interrogations or tests</td>
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<td></td>
<td>3. Not tell to his mother about the problems caused by jealousy</td>
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<td></td>
<td>4. Not look at S out of context</td>
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<td>5. Not look around checking if other men are looking at S</td>
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<td>6. Not always sit next to S</td>
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<td>7. Not say anything to S about jealousy</td>
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<td></td>
<td>8. Pay attention to conversations</td>
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<td>Postponement</td>
<td>(applied as a couple) On feeling jealous thoughts coming on, F should avoid reasoning about them. He should let these thoughts just happen while continuing with the activity he was doing, initially for 5 minutes, and gradually increasing this period (Foa &amp; Wilson, 1992, pp. 51-53)</td>
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<tr>
<td>Substantivization</td>
<td>(applied as a couple) On referring in session or in daily life to the thoughts or talk about jealousy, the couple should refer to it by the agreed name of TOC: e.g., Here’s the TOC making a nuisance of itself again. If F has jealousy thoughts that are difficult to postpone, he should refer to them as TOC: e.g., TOC’s messing things up again, or Enjoy the party, TOC.</td>
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<tr>
<td>Extinction and DRO</td>
<td>1. (applied by S) S should ignore any question that F asks her regarding jealousy</td>
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<td></td>
<td>2. S should only remind F of the procedures to apply</td>
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<td></td>
<td>3. F can only tell S things that do good in relation to the jealousy</td>
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<tr>
<td>Assertiveness training</td>
<td>(applied by F) Using modelling, instructions, metaphors (episode from El Lazarillo de Tormes) and behaviour rehearsals, the fogbank technique was trained</td>
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</table>
- We reminded S of the instructions for extinction (withdrawal of attention to F’s talk about jealousy and to his non-verbal behaviour) and DRO, as well as the substantivization procedure (if necessary), applying R2.
- We asked F to employ the procedures of postponement and substantivization, as well as response prevention (e.g., not looking at S), with the aim of blocking the functions of emotional avoidance of his jealousy responses, applying R2.
- Concurrently, we withdrew our attention from F’s jealousy responses, concentrating on S with a view to creating a situation that evoked his jealousy and in which his avoidance functions were blocked, applying R2.
- We were alert to any response from F that could constitute a CRB2 for its reinforcement at that moment, applying R3.
- If there occurred a CRB2 in the form of describing behaviour-control variables relations, maintaining a conversation without monitoring S, talking about the jealousy in the third person, or making an affectionate gesture towards S that did not include comments of the type “I’ve had it up to here with you!” (which he habitually said when a jealousy episode occurred in session), it was systematically reinforced, applying R3 and R5.

The reinforcers used (for this and other CRBs), identified during the therapy sessions on the basis of their effects, were various: open expression of emotions by the therapist (anger, moist eyes, happiness, etc., as long as the therapist felt these emotions), showing great verbal interest (e.g., “let’s have a look at what you said, which sounds very interesting”) and non-verbal interest (staring, gestures of attention, trying to avoid S or F interrupting one another or the therapist), physical approach to F by the therapist, physical contact with F (holding his hands, pressing them firmly and warmly while talking) or with the couple (going behind them and hugging them), moving the table to increase proximity, or using humour, in the form of parodies, puns, rhymes made up on the spot, dirty jokes or funny song lyrics. Kohlenberg and Tsai (1991, pp. 29-35) present a more detailed description of the process of identifying and administering reinforcers during a session of functional analytic psychotherapy.

In Session 15 a jealousy episode was evoked. F was not in a good mood that day. He had had an argument with his mother over money, and all week he felt really uncomfortable at home because his mother had rationed certain foods that he liked (cheese and smoked meat) after he told her he was no longer going to hand over his wages (after Session 12). On the day of Session 15 there had been an intense episode of jealousy, and he had had a heated argument with S, who arrived at the session in tears. On evocation of the jealousy episode, F, visibly angry, told S they were leaving, that he could stand no more, and that the therapy was over [CRB1: jealousy]. The therapist, without saying anything to F, and ignoring him, refused to let that happen: He comforted S, who, though frightened, looking down and crying silently, refused to obey F’s order, acting in accordance with what the therapist said. F began shouting, took his coat, grabbed S’s, lifting her off the chair, and threw the money for the session on the table, shouting: “There’s your bloody money!!!” The therapist immediately blocked this escape attempt, shouting at F and ordering him to shut up and sit down, and suggesting they all talk calmly about what had happened. Seeing that F obeyed immediately, the therapist exposed his feelings to F about what had occurred, and asked him if this happened often in his everyday life. F answered that it did. A dialogue began between the couple and the therapist that allowed them to talk about the feelings of all of them in relation to that episode, relating them to the events occurring in everyday life, and shaping and reinforcing the repertoire of behaviour-control variables descriptions.

With regard to [CRB1: inadequate repertoire of descriptions of relations between the behaviour and its control variables], in all the sessions, every time the couple referred to F’s jealousy in the first person [CRB1], they were instructed so that they talked about it in the third person, using the procedure of substantivization. The correct response was always followed by an arbitrary reinforcer, such as “Good” (without exaggerating the expression or tone of voice). Every time a spontaneous reference to jealousy in the third person was observed, one of the reinforcers identified during the sessions mentioned above was administered, depending on the interaction being developed. The name given to F’s jealousy (by mutual consent) after Session 6 was TOC. To offer opportunities for generating functional descriptions that could be shaped and reinforced, when F described an episode of jealousy or any other behaviour, the therapist always asked: “Why do you think that (the behaviour in question) happened?”

During the intervention, we had instructed F not to talk to his mother about the problems his jealousy caused him, not use her as his sole counsellor for every issue in his life, and to start keeping progressively larger
amounts of money from his wages. These simple instructions were extremely effective except in relation to the money issue. F asked us on several occasions to talk to his mother about this matter, as he was sure that if he asked her himself nothing would be achieved. Finally, the therapist decided that this request could be a CRB2 (F eventually decided to face his mother’s anger), and agreed to arrange an appointment. This appointment took place in Session 12, with the dual objective of obtaining first-hand information about the mother-son relationship with regard to money and to give the mother some instructions so that she could collaborate in the intervention process. Present in the interview were the therapist, F and his mother. His mother said she thought F seemed fine, but that lately he had been quite impertinent, and didn’t confide in her as before. On suggesting to his mother that F should not hand over to her his entire salary, she immediately began crying and shouting, strongly criticizing her son at his ingratitude for “(…) all the things I’ve gone through and done for him,” and claiming that he caused a lot of expense and that the family’s financial situation was not good. F looked at his mother with open hostility, accusing her at the same time of making his life unbearable, shouting at her and reproaching her, without looking at the therapist at all. Subsequently, and now alone with the therapist, F said he did not usually behave in that way at home for resolving the money issue, except in the last two weeks, and that he felt quite guilty after the argument and would try to avoid more rows in the future. The therapist considered that this confrontation constituted a CRB2, and reinforced it, including the assertiveness training procedures shown in Table 1 (an explicit request by F). The fogbank was used for generating roguish or crafty (picaresque, picaresca) behaviour, so to speak. To instruct F about the function of this procedure, we mentioned the episode from El Lazarillo de Tormes (the famous 16th-century Spanish novel about the blind person’s guide who lived off his wits) in which the guide stole wine from a century Spanish novel about the blind person’s guide who periodicity was used for generating roguish or crafty (picaresque, picaresca) behaviour, so to speak. To instruct F about the function of this procedure, we mentioned the episode from El Lazarillo de Tormes (the famous 16th-century Spanish novel about the blind person’s guide who lived off his wits) in which the guide stole wine from a

### Table 2

<table>
<thead>
<tr>
<th>Name of questionnaire</th>
<th>Scores at baseline</th>
<th>Scores at discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAI questionnaire/State</td>
<td>RS= 36; CS= 89</td>
<td>RS=15; CS= 35</td>
</tr>
<tr>
<td>STAI questionnaire/State</td>
<td>RS= 36; CS= 95</td>
<td>RS= 24; CS= 70</td>
</tr>
<tr>
<td>Beck Depression Inventory</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>Penn State Worry Questionnaire</td>
<td>49</td>
<td>28</td>
</tr>
</tbody>
</table>

immediately associated this episode with the relationship he had with his mother, and this constituted a CRB3 that was reinforced by the therapist with looks and knowing smiles congruent with those of F at that moment.

**RESULTS**

The intervention was performed in a total of 31 sessions over the course of one and a half years. After Session 16 they took place fortnightly, and from Session 29 to 36 (the follow-up period included at the request of the couple themselves), monthly. Discharge took place in Session 36.

At baseline, F’s responses to the battery of questionnaires showed a response profile indicative of a state of mood with anxious and depressive elements, with a strong worry (rumination) component, which after the functional analysis was considered as a direct consequence of the contingences that maintained the client’s problem. After the intervention, at discharge, there was a noticeable improvement in the scores on all questionnaires, as can be seen in Table 2, congruent with the improvement observed in the rest of the behaviours treated and the resulting changes in the couple’s lifestyle, which we are shall discuss below.

Figure 1 shows the data on the jealousy episodes recorded by the couple in daily life using the register, as well as the frequency of the most relevant CRBs observed during the sessions. As can be seen in Figure 1, jealousy episodes in daily life showed a high frequency of occurrence and great variability up to Session 19. Thereafter, we began to observe the consistent appearance of various changes in the jealousy episodes that had previously been observed only sporadically. S responded less to F’s interrogations. Sometimes she was even able to avoid criticizing him and arguing with him as a result of a jealousy episode.

From Session 12 onwards, the telephone calls stopped. F was less insistent on requesting explanations of S. They were often able to talk about things without focusing the entire conversation on the jealousy. F’s behaviour towards his mother began to change. He had lost his job around Session 10, and was sorting out his unemployment benefit. He was able to talk to his mother after Session 12 and broach the subject of not handing over his income, in spite of how she might respond and of the many conflicts in the family because of that decision, which would continue for the rest of the period covered by the intervention. At the same time he was starting to look for a new job, and had registered with a trades union for taking training courses that would earn him...
credits for another competitive examination. These patterns of behaviour became more solid from Session 19 onwards. In Figure 1 it can be seen how from this session onwards there is consistent appearance of lowest frequency of jealousy in daily life up to that point (below the minimum level at baseline), a decrease that stabilizes and continues until the jealousy episodes almost disappear.

During all this time the behaviour [CRB1: jealousy] was constant and stable in all the sessions up to Session 25. In that session, on our trying to evoke a jealousy episode, F started to laugh, asking if we wanted to share his partner. From that session on it was not possible to evoke any more episodes of this CRB.

Likewise, from Session 17 onwards (see Figure 3), there was an increase during the sessions of the frequency of [CRB3: description of the behaviour-control variables relationships]. From this session onwards, F began describing with ever greater frequency, and in a spontaneous fashion, the relationships between his jealousy and its control variables. This CRB3 was observed in the session, for example, when F asked S to help him. Thus, in Session 27: “Instead of giving me such a hard time, why don’t you relax and let me get on with things?” F was referring here to the self-application of procedures such as postponement and response prevention. S sometimes criticized F if he told her he was feeling jealous. The increase in this CRB3 appeared to lead to better self-knowledge. During Sessions 21 to 29, and during the follow-up sessions, F made functional interpretations of his past and present jealousy, spontaneously and without being asked to do so by the therapist, acknowledging for the first time the consequences of his jealousy: “how I’ve suffered with all of this, and how I’ve made her suffer! It’s now when I truly realize, because before I was blind, totally wrapped up in my own story.”

Other important changes were also observed from Session 19 onwards. F spontaneously began to perform the homework tasks in a systematic way from Session 22.
According to S and himself, he started to use systematically the procedures shown in Table 1, though he was sometimes reluctant to use in vivo exposure, especially when going out together or with friends in his home village. He reported that the postponement and substantivization procedures were becoming easier and easier for him (in Session 24 he said he was having fewer and fewer doubts about S’s faithfulness and sincerity, and that any doubts he had were less and less serious), and when he asked the therapist to remind him of the instructions for the procedures it was to confirm that he was carrying them out correctly: “(...) Because it’s good for me to check up now and then. I understand better and then I do things properly.” S was more often coming to the consulting room dressed, according to F, in a provocative way: miniskirts and high boots. S was going out with her workmates and F with his friends at least once a week, without any kind of problem. Their conversations focused on other subjects: by Session 25, S had just signed a permanent job contract, F was seeking work, and the couple had begun to look for an apartment because they planned to get married as soon as they could. They easily became excited talking about their future plans. In other words, the couple began to behave with an orientation towards their most important goals, totally assuming responsibility for the behavioural change.

In Session 29 we moved on to the follow-up session at the express request of the couple, who wanted to ensure that the problem was solved correctly. The dynamic of the sessions in this period changed radically and they seemed more and more like meetings between old friends, as the couple remarked in Session 33. These sessions allowed us to assess the maintenance of the achievements made and to resolve any specific, one-off problems that arose in their everyday life.

After the intervention, which lasted one and a half years, F was finally discharged in Session 36. By that time the jealousy episodes had been reduced to a minimum. According to the couple, when the episodes did occur they were able to manage them adequately: there were no arguments or mutual reproaches and they lasted no more than minutes. Both could go out with their friends without the other always having to be present, and they regularly went out with three other couples. F, moreover, was now keeping his whole salary, even though this provoked an intense conflict at home (which he dealt with in a “picaresque” way with the fogbank), and he was really excited about looking for work. Two years after discharge, the results were maintained. In a control phone call at the beginning of 2001, F informed us that the jealousy was just a bad memory, with almost no episodes occurring except for the odd idea that he dealt with using postponement; that the rest of the therapeutic goals obtained at discharge were maintained; that he had worked continuously since a few months after discharge; that he had been preparing a competitive exam for the past year; and that the couple had bought a flat and were about to get married.

**DISCUSSION**

In general terms, the functional analytic psychotherapy and the procedures used in this case study showed an acceptable degree of effectiveness which, moreover, was maintained in the long term. The nature of this study and its methodological limitations do not allow us to determine which ingredients of the package of procedures used were the most effective. However, some of the results obtained merit more detailed comment.

First of all, we should point out the marked variability in the data shown in Figure 1, especially to Session 19. Up until this session, various changes had begun to appear in F’s behaviour and S’s responses to it which, nevertheless, had not translated into significant changes in the total frequency of the behaviours shown. Only from Session 19 did we begin to observe a much more organized behavioural change, with an increase in F’s self-knowledge in relation to his own behaviour. It may be that this self-knowledge, understood here as a set of descriptions of F’s behaviour in relation to its control variables, played a causal role in this change. Nevertheless, this interpretation is questionable, since it fails to take into account the initial qualitative changes observed prior to Session 19, or the different temporal structures of the jealousy revealed by the functional analysis. It seems that these changes were of a cumulative nature, insofar as they constituted a training history of multiple behavioural examples that ended up generating a repertoire of broad verbal and non-verbal behavioural classes. In the recent literature on stimuli-derivative relationships from stimuli and rule-governed behaviour, great importance is given to these training histories of multiple examples in the generation of classes of behaviour (understood as a product) characterized by their breadth and adaptability to multiple contexts (Hayes, Barnes-Holmes & Roche, 2001). The most plausible explanation for this marked variability seems to us to lie in the fact that throughout the intervention we tried to work on broad behavioural classes, rather than focusing exclusively on specific behavioural topographies. Hence, the continual emphasis on evoking CRBs in
order to modify them in session at the precise moment that they took place, which implied acknowledging their function in a context of acceptance such as that which functional analytic psychotherapy can generate.

Following on from this point, and in second place, it is relevant to comment on the role of functional analytic psychotherapy in the intervention with this case. Kohlenberg and Tsai (1991) and Luciano (1999) remark that functional analytic psychotherapy was designed and employed when standard behavioural therapy showed itself to be ineffective, and was used in conjunction from the beginning of the intervention, without ruling out the use of functional analytic psychotherapy as the chosen treatment from the outset. The data presented here are similar, in general, to those of the depression case published by Kohlenberg and Tsai (1994a), in which a male treated with Beck’s cognitive therapy showed greater improvement when functional analytic psychotherapy was added to the intervention. The client also showed better use of the cognitive procedures and more readiness to do the homework tasks between sessions once the functional analytic psychotherapy began. On obliging the therapist to play a much more active role during sessions and to be aware of his tasks vis-à-vis the patient, the therapeutic relationship can be used as a space in which to detect, evoke and modify relevant behaviours. In the case presented here, although homework tasks were assigned, this procedure had the added function of evoking relevant behaviours that would otherwise have gone unnoticed by the therapist and the couple, bearing in mind that the couple reported the problem starting from the premise that the jealousy had a causal role. Thus, it seems that the standard procedures of behaviour modification summarized in Table 1 began to be used effectively by the client only after the generation of the training history of multiple behavioural examples by means of the systematic use of functional analytic psychotherapy. It is in this sense that, more than constituting a new package of procedures, functional analytic psychotherapy actually emerges as a new way of working for the behavioural therapist (Pérez Álvarez, 1996), which is still in need of systematic experimental research on its efficacy, its efficiency and its effectiveness.

A final comment should be reserved for an important finding: that F, in spite of a hostile environment at home, was able to behave consistently with a view to achieving an objective that was important for him: to obtain financial independence as a means of attaining a goal (marrying S). It would have been difficult for this objective to be achieved if the intervention had been focused exclusively on the elimination of jealousy – as the literature on its treatment would indeed argue (Echeburúa & Fernández-Montalvo, 2001). Nevertheless, the additional treatment components proposed focus exclusively on interventions with specific aspects of the couple, especially in relation to communication. We believe that jealousy occurs in a much wider context, and that it is functional not only for the couple, as was the case with our client. If we acknowledge the multiple contexts in which jealousy takes place and the functions it may fulfil, accepting the life’s obstacles in the course of the process of achieving the goals that are important for us emerges as a therapeutic objective of the first order. Acceptance is already present in the most recent discussions among behaviour analysts (Hayes, Jacobson, Follette & Dougher, 1994), and its promotion involves, we insist, recognizing the multiple functions of a given behaviour in a person’s history. Such recognition was our aim in this case, an aim we pursued systematically employing such an experience-based and non-didactic procedure as functional analytic psychotherapy. The promotion of acceptance in functional analytic psychotherapy has been extensively described by Cordova and Kohlenberg (1994, pp. 131-135).

As Mullen (1991) notes, jealousy fulfils a role that is currently quite diluted in the context of a mercantilist conception of the individual and interpersonal relationships. It is hardly surprising that they are considered as an individual psychopathology. Though at the social level, jealousy does seem today to have a useful function, it does seem to have a function at an individual level. It is in this sense that jealousy, as a natural emotional event, may have an important function that must be acknowledged before intervention begins. It is noteworthy that the most quantitatively pronounced changes in F’s frequency of jealousy began just after the onset of the changes in the contingences in which it acquired its function: the modification of S’s behaviour and F’s behaviour with respect to his mother. This tendency towards change cannot easily emerge from a conceptualization of jealousy as an individual psychopathology. At the risk of appearing repetitive, we should like, finally, to stress the need for a contextual perspective such as that provided by functional analysis for opening up new paths for conceptual and empirical research on the problem of jealousy.

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REFERENCES


