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BODY IMAGE IN EATING DISORDERS

VIRTUAL REALITY ASSESSMENT AND TREATMENT

Psychology & Virtual Reality

PROMOLIBRO
VALENCIA

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PRESENTATION

This manual offers a guide for the evaluation and treatment of body image disturbances in eating disorders, with the support of Virtual Reality (VR) techniques. The application here presented has been validated in the clinical setting, and reflects increased efficacy of the therapeutic results obtained when the "traditional" measures are supplemented by this new technology (Perpiñá, Botella, Baños, Marco, Alcañiz and Quero, 1999; Marco, Perpiñá, Botella, Mahiques, Baños and Fabra, 1999; Marco, Fabra, Mahiques, Perpiñá and Botella, 1999).

However, we wish to stress two aspects. In first place, VR does not constitute a novel therapeutic modality in itself, but is rather a tool involving characteristics (to be dealt with later on) that make it possible to secure a better grasp upon a concept as subjective as body image - a mental image - than that afforded by more "traditional" techniques. Moreover, when body image is dealt with in the context of disturbances as complex as eating disorders, VR is to be used as an important (but not the only) component in clinical patient intervention. This is a point that differentiates the use of VR in other problems such as specific phobias, for example, where much of the weight of intervention can be based on VR techniques. In the context of the problem dealt with in the present manual, coordination is on one hand required with the general treatment protocol of eating disorders, and on the other with other essential components of intervention in relation to body image such as psychoeducational measures, cognitive discussion, increased self-esteem, etc. A different question would be the application of such techniques to subclinical populations, where despite the existence of concern over personal body image and weight, the problem is not as serious as to merit the diagnosis of anorexia or bulimia nervosa. Obviously, in these cases, the VR and psychoeducational components would be fundamental.

On the other hand, it should be stressed that the studies conducted to date in relation to the program here presented for the clinical population have always employed the treatment protocol described herein.

After commenting these aspects of caution, it should be mentioned that VR offers a series of advantages for working with images and mental representations of people, for it is possible to "model", "objectivize" and "embody" them, place them in context and confront them. We therefore advise the reader to carefully follow each of the guidelines provided in this manual, for using the virtual scenarios of the program "Virtual & Body".

The aim of this book is eminently practical. Accordingly, we have tried to avoid excessively technical language, and have often preferred to present information in the way

we explain it to our patients in clinical practice. Furthermore, no exhaustive theoretical reviews of the subject are provided.

This guide is divided into three main sections. The first analyses the characteristics of body image, with special emphasis on how it is addressed in eating disorders. Posteriorly, the aspects to be evaluated are commented, indicating the corresponding instruments that can be used. Finally, an account is provided of the methodology to be used in group therapy relating to body image, commenting on each of its components (psychoeducational, cognitive restructuring, etc.), and giving a step-by-step account of the methodology underlying application of the VR component - employing the scenarios included in "Virtual & Body".

I. INTRODUCTION

1. "Reasonable neglect" of body image

"*I'm hungry, but I resist it. I like to eat; what I don't want is to become fat. Since I'm underweight, eating means getting fat, and that makes me scared; that's why I don't eat. I know I can't be fat… it's something you know, but you also see yourself. I'd rather die than become fat".*

These words are an example of the dramatic and contradictory experience of many patients with eating disorders. Indeed, eating disorders have become a kind of epidemic at the close of the millennium, at least in western societies. The condition affects mainly pre- and post-pubertal adolescent females (hence the present work specifically addresses the female gender). The virulence and importance of these disorders has become so important in recent years that the fourth edition of the DSM (APA, 1994) classifies them separately and considers the problem an entity in its own right.

Although eating disturbances and their manifestations have always existed (consider for example the anorexic "saints" in the excellent review by Toro, 1996), the problem intensified greatly in the sixties and seventies, coinciding with major cultural, aesthetic (and perhaps also ethical) changes that stressed passion for the body - especially a slim or thin body.

This cultural setting stigmatizes obesity and encourages youth and a pleasant physical appearance; in women, this fundamentally drives concern over weight and body image, inducing and justifying restricted food intake, the application of impossible diets, and a struggle against personal body constitution.

The over-dimensioned idea of losing weight, fear of becoming fat, and disturbances in body image form an essential part of the psychopathology of eating disorders, together with other characteristics of the problem: personality variables, altered eating behavior, physical complications, etc. Thus, while disturbances in body image are only one of the bases of the problem, they cannot be ignored or avoided.

Considering that eating disorders can directly lead to death, it is no surprise that therapeutic efforts have mainly focus on the stabilization of body weight and on eating habits - relegating aspects relating to body image in a distant second place. However, disturbances in body image not only form part of the underlying psychopathology but also play a fundamental role in the initiation and maintenance of the eating disorder, and moreover constitute a factor in relapse and patient prognosis. The clinical "urgency" and social alarm generated by these problems may explain the reason why few studies to date provide an in-depth analysis of the subject of body image and its integration within the general therapeutic framework.

As has been pointed out by a number of specialists in both eating disorders and disturbances in body image (Cash, 1996; Cash and Grant, 1996; Rosen, 1997), very few studies have

addressed the use of a specific treatment component for body image or specific measures of this construct, in the context of the general management of eating disorders. Among the conclusions drawn from the review by Cash and Grant (1996) concerning the few studies conducted to date in clinical populations, emphasis may be placed on the following: a) even though one of the objectives of treatment is body image, it receives very little attention (only one or two sessions); b) patients are not assigned tasks focus on this component; c) the measures of change used are typically limited to a single body shape/weight dissatisfaction scale; d) no assessment is made of the clinical significance of the changes obtained with treatment; and e) normalization of the eating and weight patterns does not guarantee normalization of body image. Therefore, we agree with these authors that it is essential to specifically address body image in the general treatment of eating disorders, and that it is unlikely for body image to improve without direct and specifically designed intervention measures.

2. VR as a clinical tool

The characteristics of the problem dealt with in the present work reflect the advantages afforded by a new technology such as VR in grasping or tackling body image - i.e., a complex mental representation.

This computer-based technology offers an interface to a computer-generated scenario that proves so convincing that the user truly believes to be immersed in a three-dimensional world - even if it only exists in the memory of the computer, not in that of the user.

In earlier studies (Perpiñá, Botella, and Baños, 1997; Botella et al., 1998a; Baños, Botella, Perpiñá, 1999), we addressed the nature and characteristics of VR, though it is nevertheless advisable to mention some of its advantages as a therapeutic tool.

The patient is able to act without feeling threatened. In this context, the virtual situation constitutes a "safe environment" that therapy makes available to the patient, since nothing of what she really fears can "really" happen to her. From this "safety" the patient can freely explore, experiment, feel, live and re-live feelings and/or thoughts. In addition, VR makes it possible to grade the situation, progressing from simple to more difficult settings. Gradually, and based on the knowledge and domination afforded by the interactions with the virtual world, the patient becomes able to confront the real world.

The fact that VR makes it possible to generate "protected" contexts also makes it more feasible to persuade the patient to take the step and enter action. VR thus becomes a very useful intermediate step between the consulting room and the real world. Moreover, it is not necessary to wait for events to take place in the real world, since any given situation can be modeled in a virtual environment - thereby greatly amplifying the possibilities for self-training.

In addition to all these potentials of VR, the technique has some additional advantages over traditional techniques such as exposure "in vivo" or in the imagination (Botella et al., 1998a). In the context of "in vivo" exposure, the patient confronts, in a graded and guided manner, the subject of her fears. In comparison with this type of technique, VR offers increased confidentiality, in the sense that treatment takes place in the consulting room or office; as a result, the patient is not afraid of "making a spectacle" of herself were exposure to take place in public, and can moreover feel assured that others will not know about her problem. In the case of imagination-based exposure, the therapist trains the patient to confront her fears by means of imaginative techniques, i.e., by instructing the patient to try to imagine as genuinely as possible that what she fears is actually happening. Compared with this technique, VR is more immersing, for it stimulates several sensory modalities (auditory, visual and vestibular). This may be of great help for people who have difficulties imagining such scenes. Moreover, the therapist can at all times know what the patient is seeing - thus making it easier to identify what is causing her discomfort.

Lastly, VR makes it possible to go beyond reality. On one hand, it allows the feared context to

undergo change, modifying it to our convenience. In other words, VR is sufficiently flexible to allow the designing of different contexts in which the patient can (on a virtual basis) confront not only what she fears, but also other much more threatening aspects that can be generated by VR technology. The aim of VR need not be to merely "re-create reality". The essential consideration is to delimit contexts of therapeutic value, i.e., to "create" aspects and/or conditions of the environment (including information vital to the patient) to which the patient for the time being either does not have access or has lost access.

3. VR in body image disturbances

A number of studies have been published supporting the ideality and efficacy of VR as a therapeutic tool for different psychological problems: acrophobia (North and North, 1996), agoraphobia (North, North and Coble, 1997), and phobia of spiders (Carlin, Hoffman and Weghorst, 1997). Our group has also contributed to this pioneering field, designing and validating VR applications for the treatment of claustrophobia (Botella et al., 1998 b,c) and phobia of flight (Baños et al., 2000; Botella et al., 2000) - with very good results among the clinical population suffering from such problems.

In the field of disturbances in body image, a pioneering experience is represented by “The virtual body project” (Riva, Melis and Bolzoni, 1997) - the aim of which focused on the use of virtual environments for the study and treatment of body image disturbances in non-clinical populations. Posteriorly, the same team (Riva, Baccheta, Baruffi, Rinaldi and Molinari, 1998) applied these virtual environments to an anorexic patient; although this was not a controlled study, the results obtained were very promising.

For our part, we have conducted a study with the aim of demonstrating the differential efficacy of a specific component of the evaluation and treatment of body image in eating disorders by means of VR techniques. This research satisfied the following requirements: it was a controlled study conducted in a clinical population, and afforded a comparison of the efficacy of the VR component versus the "traditional" body image techniques (Perpiñá et al., 1999). The results of this study showed that following treatment, all patients had improved significantly, though those who had been subjected to VR therapy exhibited significantly greater improvement in variables relating to general and eating psychopathology, and in parameters specific of body image. In sum, this study showed that VR treatment of body image appears to be useful in the field of eating disorders, for it addresses body image in a more direct manner than the traditional techniques. Moreover, these results were not only maintained after a six-month follow-up period, but improvement was seen to continue progressing for most of the variables assessed (Marco, 1999).

What are the features that allow VR to more directly address the body image phenomenon? In first place, and as has been mentioned above, VR makes it possible to grasp or tackle a concept as subjective as body image. On one hand, it allows the patient to model, reflect and "embody" her body image, while on the other "communicating" it and making it known to the therapist. Finally, the patient is able to come face to face with her mental representation. In second place, VR facilitates concretion and the reflection of central aspects of body image such as its "perceptive", cognitive, emotional and behavioral features - furthermore offered in a significant context. In turn, however, we have identified additional advantages such as those commented below:

A sensation of realism: despite the "virtual" nature of the situation, patients inform of a high degree of realism in the virtual settings. In fact, in the kitchen setting, when the patients "eat" virtually, they chew, swallow and become very nervous - even though they are eating something that does not really exist. The same applies when they weigh themselves, look at their own body image, compare themselves with others, etc. - despite the fact that all these events are "virtual". The important point is that the settings and scenarios are clinically significant for evoking the

fears and thoughts that these patients have in real life.

Acceptance: We have found that when patients are obliged to confront their distorted body image, they tend to accept the evidence sooner, since it is the computer system which indicates and shows it.

The computer does not lie, it becomes an objective judge: Part of the previous characteristic is explained by the "impartial" role acquired by the computer. Of note is the observation that the typical distrust of these patients towards the comments of others (particularly if some type of relationship between them exists) regarding their personal appearance either disappears or becomes attenuated when it is the computer that shows the discrepancies. The system thus becomes a source of objective and reliable information, from which no secondary intentions are to be expected.

Increased treatment motivation: One of the difficulties of therapy for eating disorders is the low patient motivation towards therapeutic procedures, and especially to change. In this new therapeutic scenario, however, these resistances decrease and the motivation for therapy increases. The patients "look forward" to coming to the consulting office to start or continue the adventure - apart from the fact that their subjective perception of time is usually considerably lower (30 minutes) than the true session duration (60 minutes).

Paving the way to real life: The fact of grasping or tackling, confronting, practicing, commenting fears, etc., in this protected environment means that the patients dare to continue their adventure beyond the computer screen. Thus, we have had patients who for years had not eaten a piece of pizza or put on certain clothes until they did so virtually - followed shortly after by corresponding genuine practice and integration in their daily lives.

Having commented the reasons why body image interventions have received comparatively lesser priority, and after defining what the novel VR techniques can afford, we will now move on to analyze the characteristics of the body image disturbances found in eating disorders, in order to facilitate their evaluation and adopt adequate interventional measures.

II. BODY IMAGE DISTURBANCES IN EATING DISORDERS

1. Eating disorders

Eating disorders are clinical conditions involving severe disturbances in eating behavior -the maximum representative cases being anorexia and bulimia nervosa.

Anorexia nervosa is characterized by the patient refusal to maintain a minimally normal body weight for her age and height, an intense fear of putting on weight or fattening (even when underweight), and disturbances in her body image. These features are, in turn, accompanied by a distorted perception of the propioceptive stimuli, and a general feeling of personal inefficacy - i.e., the psychopathology of these patients centers on the insuppressible desire to continue loosing weight, even if they have already suffered an important percentage weight loss (Perpiñá, 1999). This disturbance has serious physical consequences: hypothermia, hypotension, bradycardia, and a range of metabolic changes such as amenorrhoea. If anorexia develops before menarche, the interruption of pubertal development may lead to irreversible deterioration. Other likewise irreversible consequences of such emaciation are osteoporosis, fractures, kyphosis and other malformations, and mitral valve prolapse (Treasure & Szmukler, 1995). Moreover, the disorder exhibits high comorbidity with depressive and anxiety symptoms (basically obsessive ones).

Bulimia nervosa is, in turn, characterized by recurrent binge eating that the patient is unable to control, followed by compensatory behaviors aimed to prevent weight gain (self-induced vomiting, use of laxatives, fasting, excessive exercise, etc.), and disturbances in the perception of their body image. Thus, the three essential characteristics of this condition may be defined as: subjective loss of control over eating, behaviors destined to control body weight, and extreme concern over body image and weight (Wilson, Fairburn, & Agras, 1997). Due to the continuous imbalance caused by these patients' eating patterns, vomiting, use of laxatives, etc., they suffer a broad range of physical complications, including potassium depletion, hypertrophy of the parotid gland secondary to the electrolytic imbalance, hypocalcaemia, urinary infections, peripheral paresthesias, cardiac arrhythmias, epileptic seizures, tetanus, and - over the long term - kidney damage and menstrual irregularities. Callosities on the back of the hand may also develop as a result of the continuous friction with the upper incisors when self-induced vomiting is frequent. Another repercussion of vomiting is the erosion of the dental enamel and the production of caries. Comorbidity in patients with bulimia nervosa is represented by anxiety, depression, suicidal ideation, and complications resulting from substance abuse.

As regards the course of these disorders, in the case of anorexia some patients exhibit a fluctuating weight gain followed by relapses, while others suffer chronic deterioration over the years that may be complicated by bulimia. The long-term mortality associated with anorexia in

in-patients is about 10%. Death usually results from starvation, suicide, or electrolytic imbalance. In the case of bulimia, the course may be chronic or intermittent, with periods of remission that alternate with periods of binge eating (Treasure, 1991).

These data reflect the severity and the tendency towards chronicity of these conditions (which causes prevalence to be high), and moreover highlight the fact that no totally effective treatment is yet available to deal with these problems in their full complexity (Fernández & Turón, 1998).

Thus, eating disorders are characterized by an altered eating behavior so severe that it can cause serious physical complications or even death. However, such anomalous eating patterns are largely the consequence of attempts by these patients to control a weight and a body that they do not tolerate and which they despise.

2. The relevance of body image in eating disorders

According to Habermas (1989), Charcot was the first to acknowledge the patients' concern over their body and body image, and the purposefulness of thinness, in the context of anorexia. On examining one of these patients, he described a pink ribbon around her waist, which the patient used to inform her of any weight gain. The patient moreover stated that she would rather die than become as fat as her mother. Other authors who are becoming classics, such as Crisp, Russell, or Bruch consolidated the notion that the essential characteristic of anorexia nervosa is to reach a status of thinness and maintain that status with utmost obstinacy.

The DSM-IV acknowledges body image disturbances as the essential feature of both anorexia and bulimia. In the case of the former, and in addition to criteria A and B which relate to rejection and fear of weight gain, criterion C consists of: "*Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current body weight"*. In the case of bulimia, criterion D states that: "*self-evaluation is unduly influenced by body shape and weight"*.

Disturbances in body image, thus, not only form part of the diagnostic criteria of eating disorders, but they are what essentially distinguishes these disorders from other conditions likewise involving an altered food intake and weight fluctuations (Rosen, 1990) - i.e., they are fundamental to the establishment of a differential diagnosis.

Furthermore, body image disturbances play an important role as factors in both the development and prognosis of eating disorders. A number of studies have demonstrated the relation between the pressure to lose weight that characterizes our society and the increase in the prevalence of eating disorders; a correlation has likewise been shown between a distorted body image and altered eating attitudes and behaviors, and the role of body image disturbances in predicting the severity of the disorder and the occurrences of relapse (Cash & Deagle, 1997; Rosen, 1997; Thompson, 1992).

After 30 years of research in the field of eating disorders, during which considerable advances have been made in the understanding of their psychopathology and treatment possibilities, we now have sufficient sensitivity and the theoretical and technical conditions required to seriously deal with an aspect raised by Bruch (one of the pioneers in eating disorders) in 1962, i.e.: the problem of such patients cannot be resolved without a correction in their body image. It therefore seems reasonable to pause a moment and consider this complex subject a little further.

3. What is body image?

The concept of body image (BI) was defined by Schilder (1950) as "the picture of our own body which we formed in our mind, i.e., the way in which the body appears to ourselves " (p.11). It is therefore important to point out that BI and actual physical appearance need not coincide in the estimation made by the individual. Another more recent definition was provided by Slade (1988), in these terms: "Body image is the mental representation that we have of the size, shape,

and form of our body and of its component parts, i.e., the way in which we 'see' our body and the way we think that others see us".

BI disturbances have traditionally been expressed in two ways: on one hand, as the accuracy with which body size is estimated and, on the other, as the feelings that our body elicits - not to mention the error that has sometimes been made in reducing body image disturbances to mere perceptual distortions (Hsu & Sobkiewicz, 1991). However, can the concept of body image be reduced only to an estimation of size and satisfaction?

The human condition is inherently corporeal. We cannot imagine ourselves, appear to, or interact with others except through the body. It forms part of our identity. In fact, Sims (1988) assigns the body image psychopathology to the field of "disorders of the self".

Pruzinsky and Cash (1990) summarized the keys to body image in terms of a series of characteristics:

a) BI is composed of perceptions, thoughts, and feelings relating to the body and to the body experience.

- Perceptions: In the course of development, and within a cultural setting, we construct images of the shape or size of various aspects of the body.
- Cognitions: Thoughts, beliefs, and self-statements concerning body and body experiences.
- Emotions: Experiences of comfort/discomfort, satisfaction or dissatisfaction associated to our appearance or to our body experience.

b) BI experiences are in turn linked to feelings towards the "self".

c) It has been determined socially: The development of body image takes place in parallel to the evolutive and cultural development of the individual.

d) It is not a static construct: The aspects relating to our body experience are continuously changing.

e) It influences the information processing: People who are schematic with respect to their physical appearance process the information in terms of competence in body attractiveness.

f) BI influences behavior.

To these characteristics we should add the following:

g) It is a totally subjective and personalized experience; it need not be congruent with objective reality.

h) Experiences related to the body take place at different levels of consciousness.

According to Pruzinsky and Cash (1990), the body image construct is multifaceted. Body experience encompasses the perceptions and attitudes towards appearance, body size, body position, body limits, body competence, and aspects relating to physical condition, health, and disease, as well as one's gender.

4. Characteristics of body image disturbances in eating disorders

As can be seen, we are dealing with a complex construct where in addition to addressing the issues of size and satisfaction, the scope of its characteristics should be broadened. A review of the most important is provided below.

a) Disturbances in the estimation of size.

- Overestimation of body size: Although the overestimation of body size is not a consistent phenomenon (a number of patients do not overestimate) and is not pathognomonic of eating disorders (many women do overestimate), it does represent one of the most common distortions in this type of patients. As commented by Cash and Deagle (1997), these discrepancies are possibly attributable to differences in the methodology employed, or even to an effect of the instructions given. On asking "What size do you think you have?", the answer obtained is different to that given in reply to "What size do you feel you have?", for as pointed out in the review by Thompson (1996), asking in affective terms induces greater overestimation than doing

so in intellectual terms.

Another conclusion drawn from the meta-analysis by Cash and Deagle (1997) is the need to distinguish between the estimation of global body shape and the estimation of a particular body part, since when the estimation applies to a particular area, the latter becomes very conspicuous for the person in question - whether patient or otherwise.

- Overestimation of body weight: Overestimation refers not only to the size of the body shape, but also to the "number" corresponding to the body weight that the patient thinks (feels) she has.
- Distortion of size awareness: These patients do not acknowledge their state of emaciation, despite the evidence of their body form or their weight.
- "Dissociative" aspects: We are often surprised by the firmness with which some patients appear to claim "That's not me" when examining themselves in the mirror - reflecting the discrepancy between the mental image they have of themselves and the objective image. On the other hand, some patients seem to have a fragmented body image and schemata - revealing their perplexity by not knowing which information to heed: their image reflected in a shop window, the number corresponding to their weight, their feelings of bloatedness, their belt holes, etc.
- Distrust towards the information coming from others: Not only does the logic regarding their distortions fail to "sink in", but these patients moreover do not trust the other's opinion. They only trust their own judgment and clues.
- Rigid and extravagant self-appraisal: The patient's body becomes measure of her global value, and impossible comparisons are made accordingly, e.g., comparing to (and wishing to have) the another person's body, or her own when the patient was thinner still, or even when she was younger. Another common practice is to evaluate progression via "markers" such as belts, trousers several sizes smaller than warranted, or the prominence of her knee bone or her ribs.

b) Altered attitudes, beliefs, and feelings regarding the body.

Although the range of attitudes and emotions of these patients regarding their own body tend to focus on the same subject (i.e., dissatisfaction and great concern over body shape and weight), it exhibits a series of particularities:

- Dissatisfaction, disgust: Although anxiety may appear when the patients show or observe their own body, feelings of disgust and distress are far more frequent.
- Negative automatic thoughts: These patients present a negative body language full of very generalizing (and particularly contemptuous) adjectives.
- Morbid self-importance of an emaciated appearance: In some cases the patient may not overestimate and can acknowledge her emaciation, yet feel absolutely self-satisfied and even important in having been able to achieve such a skeletal appearance. *"I like it when they study anatomy with my bones in the natural sciences class"* was the proud comment of one of our patients.
- Fundamental dimension in their value as persons: The aspect that most distinguishes dissatisfaction in these patients from that habitual in the rest of women is the value they attribute to physical appearance in terms of their concept, esteem, and value as persons.

c) Behavioral disturbances.

Eating disorders imply a series of eating behavioral disturbances, though important behavioral problems concerning the body are also observed. On one hand, avoidance behaviors can be observed, relating to some activity (walking, looking in the mirror, etc.), people (attractive people, men, etc.), places (swimming pools, gyms, etc.), or postures (sitting down in certain way, etc.). On the other hand, rituals can also be observed of a verifying (continuous weighing or self-checking) or grooming nature (covering up certain body parts, putting on makeup in a certain way).

As we see, rather than problems with the body, eating disordered patients and individuals who are concerned about their body shape actually have problems in the way they represent, value, feel, and live their body. The body has become the most important value that they have as persons - which illustrates one of the basic psychopathological characteristics of such disorders: the over-valued idea of losing weight, an emotional attachment, a "passion" that urges these people to achieve their main (and sometimes only) purpose.

III. ASSESSMENT OF BODY IMAGE DISTURBANCES IN EATING DISORDERS

Assessment is essential for planning any treatment intervention, both as regards an exhaustive review of the basic psychopathology of the disorder in order to establish a diagnosis, and as regards the individual and specific characteristics of each particular person. The commenting of a protocol for the general assessment of eating disorders lies beyond the aims of this work. This section will focus on the assessment of body image, making it clear that the latter is merely one of the pertinent aspects, and that assessment should be complemented with the other basic areas that comprise these disorders. The interested reader may refer to other more general reviews of the assessment of eating disorders (Allison; 1995; Fernández & Turón, 1998; Perpiñá, 1996).

The material provided below is not intended to be complete. Fortunately, a great variety of instruments are available, of sufficient reliability and validity. We have choose to comment those instruments that are repeatedly cited in the specialized literature, and which in our clinical experience have been found to be useful for recording certain aspects that tend to be neglected by other types of instrument.

Furthermore, it should be pointed out that the division of instruments is in some cases artifactual, for although a given instrument may serve to assess a particular aspect, it often also includes elements of relevance in other areas.

We have decided to present a first section of interviews, followed by the gradual inclusion of different instruments relating to the central aspects that configure body image, as seen in the previous chapter. Within each assessment area, the reader may sometimes prefer using more than one instrument, or a combination of them; what matters is to assess the aspect in question. Finally, we have included the weekly assessment that our team has designed both for establishing the corresponding baseline and a weekly control of the evolution of therapy. The specific assessments and the records related to the therapeutic intervention are commented in the sections on the methodology of treatment. Particularly, the group therapy records are found in chapter VIII (material for the patient), while the VR session records are included session-by-session in chapter VI.

1. Interviews

As regards structured interviews, emphasis should, on one hand, be placed on the *Eating Disorder Examination* (EDE) (Cooper & Fairburn, 1987; Fairburn & Cooper, 1993) an interview designed to assess the specific psychopathology of anorexia and bulimia nervosa. In its twelfth version, the EDE comprises four subscales that address 23 symptoms assessed by the clinician. In addition to the restriction and food concern scales, we wish to emphasize the "body shape

concern" and "weight concern" subscales, with which the interviewer may determine the degree of importance the patient gives to body image and weight in her self-concept and self-appraisal.

On the other hand, we should mention the *Body Dysmorphic Disorder Examination* (BDDE) (Rosen & Reiter, 1996). This interview consists of 28 questions that address cognitive and behavioral aspects not only relating to body dissatisfaction but also to the overvalued idea of bodily appearance.

2. Body image dissatisfaction and attitudes towards the body

As was reflected by the meta-analysis by Cash and Deagle (1997), attitudinal measures have a greater capacity to discriminate between clinical and non-clinical populations, compared with size distortion measures; furthermore, within the clinical population, patients with bulimia nervosa are those who score highest in such measures.

Of the many questionnaires that have been used to measure this component, attention is drawn to *The Body Esteem Scale* -(BES) (Franzoi & Shields, 1984), which comprises 35 items and three factors: physical or sexual attractiveness, concern over body weight, and physical condition. Of these three subscales, concern over body weight possesses the greatest discriminating validity, for it is able to differentiate between patients with anorexia nervosa and controls.

The Body Shape Questionnaire (BSQ) by Cooper, Taylor, Cooper, and Fairburn (1987). This questionnaire comprises 34 items that evaluate aspects such as negative self-awareness of the body, concern over body weight, self-loathing, and avoidance of situations in which physical appearance may be the center of attention for others. This instrument has also shown its ability to distinguish the normal population from eating disordered patients and, within the latter group, bulimic patients yield the highest scores.

The Body Areas Satisfaction Scale (BASS) (Cash, 1991). On a five-point scale, the person assesses the personal satisfaction or dissatisfaction produced by different body areas.

Body Attitudes Test (BAT) (Probst, Vandereycken, Van Coppenolle, & Vanderlinden, 1995). This test consists of 20 items that evaluate the frequency (on a scale from 0 to 5) of attitudes, emotions, and thoughts related to certain body areas and to the body as a whole.

Finally, it should be mentioned that some of the instruments used for the general assessment of eating disorders also include specific body image scales, such as the "body dissatisfaction" subscale of the EDI (Garner, Olmstead, & Polivy, 1983) or EDI-2 (Garner, 1991).

3. Behavioral aspects

As was seen in the preceding section, this is one of the most neglected aspects to date. In this sense, mention will be made of the *Body Image Avoidance Questionnaire* (BIAQ) (Rosen, Srebrik, Saltzberg, & Wendt, 1991). Its aim is to measure avoidance behaviors (either active or passive) related to the exposure of certain body parts. It comprises 19 items distributed into four subscales: Way of dressing, Social activities, Restriction of food intake, and Grooming and weighing.

Mention should also be made at this point of any behavioral test that implies measures of distress/anxiety when the patient is faced with two of the most frequent topics: weighing and looking at herself. ANNEX III.1 presents the Behavioral Test Facing the Mirror and Weight, which our group has developed based on the suggestions of Cash and Grant (1996).

4. Aspects concerning the schematic processing of information relevant to body shape and weight

The Appearance Schemas Inventory (ASI) (Cash & Labarge, 1996). This inventory comprises 14 items that address basic assumptions and beliefs relating to the importance that physical

appearance has in the person's life, and in her value as a human being.

The Body Image Automatic Thoughts Questionnaire (BIATQ) (Cash, 1991). This questionnaire consists of 52 items and assesses (on a 5-point scale) the cognitive component of body image as a function of the frequency with which the person has had negative or positive thoughts about her physical appearance.

5. Body image in different contexts

Certain situations may activate the processing of information related to physical appearance. In this sense, mention should be made of the *Situational Inventory of Body-Image Dysphoria* (SIBID) (Cash, 1994). This instrument lists 48 situations in which the person assesses the frequency with which she experiences negative emotions due to her appearance in such situations.

6. Cultural aspects

An instrument that covers this aspect, developed in Spain by Toro's team, is the *Cuestionario de Influencias sobre el Modelo Estético Corporal* (CIMEC) (Questionnaire of Influences upon the Aesthetic Body Model; Toro, Salamero, & Martínez, 1994). This instrument does not measure body image in the same way as the previous questionnaires; rather body image is analyzed from the individual-culture relationship, for it assesses the impact of different social agents (magazines, films, advertisements, etc.) upon the attitudes and evaluations that women develop regarding their own body. In its reduced version it comprises 26 items (CIMEC-26), and is moreover able to discriminate between anorexic patients and the normal population, using a cut-off score of 17.

7. Distortion of body size

These techniques are more related to the perceptive characteristics of the construct of body image, though they also serve as an indicator of dissatisfaction in that they reflect the discrepancy between the perceived dimensions and the dimensions that the person would like to have.

It should again be stressed that the way in which the instructions are given to the person may cause individual appraisal to vary. Questions that employ cognitive values (What size do you *think* you have?) produce less overestimation than those based on affective values (What size do you *feel* you have?).

The instruments in this section can be classified into two categories: those that require the individual to estimate the size of different parts of her body using mobile markers, such as for example the mobile calibrator technique (Slade & Russell, 1973), and those that imply the global estimation of body shape using adjustable mirrors (Traub & Orbach, 1964), photographs (Gluksman & Hirsch, 1969), videos (Freeman, Thomas, Solyom, & Koopman, 1985), or silhouettes (Bell, Kirkpatrick, & Rinn, 1986; Thompson & Gray, 1995; Williamson, 1990).

By using global body estimation measures, increased differences can be obtained between the clinical population and controls (Cash & Deagle, 1997).

8. New technologies for the assessment of body image

Schlundt and Bell (1988) developed a computer program to evaluate the cognitive and affective components of body image, known as the Body Image Testing System (BITS). Body shape can be enlarged or reduced in nine independent body parts. The instruction is for the person to manipulate the figure until it represents what she considers to be her real size and her ideal size.

We have recently developed a system (Perpiñá, Botella, Baños, Marco, Alcañiz, & Quero,

1999) for assessing the discrepancies in body image using virtual reality techniques. As in the previous case, we have a human figure whose body areas can be enlarged or reduced. However, thanks to virtual reality technology, this figure is modeled in three dimensions; moreover, since the system is immersing in nature, the person is not limited to manipulating a small figure on the screen but finds herself "inside" that space, manipulating a figure of her same proportions. Furthermore, once the patient has modeled the three-dimensional figure according to her own perceived body, the resulting figure is contrasted with a two-dimensional silhouette of translucent texture that reflects her real dimensions.

This method is, moreover, able to combine several of the body image dimensions. The body can be assessed in its totality and also by areas; the body can be placed in several contexts (e.g., a kitchen, before eating, after eating, in the presence of attractive persons, etc.); behavioral tests can be performed in these contexts; and different discrepancy indices regarding weight and shape can be combined (actual, subjective, desired, healthy, how the patient thinks others see her).

This procedure is commented more in detail in the section corresponding to the virtual reality methodology and treatment agenda.

9. Weekly control

This section is completed with the inclusion of the weekly assessment that our team designed as part of the baseline and as a weekly control following the start of therapy.

The weekly assessment (see ANNEX III.2) records different relevant aspects of body image (satisfaction, acceptance, interference, negative thoughts), mood (anxiety and depression) and certain food intake aspects (restriction, binge eating, and purging behavior).

10. ANNEXES

ANNEX III.1: ***Behavioral Test Facing the Mirror and Weight***

Name: Date:

SCALE 1:

Instructions:

The patient should be standing one meter from a full-body mirror. Ask her to what extent she would either want to avoid looking or feels the need to see herself. Then, she has to see her reflected image for 30 seconds. The patient should then assess anxiety / distress with her body on the following scale:

Degree of avoidance/feels need (indicate as applicable)

0	1	2	3	4	5	6	7	8	9	10
None		Little		Some		Quite a lot				Very much

Level of anxiety/distress:

0	1	2	3	4	5	6	7	8	9	10
None		Little		Some		Quite a lot				Very much

SCALE 2:

Instructions.

- The patient should be standing on the scale, though without seeing her weight. Ask her to what extent she either would want to avoid looking or feels the need to know her weight. Ask about her level of anxiety / distress while being weighed.

Degree of avoidance/feels need (indicate as applicable)

0	1	2	3	4	5	6	7	8	9	10
None		Little		Some		Quite a lot				Very much

Level of anxiety/distress:

0	1	2	3	4	5	6	7	8	9	10
None		Little		Some		Quite a lot				Very much

ANNEX III.2: ***Weekly Assessment of Body Image***

Name: Date:

1. Weight:

2. To what extent have you been dieting in the past week?

0	1	2	3	4	5	6	7	8	9	10
None										Strict dieting

3. In the last 7 days I think that (mark only one option):

	(Belief 0-100)
My weight is just right	
I'm overweight	
I'm underweight	

4. How would you rate your degree of **satisfaction** with your body in the last week?

0	1	2	3	4	5	6	7	8	9	10
Not satisfied										Maximum dissatisfaction

5. To what extent do you think your problem is affecting your daily life? How would you rate the degree of **interference/distress** that dissatisfaction with your body has caused you in the past week?

0	1	2	3	4	5	6	7	8	9	10
Mild										Very severe

6. Have you had any **binge eating** episode in the past week?

Yes No

If yes, how many?

Objective: Subjective:

7. In the last week, after a binge eating episode, or after feeling that you have eaten too much, have you done anything to counter the effects? How often? In what way?

Vomiting	Fasting / diet	Laxatives	Physical exercise	Diuretics	Others....

8. Based on a scale of 0 to 10, your mood has been in this week:

Anxiety:

0	1	2	3	4	5	6	7	8	9	10
None										Very much

Depression:

0	1	2	3	4	5	6	7	8	9	10
None										Very much

9. Indicate the firmness with which you hold certain thoughts regarding body appearance. On a scale of 0 to 100:

Thought	Belief (0-100%)
1.	
2.	
3.	
4.	
5.	
6.	

10. Indicate the degree of **avoidance/distress** you have had this week regarding the following parts of your **body**, based on a scale of 0 (none) to 10 (very much):

Body part	Avoidance (0-10)	Distress (0-10)
1.		
2.		
3.		

4.		
5.		
Whole body		

11. Indicate to what degree you **avoid** doing certain things because of your **appearance** and to what extent these situations cause you **distress**, based on a scale of 0 (none) to 10 (very much):

Behavior	Avoidance (0-10)	Distress (0-10)
1.		
2.		
3.		
4.		
5.		

12. To what degree are you afraid of putting on weight?

0	1	2	3	4	5	6	7	8	9	10

Not afraid Very afraid

13. Since we began the assessment, to what degree do you accept your body?

"I accept myself..... than before beginning the assessment.

0	1	2	3	4	5	6	7	8	9	10

Much less Much more

IV. COMPONENTS AND STRUCTURE OF BODY IMAGE DISTURBANCES TREATMENT IN EATING DISORDERS

1. Components

The program here presented for treating body image disturbances in eating disorders has been developed from earlier work by our team, as previously mentioned (Perpiñá et al., 1999). Before explaining the specific methodology for conducting the sessions, we will describe the corresponding program components:

- Psychoeducation
- Cognitive discussion
- Exposure
- Progressive elimination of safety behaviors
- Training in self-esteem
- Pleasurable body activities
- Immersion in virtual reality
- Relapse prevention

For each of the above-mentioned elements, Chapter VII ("Therapist's Manuals for the Development of the Components") offers the corresponding materials employed by our team. These materials present structured contents, in an easily comprehensible language, and propose a series of exercises to make the group participate in the therapy - with the aim of ensuring that the patients draw by themselves the conclusions of that we wish to transmit. In addition to the proposed exercises, the manuals that deal with specific intervention techniques illustrate the methodology to be followed so the clinician can develop and organize them in therapy. Likewise, Chapter VIII ("Material for the Patient") contains the summaries of most of the manuals, in order to provide supporting material of what is dealt with in the sessions - being their reading a requirement between sessions. The same Chapter also provides the records to be completed by the patients either in therapy or between sessions.

1.1. Psychoeducation

As manifested elsewhere (Perpiñá, 2000), psychoeducation plays an important role both in primary and in secondary intervention. As regards primary intervention, the idea is to adequately inform of the factors that contribute to the development of eating disturbances, and of the aspects in which the individuals show interest and concern, i.e., body weight, beauty, body image, nutrition, etc. As regards secondary intervention, the aim is to take into account different areas

such as body weight, diets, body image, cognitive disturbances, and so forth (Fernández & Turón, 1998). Despite myth, the truth is that these individuals have only incomplete, biased, and -as a whole- erroneous information. Therefore, to facilitate change in the beliefs and attitudes that configure the psychopathology of these disorders, it is important to include a component of psychoeducation.

Particularly in the case of clinical population, it is usually useful to insist on (and distinguish) the fact that what will be said in the sessions of psychoeducation is only information - a description of what things are and how they work - and that an entirely different matter is whether or not they will like that information when it is applied to their particular case. Acceptance of the information usually comes later, when working on the challenge of thoughts in the cognitive discussion.

The topics that we consider essential in the psychoeducation component for modifying body image are:

- What is body image?
- How is body image formed?
- What is weight?
- What is beauty?

These contents (which are detailed in the Chapter corresponding to the manuals for the therapist) can in turn be completed with information on nutrition, as is habitual in the global treatment protocol for eating disorders, and which does the nutritionist usually impart. However, it is an aspect to be worked upon in the subclinical and general populations, as well. To this effect, the reader may refer to Alemany (1996), Mataix (1998), or Mataix and Carazo (1995), among others.

1.2. Cognitive discussion

Underlying the overvalued idea of losing weight we find a series of cognitive distortions that are revealed in errors in the interpretation of reality. These individuals develop relevant schemas about the "self" and focused on body shape and weight, that gradually influence perception, thought, emotion, and behavior. The cognitive models of eating disorders (Garner & Bemis, 1982; Vitousek & Hollon, 1990) stress the importance of negative automatic thoughts, of the dysfunctional style of reasoning, and of the basic beliefs or attitudes that sustain the self-schema, as well as the importance of the intervention upon these variables. To this effect, we have applied the classical cognitive restructuring strategies compiled by Botella and Ballester (1997).

In addition, we have completed this material with several guidelines on how to deal with the cognitive errors typical of these patients and which make up a peculiar negative body language/dialogue. In this case, we have relied on the twelve errors defined by Cash (1991).

In sum, this component is structured as follows:

- The importance of thought.
- How to reject thoughts. Cognitive restructuring ABC-D.
- What are cognitive errors? Negative body language.

1.3. Exposure

The aim of this component is to achieve that the patients stop avoiding all those situations that they have eliminated from their daily routines and that impose increasingly greater limitations upon them - including visioning of their own body. In this case, in addition to applying the exposure technique, three hierarchical types proposed by Cash (1991) have been provided. In this line, work has been made upon what we call "safety behaviors" (from the field of social phobia) (Wells, 1997) - which in this case correspond to checking and grooming. To this effect we have based ourselves on the indications of Cash (1995) and Rosen (1997). The contents of this component are structured as follows:

- Exposure.
- Progressive removal of safety and checking behaviors.
- Reality checking exercises: behavioral tests

1.4. Self-esteem

One of the aspects stressed by Bruch (1973) in these patients is their "paralyzing feeling of inefficacy that invades all thought and activity". For the work on self-esteem, we have followed McKay and Fanning's (1991) guidelines. In addition, as regards the basic assumptions that sustain the negative automatic thinking, we have included an element dealing with the role of language and its different levels (those referred to the situation, those relating to oneself, and those relating to others). The contents of this component are detailed in the self-esteem manual to be found in the Chapter on manuals for the therapist.

1.5. Learning how to enjoy one's body. Self-assertive techniques

For a person who has lost communication with her body, its rhythm and tuning, it is important to stop lashing it out and to secure reconciliation. The aim is to achieve better relations with one's own body. To do so, we have mainly based our approach on the activities proposed by Cash (1991). The contents of this component thus comprise:

- *Re-learning to live and pamper one's body.*

1.6. Immersion in Virtual Reality

This tool facilitates a special "communication" between the body image of the patient and the patient herself. This mental image, the body image, "acquires corporeality " through virtual reality, and constitutes a point of communication between the body image of the patient and the therapist in different contexts. In addition to the assessment aspects, which have already been mentioned, the therapeutic intervention of the “Virtual & Body” software are carried out on the following virtual environments:

- Scenario one: The Learning Room. The aim is to become familiar with this new language and the system.
- Scenario two: The Virtual Scale and Kitchen. The different discrepancy indices of body weight (real, subjective, desired, healthy) are analyzed and discussed with the patient before and after "virtually" eating. The purpose is to verify that weight and range of natural body weight - the set point - are stable.
- Scenario three: The Exhibit Room. The patient analyses and faces different body constitutions exemplified by photographs of various persons of both sexes. The aim is that the patient understands that weight is a relative concept, instead of a “magic number”, that is weight is a concept that must be placed in relation to other variables (complexion, height, sex, etc.); and train the patient in the management of the Body Mass Index (BMI). Likewise, the patient carries out several exercises comparing other persons' bodies.
- Scenario four: The Two-Mirror Room. This scenario analyses the "perceptive" aspects of body image. It is a scenario where the patient models her body image in using a 3D figure, and contrasts the result with her real and her desired body image. The appropriate corrections are made and discussed with the patient.
- Scenario five: Your Body in Space. The patient's virtual body is required to pass sideways through a predetermined gap. This way, it is possible to analyze the body image distortions of the patient when she thinks (and places) her body sideways or in profile.
- Scenario six: The Mirrored Room. In this room, the activity consists on analyzing and contrasting all possible body images of the patient: subjective, desired, the way in which she thinks others see her, her actual body, and her healthy body. Therapist and patient discuss

and correct the distortions made. Lastly, the patient becomes an observer of these same distortions in a person of whom she is particularly fond, analyzing what she would tell that person.

In the Virtual Reality section, a step-by-step explanation is provided of the strategies and actions that the user may undertake in each of these environments. Detailed guidelines of the course of the sessions in both assessment and treatment are available, as well.

1.7. Relapse prevention

This component has become an essential element in all types of interventions, for its aim is to prepare the end of the relation between patient and therapist, the end of therapy, and its review. In this case, the purpose is to consolidate the patients' feelings of efficacy, review the achievements attained, and anticipate the pitfalls that the patient may encounter on her way to recovery. To this, we have adopted the classical indications of Marlatt and Gordon (1980). This component is detailed in the manual:

- Relapse prevention.

2. Structure

The previously mentioned components are structured and combined into two therapeutic formats: group therapy and individual therapy (Virtual Reality) - both with a cognitive-behavioral orientation.

- Group therapy, initially based on and adapted from Cash (1995) and Rosen (1997), had an initial format of 8 sessions that have been extended to 15 in this new edition - thereby contributing to reduce session density. The final structure is therefore as follows: 15 weekly sessions with a duration of two-and-a-half to three hours; 7 to 8 patients; a therapist and a co-therapist.
- In parallel, and starting from the third group session, the Virtual Reality component is started with the “Virtual & Body” software - which has to be applied individually. The structure is as follows: 10 weekly sessions lasting 45 to 60 minutes, one patient, and one therapist.

The only recommendation to be stressed regarding when to start the body image treatment within the general eating disorder treatment protocol is that the patient should be stabilized in terms of her weight and eating habits, i.e., her life must not be at risk. The sequence and structure of the sessions is detailed below:

Session 1 Presentation and group formation. Psychoeducation: What is BI? (I)	
Session 2 Psychoeducation: What is BI? (II) BI formation model	
Session 3 Psychoeducation: What is weight?	VR 1 Learning Virtual Scale and Kitchen
Session 4 Psychoeducation: What is beauty? Introduction to cognitive discussion	VR 2 The Exhibit Room
Session 5 Cognitive discussion	VR 3. Relation between rooms Virtual Scale and Kitchen The Exhibit room
Session 6 Negative body dialogue	VR 4 The Two-Mirror Room Your Body in Space
Session 7 Self-esteem (I)	VR 5. Relation between rooms Virtual Scale and Kitchen The Two-Mirror Room
Session 8 Self-esteem (II) Exposure	VR 6 Review according to the patient's needs
Session 9 Self-esteem (III) Exposure	VR 7 The Mirrored Room
Session 10 Safety behaviors Self-esteem IV	VR 8. Relation between rooms Virtual Scale and Kitchen The Mirrored Room
Session 11 Behavioral test Self-esteem (V)	VR 9. Relation between rooms The Exhibit Room The Mirrored Room
Session 12 Behavioral test Self-esteem (VI) Body activities	VR 10 Review according to the patient's needs
Session 13 Improvement of BI	
Session 14 Relapse prevention	
Session 15 Relapse prevention	

The following Chapters provide a detailed description of the methodology and agendas corresponding to the group and individual therapies based on Virtual Reality.

V. METHODOLOGY AND AGENDA OF GROUP THERAPY

1. General guidelines

The contents of group therapy, structured into sessions, are commented below. As has been previously mentioned, the last two Chapters contain both the manuals required by the therapist for developing the components of the group format, and the material delivered to the patient regarding summaries and records.

2. Contents and agenda of the group therapy sessions

2.1. Session 1

0. Weekly assessment (see Annex III.2 of the assessment Chapter) Note: since the evaluation includes weighing the patient, her possible desire of not knowing her weight should be respected. In this case coming to know her weight will be one of the specific therapeutic aims for this patient.

1.-Presentation.

- Presentation of therapist and co-therapist.
- Reinforcement and congratulations of the therapist to the members of the group for having sought help to resolve their problem, and for participating in a group therapy, considering the advantages it affords (peer learning, cooperation. etc.).
- Presentation of the session agenda.
- Presentation of the group members. The patients get in couples and present her partner (name, age, studies, hobbies, etc.).

2.-Rules of group functioning

The rules of group functioning for all the group members are shared and discussed. These rules include participation, attendance, etc., in order to secure maximum cohesion and benefit for all the members of the group.

3.-Sharing of individuals problems and therapeutic goals. Explanation of the problems (each case in particular)

What is happening to you? How does it interfere with your life? A table-summary will be traced on a blackboard concerning the different aspects of the problem (in what situations it occurs, what feelings are experienced, what she thinks), and in what areas of the patient's life does it interfere and how. A discussion will be held addressing the common aspects they share regarding their problem. Next, the therapist provides a brief explanation of what eating disorders

are and how the feelings of dissatisfaction with their bodies affect them.

4.-Explanation of Body Image (I)

This psychoeducation component is explained using a series of exercises as indicated in the Psychoeducation section, and developed according to the contents of the manual "What is body image?". In the case of this session, the following is included:

- What is body image?
  - ✓ Activity: Close your eyes
- Body image in eating disorders
  - ✓ Activity: Which is yours?
- How a negative body image affects us
  - ✓ Discussion forum 1
  - ✓ Activity: What consequences do you identify yourself with?
  - ✓ Discussion forum 2

5.-General explanation of the treatment components:

- A very general comment is made of the main treatment components (psychoeducation, exposure, etc.).
- The patients' expectations regarding the possibility of change and their belief that it can be achieved by following the proposed treatment are explored.

6.-Homework assignments: Reading of the summary "What is body image?" (patient's material VIII.1).

2.2. Session 2

0.- Weekly assessment

1.- Greetings and presentation of the session agenda.

2.-Review of the previous session and comments of any doubts from reading the summary of the previous week

3.-Explanation of Body Image (II)

This session continues with the following contents of the psychoeducation section: “What is body image?”:

- Can body image be changed by modifying physical appearance?
  - ✓ Discussion forum 3
  - ✓ Activity: What conclusions can we reach from what is body image and what is the body?
  - ✓ Discussion forum 4
  - ✓ Activity: Reviewing your own history

4.- Explanation of body image model

This component is developed following the contents of the manual “How body image is formed”, including the exercises and activities proposed

- How is a negative body image formed?
  - ✓ Discussion forum 1
  - ✓ Activity: Remember (or think of) your adolescence
  - ✓ Activity: Imagine yourself in the future
  - ✓ Discussion forum 2
  - ✓ Discussion forum 3
  - ✓ Activity: How does a negative body image affect us?
  - ✓ Activity: Review the events that have contributed to you having a negative body image. (This exercise is performed relating it to the model, so that each patient personalizes it.)

5.-Homework assignments: Reading of the summary “How body image is formed” (patient's material VIII.2).

2.3. Session 3

0.- Weekly assessment
1.- Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen as to how the model fits their particular cases.
3.-Psychoeducation: "What is weight?"
Discussion and exercises of the manual "What is weight?":

- What is (corporal) weight?
  - ✓ Activity: Does the interior of our body weigh?
- We do not have ONE weight. We have a RANGE of weight.
  - ✓ Discussion forum 1
- Can I weigh what I want?
  - ✓ Activity: Reviewing family photographs
- What is "natural" weight? ("set point theory").
  - ✓ Discussion forum 2
- How is "natural" weight maintained?
- Why is natural weight useful?
- Body Mass Index (BMI)
  - ✓ Activity: Calculate your BMI
- Ideal weight yes, but… for whom?
- Conclusions
  - ✓ Mobilize group discussion

4.- Homework assignments: Reading of the summary "What is weight?" (patient's material VIII.3). Calculate the BMI of persons that they compare themselves with. Give express instructions that they should only weigh themselves once weekly: when coming to therapy.

2.4. Session 4

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen about "What is weight?". Group discussion on the BMI calculation.
*3.-Psychoeducation: "*What is beauty?" Discussion of the manual "What is beauty?", including exercises and activities:

- The value of physical appearance.
  - ✓ Discussion forum 1
  - ✓ Activity: Are you convinced by the first impression?
  - ✓ Discussion forum 2
- What is beauty?
  - ✓ Discussion forum 3
- Is beauty universal?
  - ✓ Discussion forum 4
  - ✓ Activity: What if we question beauty?
- The quest for beauty at a painful price.
  - ✓ Discussion forum 5
  - ✓ Activity: Put it on a scale.

4.-Introduction of cognitive restructuring. Contents of the manual: "The importance of thought

(ABC)".
Aims:

- Explaining the A-B-C process and the role of thoughts within the model of how a negative body image is formed.
- Teaching the use the A-B-C record for body image situations.

5.- Homework assignments: Reading of the summaries: "What is beauty?" (patient's material VIII.4) and "The importance of thoughts (ABC)" (patient material VIII.5). Carry out the activity "Put it on a scale". Distribute the weekly record of Negative Thoughts (ABC) (patient's material VIII.6) for its fulfillment.

2.5. Session 5

0.- Weekly assessment
1.- Greetings and presentation of the session agenda.
2.-Review of the previous session, comment of the doubts that may have arisen about "What is beauty?", results of the activity "Put it on a scale", and revision of the ABC record. Group discussion.
3.-Cognitive restructuring (ABC-D). Contents of the manual "How to challenge negative thoughts. ABC-D".
Aims:

- Teaching how to conduct a cognitive discussion applied to body image situations.
- Showing how to complete the ABC-D record for the patients' weekly use.

4.- Homework assignments: Reading of the summary "How to challenge negative thoughts. ABC-D" (patient material VIII.7). Hand out the weekly thoughts challenge record (ABC-D) (patient's material VIII.8).

2.6. Session 6

0.- Weekly assessment
1.- Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen (ABC-D record). Group discussion.
4.-Negative body dialogue. Contents of the manual: "Negative body language. What are cognitive errors?"
Aims:

- What are cognitive errors and their relation to negative automatic thoughts?
- Explanation of the main cognitive errors made by persons with a negative body image. Group discussion.
- Completion in session of the "Cognitive Errors Sheet".
- *5.- Homework assignments*: ABC-D record. Delivery of completed "Cognitive Errors Sheet" (patient's material VIII.9). The patients have to identify these errors in the course of the week and challenge them with the ABC-D to confirm their accuracy and adaptability.

2.7. Session 7

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen (reflection upon the 12 errors and ABC-D record). Group discussion.
3.-Introduction of the self-esteem component. Contents of the manual: "Self-esteem manual",

with the following points:
Aims:
- Explaining what self-esteem is.
- Explaining the role of language in self-esteem. Language levels.
- What are the consequences of having low self-esteem?
- Exercise: In session, making a new description of oneself (start it in session and finish it at home).

5.- Homework assignments: ABC-D record. Review the exercise performed in therapy: amplify adjectives or short phrases describing qualities of oneself in different areas, and rate them as positive, negative, or neutral.

2.8. Session 8

0.- Weekly assessment.
1.- Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Review of the ABC-D record. Review of the new description. Group discussion.
3.- Self-esteem.
Aims:
- Review negative self-descriptions: do not use pejorative language; employ a precise language limited to the facts. Use specific rather than general language, identify exceptions or positive qualities.

4.-Exposure: explanation and practice. Contents of the manual: "Exposure manual", with the following points:
Aims:
- Reminder of the model of how negative body image forms, and role of avoidance.
  - ✓ Activity: Things we are missing
- Consequences of avoidance.
  - √ Discussion forum 1: disadvantages of avoidance
- What is exposure?
- How to carry it out.
  - √ Establish hierarchy of dressed body areas (patient's material VIII.11)
  - √ Preparation for exposure
- Perform exposure of dressed patients in front of a full-size mirror.
- Group discussion following exposure.

5.-Homework assignments. ABC-D record. Review self-description with the indications given in session. Reading of the summary "Exposure" (patient's material VIII.10). Review exposure hierarchy for the dressed body. Perform exposure at home using the exposure record (patient's material VIII.12).

2.9. Session 9

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen (review of the ABC-D record, of exposure at home, and of self-description). Group discussion.
3.-Self-esteem.
Aims:
- Reflect upon one's positive characteristics. Extend and rewrite the list using longer phrases

and paying attention to the language used.
3.-Exposure: A second exposure is carried out in therapy, following the same indications as in the previous session.
4.-Extend exposure to social situations.
Aims:

- In-session, establishment of the hierarchy of social situations related to the body. Prepare in vivo exposure, covering those hierarchical aspects relating to the social contexts and situations that produce negative emotions about the body.
- Exposure planning.

5.-Homework assignments. ABC-D record. Review self-description with the indications given in session. Exposure and record relating to the dressed body. Review the hierarchy of social situations, expose to one social situation, and fulfill the corresponding record.

2.10. Session 10

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Group discussion over the ABC-D record, self-description, and exposure activities.
3.-Explanation of safety and checking behaviors. Contents of the manual: "What are safety and checking behaviors?", with the following points:
Aims:

- Explaining safety and checking behaviors.
- Explaining their function and consequences.
- How to combat them.
  - √ In-session, identification of each patient's safety behaviors, and planning their removal (patient's material VIII.14).

4. -Self-esteem
Aims:

- Elaboration of the new self-description: complete a new description of oneself, joining by areas both the positive and negative characteristics, to yield a more realistic description.

5.-Homework assignments. ABC-D record. Start writing the new self-description with the indications given in session. Exposure to and record of the dressed body. Exposure to and record of social situations. Reading the summary "What are safety and checking behaviors?" (patient's material VIII.13). Removal of safety behaviors.

2.11. Session 11

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Review of the ABC-D record, of the new self-description, and the exposure activities removing safety behaviors. Group discussion.
3.- Exposure to and removal of safety and checking behaviors. Contents of the manual: "What are safety and checking behaviors?"

- Perform a behavioral test: reality checking.
- Analyze and discuss the results.

4.-In-session, establishment of the hierarchy relating to the totally or partially naked body. For those patients who are prepared, instruct to start this activity at home.
5. -Self-esteem

Aims:

- Assimilation of the new self-description. Provide indications as to how to assimilate the new description: read the description twice daily and review to identify possible changes.

6.-Homework assignments. ABC-D record. Assimilation of the new self-description with the indications given in session. Exposure to and record of one's body and social situations. Safety behaviors removal.

2.12. Session 12

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Review of the ABC-D record, of the assimilation of the new description, of the exposure activities removing safety behaviors. Group discussion.
3.-Exposure to and removal of safety and checking behaviors.

- Perform a behavioral test: reality checking.
- Analyze and discuss the results

4. -Self-esteem
Aims:

- Assimilation of the new self-description: Instructions to read the description twice daily, carry out daily self-statements, reminder notes, etc.

5.-Improvement of body image by increasing body-related activities. Contents of the manual: "Re-learning to live with and care for the body", with the following points:
Aims:

- Learning to enjoy one's body.
- Body functionality.
  - ✓ Discussion forum 1
  - ✓ Carry out pleasant activities
- Complete the list of body activities (patient's material VIII.15).
  - ✓ Patients are to perform at least one activity in each of the three categories (appearance, exercise, sensations).

6.-Homework assignments. ABC-D record. Assimilation of the new self-description with the indications given in session. Exposure to and record of one's body and social situations. Removal of safety behaviors. Perform and record a body activity in each category (patient's material VIII.16).

2.13. Session 13

0.-Weekly assessment
1.- Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Review of the ABC-D record, of the assimilation of the new description, of the exposure activities removing safety behaviors, and of the body activities. Group discussion.
3.-Improvement in body image. Contents of the manual: "Re-learning to live with and care for the body".

- ✓ Activity 1: Letter of reconciliation with your body.

4.-Homework assignments. ABC-D record. Assimilation of the new self-description. Exposure to and record of one's body and social situations. Removal of safety behaviors. Perform and record a body activity belonging to each category. Writing the letter of reconciliation with one's body.

2.14. Session 14

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Review of the ABC-D record, of the assimilation of the new description, of the exposure activities removing safety behaviors, the body activities, and letter of reconciliation. Group discussion.
3.-Relapse prevention. Contents of the manual: "Relapse prevention", with the following points:
Aims: assess progress and identify risk situations.

- Approaching the end.
  - ✓ Activity: Establishing a balance
- Situations that make us vulnerable: knowing risk situations.
  - ✓ Discussion forum
- Having an action plan.

4.-Homework assignments. ABC-D record. Assimilation of the new self-description. Exposure to and record of one's body and social situations. Removal of safety behaviors. Perform and record a body activity belonging to each category. Planning risk situations.

2.15. Session 15

0.-Weekly assessment
1.-Greetings and presentation of the session agenda.
2.-Review of the previous session and comment of the doubts that may have arisen. Review of the ABC-D record, of the assimilation of the new description, of the exposure activities removing safety behaviors, of the body activities, and planning of the risk situations. Group discussion.
3.-Relapse prevention. Contents of the manual: "Relapse prevention", with the following points:
Aims: Importance of the conceptualization of relapse.

- Distinguish between slip, lapse, and relapse.
  - ✓ Discussion forum: discovering alarm signs
- How to react and act in the event of a relapse.

4.-Farewell

- Reinforcement for what they have achieved.
- Emphasizing the need to keep practicing what they have learned.
- Setting an appointment for post-treatment assessment and follow-ups.

VI. METHODOLOGY AND AGENDA OF VR THERAPY

1. General guideline

The “Virtual & Body” software comprises six virtual scenarios that have already been briefly described in the components section, and which are here detailed by sessions. In order to use the program, the clinician must introduce the data corresponding to each patient in the accompanying database, i.e., actual weight, healthy weight, height, maximum profile width, and healthy body shape. In addition, at the start of each session, the patient's weight on that day is also to be recorded in the database. The in-session responses of the patient to her distortions during interaction with the computer are recorded on a session-by-session basis.

In order for the patient to become psychologically "immersed" in the virtual environment, we must pay attention to the use we are making of language. Everything must be set in context, we must speak in the present tense, and make the environments the patient is visiting familiar to her ("we're in your kitchen", "walk around", "eat", "look at yourself"). Once we have managed to "immerse" the patient in the situation, we can make her remember other similar experiences or project herself into the future - though always staying in the present situation.

The patient should also be made aware that the system will react to her movements and responses, either approving or correcting such interactions.

The present Chapter describes on a session-by-session basis how the VR component is developed. In first place, we will describe the scenario/s to be used in each specific session, indicating its corresponding elements, the aims pursued, and the activities that the patient can perform in each particular virtual environment. Secondly, specific indications are provided to allow the clinician to introduce the patient into the virtual environment, specifying which issues are to be considered, and the conclusions that should be drawn in company of the patient. Lastly, a record of each of the sessions is provided. This record functions as an assessment protocol and script for the development of the session aims. It should be made clear that, in many cases, the clinician will not have to make each and every question suggested here; indeed, and depending on each patient in particular, other questions will emerge that more closely correspond to each individual case.

2. Contents, agenda and records of the VR sessions

2.1. Session 1

a.1) Scenario 1: The Learning Room

A room with several objects (a table with a sphere and a pyramid) and a door.

- Aim: The objective is for the patient to become familiar with a VR environment, become

used to wearing the helmet, learn how to use the mouse, and to move and interact with the objects present in the scenario.

- Activity: The patient is instructed to touch the objects on the table and move about the whole room.

a.2) Scenario 2: Virtual Scale and Kitchen

This zone has the following elements:

→ Virtual Scale. This is a digital screen placed at eye level, with a keyboard with 10 keys (from 0 to 9) so that the patient can introduce other values. The scale provides information as to the adequacy or inadequacy of the values introduced by the patient, in two ways: giving the correct number and producing different sounds; a "No!" sound indicates that the figure is incorrect, and a "pleasant" sound indicates that the figure is realistic.

→ Eating area: this is a kitchen with a refrigerator and furniture showing different foods, ranging from what the patients consider "forbidden" (pizza, hamburgers…) to those considered very "safe" (apple, lettuce…).

- Aims: The general objective is to obtain the different patient weight categories and the discrepancy indices, and contrast them with the patient's opinion - transmitting and verifying that weight is stable. The aim is for the patient not to overestimate her weight (either before or after eating). This objective can be divided into other specific aims as detailed below:

- Assessing weight discrepancy indices.
- Assessing her eating preferences and fears after eating.
- Contrasting and learning to distinguish actual weight, subjective weight, desired weight, and healthy weight.
- Having the patient realize the wrong rules she uses when calculating her subjective weight, particularly after eating.
- Making the patient aware of the fact that a subjective weight very different to the real weight (overestimation) gives her negative thoughts that maintain her dissatisfaction with her body, and causes her to carry out certain behaviors related to her body dissatisfaction.
- Improving the accuracy of the estimation of one's weight.

- Activities:

- The patient weighs herself on the scale, and her actual weight appears. The patient then introduces her subjective weight on the scale, her desired weight, and, finally, the scale shows her corresponding healthy weight.
- The patient moves towards the food area, observes and describes the foods she finds there, and is required to choose and "eat" one of them. The patient chooses a type of food (normally a "safe" one), touches it, and begins to "eat" it virtually (the food is directed towards the patient's mouth, chewing sounds are heard, and the bitten food is seen). The therapist guides the patient's eating by suggesting tastes, textures, sensations, etc.
- The patient returns to the scale to introduce her subjective weight (what she believes she weighs at that time). The scale tells her if she is right or wrong.
- The procedure should be repeated with a "banned" food (eat it and weigh herself).

b) Guidelines for the therapist

- As this is the first contact of the patients with the VR system, on occasion of this first session they are given a small introduction as to what will be done and what they will find:

"Do you know computers? Have you ever played a game on a computer? Have you heard of Virtual Reality?

What we are going to do here is very similar. You will get in front of the computer, put this

helmet on, and pick up the mouse. With VR you won't only see a computer screen: you will actually "be inside there". You will find a series of rooms containing a number of objects: photographs of people, human figures, food, etc. Not only will you be able to walk through these spaces; you could also "touch" things, interact with the objects. The advantage of VR is that we will do things that we don't like to do in real life, and we will also do things that cannot be done in real life. VR will allow you to test things you fear and train you in doing things that are difficult for you in real life, but that you should be able to do. We might say that is a way of training yourself so later you could transfer what you are going to learn here to real life - with the advantage that nothing really happens during training.

At some points, the computer will ask you for information and you will have to answer. The computer will let you know if your answer is correct or not, by means of sounds.

The most important thing is that you won't be alone in there; I'll be with you at all times, I'll be seeing the same things as you on that screen.

This is a great opportunity for you to get close to and do all those things you normally avoid doing. It's a kind of training.

Would you like to ask me any questions about what we're going to do?"

- Explain briefly which room she is going to enter. Place the patient in context and make it familiar, to allow the patient to introduce herself as deep as possible in the scene: "Now you're going to enter your kitchen. Is it like this one? What do you see? There are cupboards for plates, cutlery; a fridge, a microwave oven…".
- If any patient remains reluctant to know her real weight, introduce a number verging on the ridiculous, using the sense of humor, such as 15-20 kg. (30-40 pounds).
- The first weight value that the scale shows is the patient's actual weight, and the last one is her healthy weight. The patient herself should introduce the rest of weight values. "This is a very special scale: it allows you to indicate the weight you are thinking of…"
- Explain the sounds produced by the system and why they are produced: "What has happened? What do you think that sound means?"
- Anticipate actions taken by the computer: "Now the system will show the weight that is healthy for you (remember that the natural range is about 5 kg.)"

In the second choice of food, the therapist persuades the patient to select a "forbidden" food item (if she has not already done so): "What do you prefer to eat? Remember that this is a virtual experience and that you are testing what you fear, with nothing happening to you".

- The patient describes the food.

It is very important that the patient believes that she is eating. In parallel to the visual and audio effects, the therapist should guide her in eating: "Notice the taste; it's cool. Notice the bites of food against your teeth; notice how you swallow. You're a little thirsty. The food is reaching your stomach…".

- Stress that it is impossible to suddenly put on 2 kg (4 pounds) of weight immediately after eating a piece of pizza.
- Cautions: Do not speak about getting fat, but rather of putting on weight. Relate the session to what was learnt in psychoeducation: energy, metabolic rate...
- At the end of the session, therapist and patient should discuss and appraise everything that happened. "What conclusions can be drawn from what has happened in this session?"
- Arguments and conclusions for this session-scenario:

1.- We have seen that there are differences between subjective weight (what we feel or think we weigh) and real weight. We have seen that these differences increase when we eat something, and that they are even greater when we eat something "forbidden".

2.- We have tested that one thing is what you actually weigh, and something quite different is what you feel you weigh. We have also seen that although after eating a particular food we feel

that we have put on several kilograms, this is not really so. Feeling more bloated or fat is not a good indicator of what we actually weigh; it doesn't mean that we have got fat.
3.- A person's real weight depends on many factors, such as the metabolic rate, the fasting phase of the body at that moment, the time went from the last meal, the body activity, a balanced diet, the elements that the body needs to expel (sweat, urine, faeces, water vapor), etc.
4.- We know that a person's weight is stable; it stays within a certain range genetically determined.
5.- We should learn to be more realistic about calculating body weight, particularly after meals.

c) Record/script of Session 1

The record for the first session, which also serves as a corresponding script, is shown on the following pages.

VIRTUAL REALITY RECORD SESSION 1[1]
(Virtual Scale and Kitchen)

Name: Date:

1. (In the consulting room, before weighing, assess the patient's fear of having to weigh herself, and -if avoiding it were possible- to what extent would she avoid weighing or feel the need to do so, when applicable)

Fear (0-10):	Avoidance/Need (0-10):
What does she think?	What does she feel?

2. Weight
(When real weight appears)

What does she think?	What does she feel?

How much do you think/feel you weigh? (Subjective weight)

To what degree do you think it matches reality? (0-10):	
What does she think?	What does she feel?

How much would you like to weigh? (Desired weight)

To what degree do you think it matches reality? (0-10):	
What does she think?	What does she feel?

(When real weight appears)

To what degree do you fear your healthy weight? (0-10):	
What does she think?	What does she feel?

3. Foods

Forbidden foods hierarchy (0-10)	
Apple:	Ice-cream
Lettuce:	Chocolate
Carrot	Pizza
Water	Hamburger

(Food of choice for eating. Assess the degree of fear it produces and to what extent the patient would wish to avoid eating it)

Fear (0-10)	Avoidance (0-10)

Patient eats it. (After eating it)

[1] The questions in italics/ mean that the patient has to take some action with the system: introduce data, eat, touch…

What does she think?	How does she feel?		
	Good:	Bloated:	Urged to eat more
	Satiated:	Nervous:	Expel:
	Annoyed:	Guilty	Others

Goes to the scale
Before weighing:

Fear (0-10):	Avoidance/Need (0-10):

How much do you think you weigh now?

What does she think?	What does she feel?

Opposite food item ("forbidden" food):

Fear (0-10)	Avoidance (0-10)

Patient eats it. (After eating it)

What does she think?	How does she feel?		
	Good:	Bloated:	Urged to eat more
	Satiated:	Nervous:	Expel:
	Annoyed:	Guilty	Others

Goes to scale
Before weighing:

Fear (0-10):	Avoidance/Need (0-10):

How much do you think you weigh now?

What does she think?	What does she feel?

Stress that weight does shoot up after eating. Weight fluctuates in the range of 5 kilograms (11 pounds) and remains stable at the long-term.

4. Summary (0-10)

To what degree do you think weight remains stable? (set point; weight range; no sudden weight gain)	
To what degree do you fear your healthy weight?	
To what degree do you feel you are able to tolerate your weight?	
To what degree do you accept that you overestimate your weight?	
To what degree do you accept that you overestimate your weight after eating?	
To what degree would you say that this situation is the same as what you usually experience?	
What have you learned today?	

2.2. Session 2

a) Scenario 3: The Exhibit Room

This room exhibits posters with people of both sexes and different body constitutions. The components are the following:

→ Eight full body photographs distributed in four groups: professional male and female models; a man and woman of normal weight; an obese man and woman; and two anorexic patients with different BMI values and severity.

→ Each photograph contains information about the person's height.

→ Each panel will indicate whether the information introduced by the patient is correct or not (numerically and audio). It will also present the person's BMI.

- Aims: The general aim is that the patient understands that the "magical" weight number is actually relative to other variables (physical constitution, sex, height, age, etc.). This aim consists of the following specific objectives:

- Making the patients aware of their mistakes when calculating other's people weight - particularly as regards attributing a weight lower than the real one, and when calculating the weight of people with an appealing physical appearance.
- Contrasting the underestimation the patient's make of others' weight with the overestimation of their own weight, and how this has repercussions upon dissatisfaction with her body shape and body weight.
- Supporting psychoeducation. Showing them that the best way to calculate their true appearance is not through body weight but rather via the BMI.
- Evaluating and questioning their tendency to compare with other people.
- Making the patient aware that physical appearance is something momentary that will tend to deteriorate over time.

- Activities:

- The patient should indicate the body weight of each of these persons. The system will inform her whether the estimate is correct or wrong. Finally, the BMI will appear.
- By observing each photograph, the patient responds to different questions (Do you like that person? Is that person happy? How will that person be like in 15 years?…)
-

b) Guidelines for the therapist

- Place in context, and immerse the patient in the situation. "Now we are going to enter a exhibit room. Here we have photographs of people. You will find people with different body constitutions. Each photograph indicates the person's height. Once you have seen the photograph and known his/her height, introduce what you believe to be that person's body weight".
- Begin with the male model of each pair.
- Remind the meaning of the sounds.
- Comment of the errors. If the girl in the picture weighs more than the patient does, and the patient thinks otherwise: "You've calculated her weight wrong by only looking at her appearance. Do you think you can judge yourself as being either fat or thin considering only your weight number?" The girl in the picture weighs less than the patient does, and she considered her to be thin (particularly in the case of anorexic patients): "We can see that the girl you think weighs less than you has a very low body weight. Look at her BMI". Remind the patient that despite their different appearance, the last two girls are anorexic, i.e., they have problems.
- At the end of the session, therapist and patient should discuss and appraise everything that happened. "What conclusions can be drawn from what has happened in this session?"
- Arguments and conclusions for this session-scenario:

1.- We have seen that it is very difficult to determine a person's weight by considering only

his/her physical appearance. Judging a person's weight only through his or her physical appearance leads us continuously to making mistakes.
2.- We have seen that there are people who weighing only 45 kg. (100 pounds) are very thin, while others who weigh 80 kg. (177 pounds) have a normal weight, and others who weigh 60 kg. (133 pounds) are not fat at all. The number of "kilograms" or "pounds" means nothing, for a tall person weighing 60 kg can be thin, while a short person weighing the same can seem very fat. It all depends on body constitution and, in sum, on the body characteristics of each of us.
3.- Based only on body weight it is very difficult to known whether a given person is overweight, has a normal weight, or is underweight. The Body Mass Index (BMI) is an index that reflects the reality of the body by taking into account body constitution, height, and weight.
4.- If you do not know from physical appearance whether a person is happy or not, why do you apply such reasoning to yourself? What were your conclusions on imagining yourself 20 years from now? And those people with anorexia?

c) Record/script of Session 2

The record for this session, which also serves as its guideline, is shown on the following pages.

VIRTUAL REALITY RECORD SESSION 2
(The Exhibit Room)

Name: Date:

1. Models

MALE
Do you like this figure?
How do you value him?
How would others value him?
Do you think he's happy?
What do you think he'll be like in 30 years?
Considering his height, *how much do you think he weighs?*
FEMALE
Do you like this figure?
How do you value her? - attractive?+fat?+thin?
How would others value her?
Do you think she's happy?
To what degree does it bother you to compare yourself with her?
To what degree do you like to compare yourself with her?
What do you think she'll be like in 30 years?
Considering her height, *how much do you think she weighs?*

2. Normal weight

MALE
Do you like this figure?
How do you value him?
How would others value him?
Do you think he's happy?
What do you think he'll be like in 30 years?
Considering his height, *how much do you think he weighs?*
FEMALE
Do you like this figure?
How do you value her? - attractive?+fat?+thin?
How would others value her?
Do you think she's happy?
To what degree does it bother you to compare yourself with her?
To what degree do you like to compare yourself with her?
What do you think she'll be like in 30 years?
Considering her height, *how much do you think she weighs?*

3. Obesity

MALE
Do you like this figure?
How do you value him?
How would others value him?
Do you think he's happy?
What do you think he'll be like in 30 years?

Considering his height, *how much do you think he weighs?*

FEMALE
Do you like this figure?
How do you value her? - attractive?+fat?+thin?
How would others value her?
Do you think she's happy?
To what degree does it bother you to compare yourself with her?
To what degree do you like to compare yourself with her?
To what extent have you seen yourself like her sometimes?
How afraid are you of seeing yourself like that? Do you think it's possible?
What do you think she'll be like in 30 years?
Considering her height, *how much do you think she weighs?*

4. Anorexia

FEMALE, FRONT VIEW
Do you like this figure?
How do you value her? - attractive?+fat?+thin?
How would others value her?
Do you think she's happy?
To what degree does it bother you to compare yourself with her?
To what degree do you like to compare yourself with her?
To what extent have you seen yourself like her sometimes?
If you were ever like that, do you remember whether you saw yourself like that?
How afraid are you of seeing yourself like that? Do you think it's possible?
What do you think she'll be like in 30 years?
Considering her height, *how much do you think she weighs?*
FEMALE, REAR VIEW
Do you like this figure?
How do you value her? - attractive?+fat?+thin?
How would others value her?
Do you think she's happy?
To what degree does it bother you to compare yourself with her?
To what degree do you like to compare yourself with her?
To what extent have you seen yourself like her sometimes?
If you were ever like that, do you remember whether you saw yourself like that?
How afraid are you of seeing yourself like that? Do you think it's possible?
What do you think she'll be like in 30 years?
Considering her height, *how much do you think she weighs?*

5. Summary (0-10)

To what extent do you think the concept of weight is a relative concept? (depending on age, sex, height, time of day)	
To what extent do you think body deteriorates over time?	
To what degree would you say that this situation is the same as what you usually experience? (when you compare yourself…)	
How do you imagine yourself within 10 years? And within 20?	
What have you learned today?	

2.3. Session 3

a) Relation between virtual environments: Virtual Scale and Kitchen, and Exhibit Room

Following the same aims as those pursued by these two scenarios, this session attempts to combine them, i.e., to establish a relation between the tendency to overestimate weight after eating and the tendency to compare oneself with other persons. It also pursues to analyze the effect that such tendencies have. Likewise, a review is made of the concepts of overestimation, the body weight stability, and its body relativity.

b) Guidelines for the therapist

The indications are those already provided for each of these two scenarios. In this case the idea is to assess (and reinforce where required) the progress achieved, and connect the two situations offered by these two scenarios - stressing that the patient has just eaten a food "forbidden" in her comparisons.

c) Record/script of Session 3

The record for this session, which also serves as its guideline, is shown on the following pages. In this case, only the script of the elements already seen in earlier sessions is provided.

VIRTUAL REALITY RECORD SESSION 3
(Virtual Scale and Kitchen, and The Exhibit Room)

Name: Date:

KITCHEN

1. (In the consulting room, before weighing, assess the patient's fear of having to weigh herself, and -if avoiding it were possible- to what extent would she avoid weighing or feel the need to do so, when applicable)

2. Weight

Real weight:	To what degree do you feel you are able to tolerate your weight?
How much do you think/feel you weigh? Subjective weight:	To what degree do you think it matches reality?
How much would you like to weigh? Desired weight:	To what degree do you think it matches reality?
Healthy weight:	To what degree do you fear your healthy weight?

3. Foods
("Forbidden" food. Assess the degree of fear it produces and to what extent the patient would wish to avoid eating it)
She eats it. (After eating it, what does she think?, how does she feel?)

4. Goes to scale
Before weighing herself:

Fear (0-10)	Avoidance/Need (0-10)

How much do you think you weigh now?

EXHIBIT ROOM
(When questioning about comparisons, stress the fact that she has just eaten a "forbidden" food)

5. Models
(Only the "female" record seen in session 2)

6. Normal weight
(Only the "female" record seen in session 2)

7. Obesity
(Only the "female" record seen in session 2, including the following question):

After what you have eaten, do you feel like her right now?

8. Anorexia
(Following the records seen in session 2, including the following question):

Do you think the same that happens to you will happen to her when she eats?

9. Summary (0-10)

To what degree do you think weight remains stable? (set point; weight range; no sudden weight gain)	
To what degree do you fear your healthy weight?	
To what degree do you feel you are able to tolerate your weight?	
To what degree do you accept that you overestimate your weight?	
To what degree do you accept that you overestimate your weight after eating?	
To what extent do you think the concept of weight is a relative concept? (depending on age, sex, height, time of day)	
To what extent do you think body deteriorates over time?	
To what degree would you say that this situation is the same as what you usually experience? (when you compare yourself…)	
How do you imagine yourself within 10 years? And within 20?	
What have you learned today?	

2.4. Session 4

a.1) Scenario 4: The Two-Mirror Room.

There are two "special" mirrors in this room whose elements are:

→ A first mirror with a 3D human figure that has the patient's real dimensions.

→ A panel through which the patient can change (increase or decrease) different parts of the 3D figure: bosom, forearm, chest, abdomen, hips, thighs, and legs.

→ A second mirror with a 3D human figure, of a translucent texture, with the patient's real dimensions.

- Aims: The general aim is to obtain the distortion indices of body shape and contrast them with the patient's opinion.
- Assessment of the distortion the patient's make of her body dimensions.
- Showing the discrepancy between her body image and her real appearance.
- Demonstrating the relationship between the overdimensioned body parts and those generating greater dissatisfaction.
- Improving the accuracy in the estimation of her body dimensions.
- Showing how body image fluctuates depending on the food eaten, how thoughts play a role in body dissatisfaction, and the consequences of this distortion of body image (this is to be done when combining the Two-Mirror Room with the Kitchen).

- Activities:
- The patient models the 3D figure, increasing or diminishing different parts, until the figure reflects how the patient "sees" herself, i.e., the dimensions of her body image. This is the figure "How I feel look like" (how I see myself)
- Once modeled, the patient can rotate her figure to examine it from all angles.
- On touching the second mirror, the translucent 3D figure appears with the real dimensions of the patient. This is the figure "How I look like" (How I am).
- On touching the figure "How I look like", it becomes superimposed upon the figure " How I feel look like".
- Thanks to the translucent texture, the discrepancies between both figures become manifest.
- The patient corrects the discrepancies until her body image adjusts to her real appearance.

a.2) Scenario 5: Your Body in Space

This zone has the following elements:

→ A door covered with several colored strips.

→ Behind the door stands the figure "How I feel look like", already corrected.

- Aim: To obtain the distortion images of the body figure and contrast them with the patient's opinion, though in this case with her representation seen sideways (in profile).

- Activities:
- The patient has to remove the exact number of strips to allow her body to pass through sideways (i.e., in profile).
- The patient passes her figure through the gap.
- The system shows whether the gap opened fits the patient's true width.

b) Guidelines for the therapist

- Place in context, and immerse the patient in the situation. "Now we are going to enter a room that has two "special" mirror. They not only show us how we are, but also how we would like to be. I' like you to mould the figure that represents you until it reflects the body you think and feel

you have. You can shape the figure by zones, pressing those buttons. Shall we begin?"

- Introduce the real body: "Do you remember that we have all your measures? We have introduced those measures in the computer, and here this is your body with its true dimensions".
- Your Body in Space: "Do you see that head behind the colored strips? That's you. As you can see, there are a number of colored strips blocking you from moving through sideways, in profile. To get through, you have to remove the exact number of strips. How many do you think you have to remove to get past?"
- If the patient makes a mistake: "Did you think you were wider? By how many centimeters (inches) have you overestimated your body width?"
- At the end of the session, therapist and patient should discuss and appraise everything that happened. "What conclusions can be drawn from what has happened in this session?"
- Arguments and conclusions for this session-scenario:

1.- We see that there can be a difference between the image we have of ourselves (body image) and our true appearance.
2.- We have commented that perceptive distortions are one of the features of body image in eating disorders, i.e., we see the body parts that we don't like (hips, thighs, belly, buttocks,) as being larger, wider than they really are - which increases our dissatisfaction with these zones.
3.- These distortions affect us upon thinking whether we are fat or thin, and also on comparing ourselves with other persons.
4.- If we always think that the parts of our body that we don't like are larger than they really are, we will come to the conclusion that we are indeed fatter - which in turn affects us emotionally.
5.- We see that this distorted perception exists not only regarding our "front", but also the room occupied by our body in space (i.e., when thinking of it in profile).

c) Record/script of Session 4

The record for this session, which also serves as its guideline, is shown on the following pages.

VIRTUAL REALITY RECORD SESSION 4
(The Two-Mirror Room)

Name: Date:

TWO-MIRROR ROOM

1. Before entering the virtual room:
- What are the body parts that you are most dissatisfied with?
- What are the body parts that you are most satisfied of?

2. (In the consulting room, and before looking into the mirror, assess the patient's distress/fear of having to see herself and –if avoiding it were possible- to what extent would she avoid seeing herself or feel the need to do so, where applicable).

Distress/Fear (0-10):	Avoidance/Need (0-10):

3. I would like you to model the figure according to how you see yourself. What parts are you going to change?:

4. *She modifies the figure that represents her.* Is it that how you see yourself? (the patient can *rotate the figure*)

Distress (0-10):	Satisfaction (0-10):
To what degree do you think your body is like that? (0-10):	
To what degree do you think others see you like that (0-10):	

5. *On touching* the second mirror, it appears the figure "How I look". This is your real body. What do you think?

Distress (0-10):	Satisfaction (0-10):
Are the figures the same?	
What differences do you see between them?	

6. *On touching* "How I look like", it superimposes upon "How I feel look like".

What has happened?
What parts have you distorted?
What makes you think that your (name the distorted body parts) are larger than they really are?
How does that affect you emotionally?
How does it affect what you do? (avoidance, diets...)
To what degree do you accept that you overestimate your body image, that your body image is different to your real body? (0-10):

7. Use the *sliders* to *correct the distortions* until both figures fit together again ("How I feel look like" is corrected as a function of "How I look like").

To what degree do you think that's you? / To what degree do you identify yourself with that figure? (0-10):
To what degree do you think that others see you that way? (0-10):
What conclusions can you draw?

YOUR BODY IN SPACE

8. (The patient must pass her body through in profile).

How many strips are you going to remove?

She removes them

She checks passing through in profile by touching the figure

What has happened? *Check if correct*
How many does the system remove?
What has happened? Why?

9. SUMMARY (0-10)

To what degree do you think that you overestimate your body image, that your body image is different to your actual body?	
From 0 (dissatisfaction) to 10 (satisfaction), to what extent are you satisfied with your body?	
Do you think it is pure chance that the parts you like least are precisely the ones that you overestimate?	
Could we say that your body parts that least coincide with reality are those that you dislike most?	
To what degree would you say that this situation is the same as what you usually experience? (when you look yourself in the mirror, when you compare yourself…)	
What have you learned today?	

2.5. Session 5

a) Relation between virtual environments: Virtual Scale and Kitchen, and The Two-Mirror Room

Following the same aims as those pursued by these two scenarios, this session attempts to combine them, i.e., to establish a relation between the tendency to overestimate weight after eating and the overestimation of body dimensions. Both types of body image overestimations are assessed and related.

b) Guidelines for the therapist

- The indications are those already provided for each of these two scenarios. In this case the aim is to assess the patient's progress (reinforce it when required), and connect the two situations offered by these two scenarios - stressing when looking into the mirror that the patient has just eaten a "banned" food.
- Point out that in the same way that body weight does not shoot up after eating, body dimensions do not increase either. The therapist should invite the patient to question any objective reasons she has for thinking that the food she has just eaten is going to settle directly onto the conflictive body part.
- At the end of the session, therapist and patient should assess everything that has happened. "What conclusions can be drawn from what has happened in the session?"

c) Record/script of Session 5

The record for this session, which also serves as its corresponding guideline, is shown on the following pages. In this case, only the script of the elements already seen in earlier sessions is provided.

VIRTUAL REALITY RECORD SESSION 5
(Virtual Scale and Kitchen, and The Two-Mirror Room)

Name: Date:

KITCHEN

1. (In the consulting room, before weighing, assess the patient's fear of having to weigh herself, and -if avoiding it were possible- to what extent would she avoid weighing or feel the need to do so, when applicable)

2. Weight and discrepancy indices.

3. Foods. Eating "banned" food.

4. Going to the virtual scale
Before weighing herself: fear and avoidance/need ratings
Subjective weight after eating.

THE TWO-MIRROR ROOM
(Remind the patient that she has food in her stomach)

5. Before entering the virtual room:
- What are the body parts that you are most dissatisfied with?

6. In the consulting room, and before looking into the mirror, assess the patient's distress/fear of having to see herself, if avoidance were possible to what degree would she avoid seeing herself, or - applicable - to what degree she feels the need looking herself at the mirror

Distress/Fear (0-10):	Avoidance/Need (0-10):

7. I would like you to model the figure according to how you see yourself. What parts are you going to change?:

She modifies the figure that represents her. Is it that how you see yourself? (the patient can *rotate the figure*)

Distress (0-10):	Satisfaction (0-10):

On touching the second mirror, the patient appears "How I look like". This is your real body. What do you think?
On touching "how I look like", it superimposes upon "How I feel look like".

What has happened?
What parts have you distorted?
What makes you think that your (name the distorted body parts) are larger than they really are?
How does that affect you emotionally?
How does it affect what you do? (avoidance, diets...)
Do you distort more when you have just eaten? What conclusions can you draw from this?
To what degree do you accept that you overestimate your body image, that your body image is different to your real body? (0-10):

Point out that in the same way that body weight does not shoot up after eating, body dimensions do not increase either. The therapist should invite the patient to question any objective reasons she has for thinking that the food she has just eaten is going to settle directly onto the conflictive

body part.

8. Use the *sliders* to *correct the distortions* until both figures fit together again ("How I feel look like" is corrected as a function of "How I look like").

9. SUMMARY (0-10)

To what degree do you think weight remains stable? (set point; weight range; no sudden weight gain)	
To what degree do you fear your healthy weight?	
To what degree do you feel you are able to tolerate your weight?	
To what degree do you accept that you overestimate your weight?	
To what degree do you accept that you overestimate your weight after eating?	
To what degree do you think that you overestimate your body image, that your body image is different to your real body?	
From 0 (dissatisfaction) to 10 (satisfaction), to what extent are you satisfied with your body?	
Do you think it is pure chance that the parts you like least are precisely the ones that you overestimate, and more prominently after you have eaten?	
Could we say that your body parts that least coincide with reality are those that you dislike most?	
To what degree would you say that this situation is the same as what you usually experience? (when you look yourself in the mirror, when you compare yourself…)	
What have you learned today?	

2.6. Session 6

This session reviews the areas seen up to this point, involving those concepts that prove most difficult for each patient in particular.

Relate to the contents that have been dealt with in group therapy.

VIRTUAL REALITY RECORD SESSION 6

Name: Date:

REVIEW SESSION ACCORDING TO THE NEEDS OF THE PATIENT

The therapist may combine the areas and the assessment considered up to this point to review particular aspects (kitchen, foods, scale, exhibit room, mirrors, body in profile) or a combination of them, according to the specific needs and rhythm of each patient.

2.7. Session 7

a) Scenario six: The Mirrored Room

There is a large mirror in this room. The different parts of this are described below:

→ The "How I look like" figure. Translucent. Non-modifiable.
→ The "How I would like to look" figure, on which the desired body is shaped.
→ The "How (a significant person) sees me" figure, on which the body is shaped according to how the patient considers a significant person sees her.
→ The "My healthy body" figure. This is the way the patient will look when reaching their healthy weight. Translucent and non-modifiable.
- A display panel of allows modify (increase and reduce) different areas of the 3D figure: bust, forearms, abdomen, chest, hips, thighs, and legs.

- Objectives:

All these figures are contrasted with the patient's real and healthy figures. The therapist should invite the patient to consider the role that her body dissatisfaction is playing in her eating disorder. It is important she realizes that her body is quite different from her body image, from what is the body image disturbance what has to be eradicated. The most specific objectives are:

- Assessing the discrepancy indices in the whole range of "body images"
- Analyzing the discrepancies between her desired, actual, and healthy appearance. Sometimes the difference between her real appearance and ideal appearance is very slight indeed, and the patient is encouraged to question if it is a good idea to get involved in certain behaviors to attain a body that actually does not differ very much from the one she already has. On other occasions, the problem focuses on a single body part. Patient and therapist analyze the necessary proportions to be kept among the different body parts.
- Analyzing the discrepancy between "How (a significant person) sees me" and "How I look like", and the emotional consequences lying behind this difference.
- The patient should see what her body will be like when she reaches her healthy weight. Analyzing her reasons and emotions along with the patient.
- The patient should question the different versions of her body and realize how body dissatisfaction is maintaining her eating disorder.

- Activities:
- Shaping the "How I feel look like" figure
- Shaping the figure representing "How I would like to look"
- Shaping the "How (a significant person) sees me" figure
- Rotating all the figures
- Contrasting each of these figures with "How I look like" and with "My healthy body".
- Correcting any discrepancies
- Becoming an observer of the distortions found and imagining that these belong to someone the patient loves.

b) Guidelines for the therapist

- Place in context, and immerse the patient in the situation.
- Contrast all the possible body images
- Correct and compare the images with the patient's real and healthy bodies.
- Relate the patient's remarks in this scenario to the group therapy contents.
- At the end of the session, therapist and patient should discuss and appraise everything that happened. "*What conclusions can be drawn from what has happened in this session?"*
- Arguments and conclusions for this session-scenario:

In this area, we have seen the following figures:

1.- "How I look like". The computer shows you the body shape you actually have. You may like it or not, but this body shape has been calculated through your weight and body structure, and these are genetically determined. However, do not forget that the body that has fallen to our lot is what allows us to live and enjoy these years that will never come round again.
2.-"How I would like to look". This is the figure we would like to have. Everybody would like to look more alike a particular model on TV, but we have to keep in mind the following points:

- These are unreal ideals that either are found in people with that particular constitution, or they have been achieved at the expense of serious problems with physical and mental health.
- Which consequences may involve reaching that desired body shape in your particular case? (Probably, having serious problems again: putting my life at risk, pouring years of life down the drain trying to get that body shape, breaking up with my friends, withdrawing from everybody, getting into a vicious circle of "vomit-binge-vomit", and in some cases even dying.)
- Analyze if this ideal is realistic or not.
- Sometimes there is not much difference between the real body and the desired one. Stress this point.
- Insist on the proportions of the different body parts.

3.-“How (a significant person) sees me”. This is the way we think others see us. It may be different to our real body shape, and different to the way we see ourselves. Can you read other people’s minds? Can other people see us differently from the way we really are? Why they only see our negative aspects and not the positive ones?
Just tell me, Does everybody have to like you? Do you like everyone? Of course you do not, so why does everybody else have to like you?
4.-"My healthy body". This is the figure that the computer says would be your healthy body according to your age, height, and constitution. It might not be the body fashion dictates, but it is indeed what your biology indicates. That is the body that will allow you to live and relate with the world. (Occasionally the healthy body shape is very similar to the one the patient had before starting with the disorder.)

c) Record/Script for Session 7
The record for this session, which also serves as its corresponding guideline, is shown on the following pages.

RECORD FOR VIRTUAL REALITY SESSION 7
(The Mirrored Room)

Name: Date:

MIRROR ROOM

1. In the consulting room, and before looking into the mirror, assess the patient's distress/fear of having to see herself, if avoidance were possible to what degree would she avoid seeing herself, or - applicable - to what degree she feels the need looking herself at the mirror

Distress/fear (0-10):	Avoidance/Need (0-10):

2. Modeling of "How I look like". I would like you to model the figure according to how you see yourself. What parts are you going to change?:

She modifies the figure that represents her. Is it that how you see yourself? (*the patient rotates the figure*)

Distress (0-10):	Satisfaction (0-10):
To what degree do you think your body is like that? (0-10):	
To what degree do you think others see you like that (0-10):	

3. Modeling of "How (a significant person) sees me". I would like you to model the figure according to how ... (a patient's significant person) sees you. What parts are you going to change?

She modifies the figure. Is it that how … sees you? Now, that figure is you (*the patient rotates the figure*)

Distress (0-10):	Satisfaction (0-10):
To what extent do you think your body is like that?	
What evidences do you have that ... sees you like that?	
In what situations do you think that ... sees you like that?	
How does it make you feel, what does it make you do?	
Do you think that others see you like that?	
Do you think that view of you matches reality?	

4. Modeling of "How I would like to look". I would like you to model the figure as you would like to see yourself, how you would like to be. What parts are you going to modify?

She modifies the figure. Is that how you would like to be? Now, that figure is you. (*The patient rotates the figure)*

Distress (0-10):	Satisfaction (0-10):
To what extent do you think your body is like that?	
To what extent do you think that it is realistic to wish to be like that?	
To what extent do you think that others see you like that?	
In what situations would you like the most to be like that?	
Do you think you would be happier that way?	
What do you think that image will be like in 20 years' time?	

5. At one end, you see “How I look like”. That is your real body. What do you think about it?

Distress (0-10):	Satisfaction (0-10):
To what extent do you think your body is like that? (0-10):	
To what extent do you think that others see you that way? (0-10):	

6. At the other end, you can see “My healthy body”. That would be your body if you were (or are) in your healthy weight range. What do you think about it?

Distress (0-10):	Satisfaction (0-10):
What are the parts that you dislike most?	
Are there any parts that you like, that you think are all right as they are?	
To what extent do you accept this is how you should be?	
To what extent do you think this is a realistic view of you?	
How do you value yourself this way? How will you feel, how will you be this way? Health aspects. Beauty aspects	
What conclusions can we draw from this?	

7. Comparison of all the figures. They are all different views of you.

Are there any differences among them?
If they were the images of someone else whom you appreciate very much, what would you say to her?
Which would you choose for a person whom you appreciate very much?

8. Comparison/correction of “How I feel I look like”/“How I look like”.
On touching " How I look like ", it superimposes upon “How I feel I look like”.

What has happened?
What parts have you distorted?
What makes you think that your (name the distorted body parts) are larger than they really are?
How does that affect you emotionally?
How does it affect what you do? (avoidance, diets...)
To what degree do you accept that you overestimate your body image, that your body image is different to your real body? (0-10):

Use the sliders to correct the distortions until both figures fit together again ("How I feel I look like" is corrected as a function of "How I look like").

To what degree do you think that is you? / To what degree do you identify yourself with that image? (0-10):
To what degree do you think that others see you that way? (0-10):
What conclusions can you draw from this?

9. Comparison/correction of “How (a patient's significant person) sees me” / “How I look like”
On touching “how I look” it superimposes upon “How … sees me”

What has happened?

In which parts are there differences?
What makes you think that …(significant person) sees you ... (name the distorted body parts) larger than they really are?
How does that affect you emotionally?
How does it affect what you do? (avoidance, diets...)
What conclusions can you draw from this?

Use the sliders to correct the distortions until both figures fit together again ("How (a patient's significant person) sees me") is corrected as a function of "How I look like").

This is the way you are
Can you read other people's minds? Is it possible that others have a different opinion to yours or be wrong?

10. Comparison/correction of "How I would like to look" / "How I look like".
On touching "How I look" it superimposes upon "How I would like to look"

Are they the same?
What difference can you see in them?
What parts have you distorted / overestimated?
What does the fact of your (name the distorted body parts) being different from what they really are make you think? (if this is relevant)
What conclusions can we draw from this?

Use the sliders to correct the distortions until both figures fit together again. ("How I would like to look" is corrected as a function of "How I look").

This is how you are
Is there so much difference? Does everything keep to a proportion? Are there any parts of your body that you like?

11. Comparison/correction of "How I would like to look" / "My healthy body".
On touching "How I would like to lo" it superimposes upon "My healthy body".

What happens?
In what parts are there differences?
What does the fact of your (name the body parts) being different to how they should be to be healthy make you think?
What is the part you dislike most about your healthy figure?
What implications would have this healthy image have on your life?
What are your... (the patient's problematic body parts) for? What would happen if you did not have them?

Use the *sliders* to *correct* the distortions until both figures fit together again. ("How I would like to look" is corrected as a function of "My healthy body").

What would you feel if you were like that?
What would be the most difficult part of being like that? What would diminish of you if you were like that, i.e., what would you lose as a person? Is there nothing in this figure that you like? Does everything keep to a proportion? Are there parts of your healthy body that you like?

To what extent do you accept this image? (0-10)
To what extent do you think that others would accept your healthy body? (0-10)

12. SUMMARY (0-10)

To what degree do you think that you overestimate your body image, that your body image is different to your real body?	
From 0 (dissatisfaction) to 10 (satisfaction), to what extent are you satisfied with your body?	
Could we say that your body parts that least coincide with reality are those that you dislike most?	
What are the body parts you are most satisfied with?	
To what extent do you think that your desired image is realistic?	
To what extent do you accept your healthy image?	
To what degree would you say that this situation is the same as what you usually experience? (when you look yourself in the mirror, when you compare yourself…)	
What have you learned today?	

2.8. Session 8

a) Relation between virtual environments: Virtual Scale and Kitchen, and The Mirrored Room

Going on with the same aims as pursued by these two scenarios, we intend to combine them at this session, that is, to associate the overestimation of weight after eating with the overestimation of bodily dimensions. The two types of overestimation of the body image in all its dimensions are assessed and related.

b) Guidelines for the therapist

- The ones already given for each of these two scenarios. In this case the aim is to assess the patient's progress (and reinforce it when required), and connect the two situations offered by these two scenarios - stressing when looking into the mirror that the patient has just eaten a "banned" food.
- Stress that just as weight does not shoot up after eating, neither do body dimensions. The patient should question what objective reasons she has for thinking that the food consumed is going to settle directly in the conflictive body part. Analyze the repercussions of having eaten a banned food item and its repercussions on all the other figures of the Mirrored Room
- At the end of the session, both therapist and patient make an assessment of all that has happened: What conclusion can be drawn from what has happened at this session?

c) Record/Script for Session 8

The record for this session, which can also be used as its guideline, is shown in the following pages. Although the record brings together the elements of both virtual settings, the clinic will decide if all the questions have to be dealt with, or just a selection of these for each particular patient.

RECORD FOR VIRTUAL REALITY SESSION 8
(Virtual Scale and Kitchen, and The Mirrored Room)

Name: Date:

KITCHEN AREA

- The record from previous sessions is administered.

THE MIRRORED ROOM
(Remember the patient she has food in her stomach)

- The record for the previous session is administered. Each time the patients is going to shape a figure insist on the "now that you have eaten, what parts are you going to modify?"

SUMMARY (0-10)

To what extent do you think weight is stable? (set point; weight range; not getting fat ipso facto.)	
To what extent do you fear your healthy weight?	
To what extent do you feel able to tolerate your weight?	
To what extent do you accept that you overestimate your weight? (If this is the case.)	
To what extent do you accept that you overestimate your weight after eating? (If this is the case.)	
To what extent do you think you overestimate your BI, that your BI is different from your real body, after eating? (If this is the case.)	
From 0 (dissatisfaction) to 10 (satisfaction), to what extent are you satisfied with your body?	
Do you think it is purely by chance that the parts you like least are the ones that you overestimate, and more so after eating?	
Could we say that the zones of your body that coincide with reality least are the ones that you dislike most?	
What parts of your body are the ones you are most satisfied with?	
To what extent do you think your desired image is realistic?	
To what extent do you accept your healthy image?	
To what extent would you say that this situation is the same as the one you normally experience? (when you look in the mirror, when you compare...)	
What have you learned today?	

2.9. Session 9

a) Association of virtual scenarios: The Exhibition Room and The Mirrored Room

Following on with the same objectives as pursued by these two scenarios, the intention at this session is to combine them, that is, to associate the influence of the comparisons established by the patient in their body image and vice versa.

b) Guidelines for the therapist

- The indications are those already provided for each of these two scenarios. In this case the aim is to assess the patient's progress (and reinforce it when required), and connect the two situations offered by these two scenarios - stressing that the patient should remember the comparisons she has just made, before looking into the mirror.
- Stress that each person has THEIR OWN body, and the consequences of wishing to have someone else's.
- Analyze body characteristics as a part of the other characteristics that constitute a person as a whole.
- At the end of the session, therapist and patient should make an assessment of all that has happened: what conclusion can be drawn from what happened at this session?

c) Record/Script for Session 9

The record for this session, which can also be used as its guideline, is given in the following pages. Although the record unifies the items from both virtual settings, the clinic will decide if all the questions have to be dealt with, or just a selection of these for each particular patient.

RECORD FOR VIRTUAL REALITY SESSION 9
(The Exhibit Room and The Mirrored Room)

Name: Date:

THE EXHIBIT ROOM

- The record for the "Exhibit Room" for the previous sessions is administered, only with the photos of the girls.

THE MIRRORED ROOM

(Instruct the patient that she has just seen different types of body and that she has to compare herself with those girls; tell the patient that she is getting ready to go to the beach.)

- The "Mirrored Room" record from previous sessions is administered. Each time the patient is going to model herself, insist on "I want you to shape the figure as you see yourself after seeing the other girls. What parts are you going to modify?" After modeling and correcting the figure: What is good and what bad about it compared with that of the other girls?

SUMMARY (0-10)

To what extent do you think that the concept of weight is something relative? (Age, sex, size, time of day.)	
To what extent do you think that the body is going to deteriorate as time goes by?	
How do you imagine you will be in 10 years – and in 20?	
To what extent do you think you are overestimating your BI, that your body is different to your real body? (If this is the case.)	
Do you think that the distortion is greater when you compare yourself with other body constitutions, above all the slim ones?	
From 0 (dissatisfaction) to 10 (satisfaction), to what extent are you satisfied with your body?	
Do you think it is just chance that the zones you like least are precisely the ones you overestimate?	
Could we say that the body parts that coincide least with reality are the ones that you dislike most?	
What are the parts you are most satisfied with?	
To what extent do you think your desired image is realistic?	
To what extent do you accept your healthy image?	
To what extent would you say that this situation is like the ones you usually experience? (When you look in the mirror, you compare...)	
What have you learned today?	

2.10. Session 10

In this session the clinician reviews the areas he/she considers needs to be checked out, along with the concepts that are proving to be most difficult for each particular patient.

Relate the contents that have been examined up to now in group therapy to what has been dealt with in virtual sessions.

RECORD FOR VIRTUAL REALITY SESSION 10

Name: Date:

REVIEW SESSION ACCORDING TO THE PATIENT'S NEEDS

The clinician may combine the virtual environments and the assessment dealt with up to now to review some particular aspect: (kitchen, food, scales, exhibit room, two-mirrors, body on its side, mirrored room, or a combination of these, depending on the needs and pace of each patient.

VII. THERAPIST'S MANUALS FOR DEVELOPING THE COMPONENTS

WHAT IS BODY IMAGE?

1.-What is body image?

Body image is the representation that each person has of their own body, that is the idea or the image that each person has of his/her-self and also the way one thinks others see him/her.

The way we see ourselves may be very different to our "real" external appearance. There are people who have marks or scars that make their appearance less attractive, but if they have a positive body image that this does not interfere in their daily lives. On the other hand, there are people with no "distinctive" feature (such as scars or burns...) and who nevertheless may believe that their bodies are horrible, which does indeed interfere in their everyday lives.

Activity 1: Close your eyes
To get to know your body image close your eyes, think for a moment about your body, and describe it.

Two of the components of Body Image will be seen in this exercise:

a) The physical traits of our body.
   "dark hair, medium height, 48 Kg., fair skin... "
b) The emotional-cognitive characteristics of our body.
   There are parts of our appearance which we like and others we do not: that is, we value and have attitudes towards our body or particular parts of it: "*nice* hair, *pretty, pleasant* face*, large* thighs and hips *too* wide, *small* feet, *thin* legs and some freckles around my nose which *I don't like at all*."

Both characteristics are closely related. Physical characteristics could be considered as being the "objective" part, but this is not exactly so because they are also dependent on the subjective appraisals that a person makes in a particular culture. Our physical characteristics and above all, the value that we give to these determine not only how we see ourselves but also how we feel about ourselves.

There are studies that show that one of every four men and one of every three women are not satisfied with their physical appearance. Specifically teenagers (particularly girls) display the most negative valuation of their physical appearance. The body parts that produce most dissatisfaction in girls are: bust, hips, waist, belly, thighs and buttocks, and of course weight. This widespread dissatisfaction does not come from nowhere, but is the reaction these people have to not being able to reach the present idea of beauty: very thin bodies, almost without hips, belly, or thighs. This is at present the ideal of beauty and some consider it the synonym of success.

With the pressure that we are currently undergoing in this culture that praises image and body, it is not easy for people to be happy with their body image. Most people would like to change something about their appearance - weight and body shape being the two main sources of dissatisfaction.

2.-Body image in eating disorders

One highly important characteristic of eating disorders is the distortion of body image. This disturbance is seen in the following ways:

Perceptive distortion:

- "Seeing" one's body shape or body size as being bigger than it actually is.
- Disproportionately overestimating the size of specific body parts, such as the stomach, hips, buttocks, waist, thighs, etc.
- The inability to recognize one's own slimness and continuing to see oneself as fat in spite of being far under one's healthy weight.
- Lack of agreement between the weight marked by the scale and the perceived appearance.
- Exaggerating completely imperceptible flaws in the appearance.

Distortions of the information that our body gives us about our organism:

- Disturbance of the sensation of hunger, of feeling of fullness, etc.
  Not knowing if one is eating because of being nervous, angry, bored, or tired
  Never being hungry
  Always feeling full

Emotional-cognitive characteristics:

In eating disorders the concern for physical appearance takes up a good deal of time and causes considerable distress:

- There are negative reactions towards the body, dissatisfaction, abhorrence, hate for certain body parts (which is why these are hidden or disguised).
- Certain body parts are subjected to impossible comparisons (with one's friend, with the latest model), so that one always ends up losing by wanting to have, for instance, thighs that belong to someone else but not to oneself.
- The person's self-esteem depends on her weight. That is, if she puts on weight she feels ashamed, guilty, and frustrated. Nevertheless, if she loses weight, in spite of the fatal consequences of malnutrition, she maintains a dangerous insistence on attaining a thinner silhouette, thinking that "slimming" is an exceptional achievement, something to feel special about.

Activity 2: Which is yours?

Review the previous characteristics one by one and identify which of these you feel identified with.

We know that these distortions are another part of the problem because when someone who has an eating disorder has managed to get over it they themselves recognize that they were in fact very emaciated.

3. How does having a negative body image affect us?

3.1. Cognitive and emotional consequences:

As we have already mentioned, the appraisal that people who are very concerned with their weight make of themselves depends utterly on their physical appearance. For this reason, if we have a negative body image, this directly affects our self-esteem.

The concern for appearance can vary in its intensity. It tends to increase after eating and in situations the person thinks that everyone is looking at her. This attention for one's own appearance makes the person feel nervous and extremely concerned because she thinks that any defect will reveal some negative characteristic, not only about her body but (also) about herself as a person. This is how she thinks:

"At the prom party when we go out to dance, since I have fat hips, everyone will realize this, and look at my bottom. They'll think I'm ugly and fat, and reckon I'm a horrible stupid person who is not worth wasting time on".

Discussion forum 1

Do you think that physical appearance defines people's personality, intelligence, skills?

3.2. Behavioral consequences:

A negative body image can also modify our behavior and our habits. How?

- By avoiding social situations, through believing that we are going to be negatively judged because of our appearance.
- By "strategically" hiding our body by means of clothes, or maintaining body postures that hide the unwanted part.
  "so nobody can see that my thighs are fat, when I sit down I make sure the insides of my thighs don't touch; otherwise everybody will realize that I am awfully fat".
- By comparing and checking: comparing one's own appearance with that of other people,

constantly asking others if we look all right or not, looking in the mirror or weighing ourselves all the time.

- Avoiding looking at oneself in the mirror.

Activity 3: Which consequences do you identify yourself with?
Go through the previous characteristics one by one and identify the ones that seem to reflect your own situation.

Discussion forum 2
Do you think that concern for the physical appearance can make a person change their habits and customs; turning us into people with countless "crazes"?

4. Can we change our body image by altering our physical appearance?

When one is convinced that the only way to improve one's body image is by improving one's physical appearance, it is no wonder one starts doing things such as dieting, vomiting, or exercising excessively, in order to cut down weight and change one's appearance. Nevertheless, we are learning that it is our body image (what we feel, what we value about our body) that makes us unhappy and makes us feel bad with ourselves, not the body itself.

If one is not aware of this last point, one may think that the reply to the question "How can we change a our negative body image? is: "By changing our body"; i.e. by simply eliminating or suppressing the body parts which we do not like. This can be done by surgery, losing weight, or modifying aspects of our physical appearance. But, answer this – will this really ensure that we are going to be more at ease with our body? Do you really believe that if you reduce those kilos/pounds that bother you so much, you will cease to be concerned by diets, to be obsessed by food and accept your own body?

Discussion forum 3
The answer you give to this question might be YES, but before replying over hastily, just think of this: Do you know people who, though being very pretty or handsome, do not like themselves? Why do you think they do not like themselves? Do you know any girl who has lost a lot of weight, who is still dissatisfied with her body or does not like particular aspects, even going so far as to hate them? Do you know any girl who, even whilst being very thin, is still constantly thinking of what food she should eat or goes on weighing herself several times a day, worried about if she has put on a few grams/ounces?

Activity 4: What conclusions can we draw from what body image is and what body is?

When answering these questions we realize that:

- Body image and body are two different things
- Body image does not necessarily match one's own body
- Body image is sometimes very different from one's own body
- It is not our body what presides over our feelings and over what we do, but our body image.

If we insist on thrashing our body without bearing in mind that the really important thing is what we think about it, we are highly likely to make great efforts to modify our appearance, putting our health at risk, and after all those efforts we will not have done anything for being more at ease with our body. Unless we change the way we think and value ourselves we will not get anywhere at all, for all we may strive to change our appearance.

Discussion forum 4

What may happen if you invest your time, health, and years of your lifetime in attempting to modify your body?

What do you lose if you try to contemplate the possibility of exploring and learning about your body image?

Here, we are going to put forward this alternative path with the aim of helping you to learn to love your body, appreciate it, learn to feel at ease with it, and live it realistically.

Activity 6: Reviewing your own history

Now we are going to review your own background a little:

What have you attempted to do to improve your physical appearance or for your physical appearance to be as you would like it to be?

What consequences has this behavior had on your health and on your family, social and working life, etc.?

After you had done those things, were you any better, did you feel any happier, did you achieve your aims, did your body image improve? Why?

Would you do this again, would you do the same things to change your body all over again?

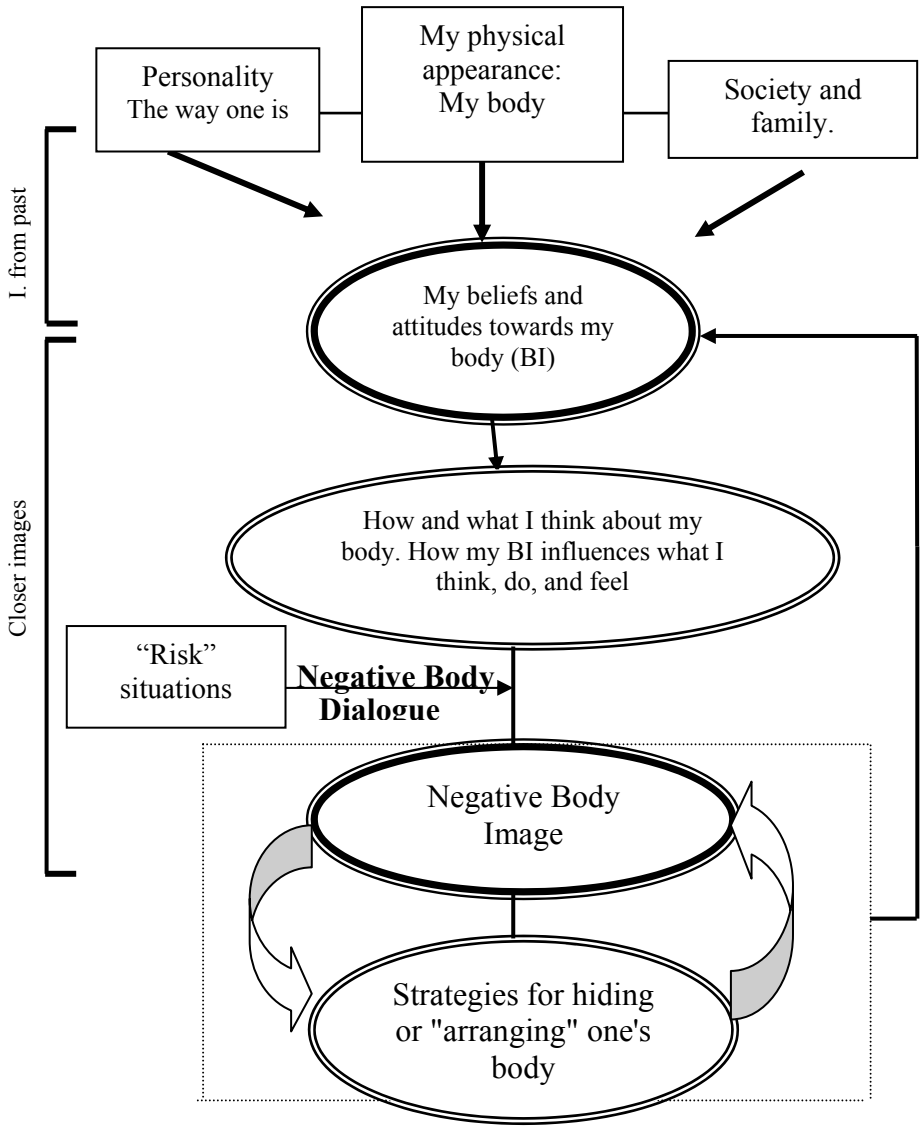
Would you advise someone you dearly love, for example, your sister or your daughter, to do the same things to be at ease with their body? Why?

HOW IS BODY IMAGE FORMED?

1. How is a negative body image formed?

In a previous section we saw what body image is. In this section we will see how a person's body image is formed throughout her life.

Formation of a Negative Body Image
(Adapted from Cash, 1991)



So you can see how all the factors that we are going to examine relate to one another, have a look at the diagram from the model "Formation of a negative body image".

Body image is a complex concept and many different factors and experiences are involved in its development. What we are going to explain does not mean that you had gone through all these experiences, since everyone has had a different development, but you will surely recognize some of them.

We can distinguish between two types of influences in the formation of body image:

a. *Influences from the past*. These are past experiences that, during a person's development, conditioned the way she sees herself, that is, her body image.
b. *Closer influences*. These are daily influences that directly affect how we feel and see our body.

a. Influences from the past

- "My physical appearance: my body". Unlike animals, we have the ability of being self-conscious, and can make a representation of ourselves, as is the case of body image. Our body is part of our awareness as individuals:

- On one hand, our body is our limit as individuals, and marks out our boundaries as people independent from the other objects and beings in the world; this is what individualizes us.
- On the other hand, our body is the instrument through which we relate to the rest of the world. Thanks to our body we can talk, smell, feel, and touch. Most two-year-old children are able to recognize themselves as "individuals" when they see themselves in a mirror.

- "Society and family". Since childhood, we compare ourselves with the ideal models and the messages that come to us from the mass media. Children learn from an early age what is "good" (how one should be) and what is "bad" (what one should not be) and this is also applicable to weight, height, musculature, hair color, and even clothes brands or dress style. Since childhood, we value our appearance depending on how much we resemble these ideals.

Discussion forum 1
What are the ideals displayed by the mass media? What do they consider beautiful, appealing, as a synonym of personal, professional, and social success? How might a person who does not meet these standards of beauty feel?

Over the last few decades, the mass media in western societies have been telling us that slimness, a body with practically no curves, is the model of beauty desirable for women.

Our "closest" society, that is, our family, friends, and acquaintances cannot withdraw from the culture in which they live, so they are also exposed to the influence of the mass media. This is why the values instilled by the family are another important factor in the development of body image. Your siblings or your parents can become loudspeakers for those messages connected to the body.

On the other hand, the physical appearance is the commonest butt of the "jokes" told by children during their childhood. During our schooldays we have all had to hear something like "*you've got Dumbo ears*", *"fat cow",* or *"big bum!"*.

When we reach puberty (the beginnings of adolescence), there is an enormous revolution of changes preparing our body to become an adult organism. The body is in a transit state; it is no longer that of a child, and neither that of an adult. Sexual differentiation starts to appear (such as bodily hair, bust, hips, the voice changing) and the hormonal revolution leaves traces of its presence, not only in our emotions (one minute I'm happy and the next down in the dumps, without knowing why), but also in those awful spots that they pompously call "acne". At this time of life, we are highly concerned about these changes and the people around us judging us.

The way we perceive and live our new appearance is crucial in the formation of our body image. Just as we did in our childhood, we compare ourselves with what we consider "good-looking" and with our peers, making even greater demands than in childhood and valuing ourselves according to all this.

Activity 1. Remember (or think about) your own adolescence
Can you remember what aspects of your body were the ones that you liked most in your adolescence? What were the ones you liked least? Were you bothered about what others might think about your appearance? Did you spend more time thinking about your appearance than at previous ages? Why?

The human body and its appearance are always changing. We have already talked about the evolution that occurs in a child's body as it changes to that of an adolescent, and it will go on changing when it gets old.

Activity 2. Imagine yourself in the future

Think of yourself in 5 years. How will you look? What will you be doing?
What about in 15 years?
And in 30?

The body can also change because of more dramatic causes, such as having suffered an accident that involves some type of disfiguration or physical anomaly. Nowadays, it is quite common for people to have aesthetic surgery to improve or keep control over their appearance. But it is also true that some people constantly submit to surgical operations in an attempt to control aspects that are not controllable, either because they are hereditary and constitutional aspects, or because they form part of the natural aging process. Where is the limit?

Discussion forum 2

Do you know any celebrity who is constantly at the operating theatre or having other things done to improve their appearance?
Do they achieve their aim?
Do you know anyone from your own setting who has gone through this?

Changes in appearance are a natural consequence of people's development. We can control some of these changes such as cutting our hair or leaving it long, wearing contact lenses, etc.. Nevertheless, there are aspects which it is not within our power to modify, such as our height, the color of our eyes, having freckles or hereditary alopecia (baldness), or other characteristics of our organism. Among these physiological characteristics are weight and our body shape.

- One last factor in these influences from the past is what we have called "Personality" or "the way we are". Whilst there are people who attribute hardly any importance to their appearance, for others their aspect is of vital importance. In this last case it is not only the fact that such people devote so much of their time and energy to their appearance, but that they consider that their value as persons depends on their physical characteristics. Here self-esteem is crucial. Children, adolescents, or adults who have been developing a positive sense of themselves are less vulnerable to "what should be beautiful" according to their culture, to jokes, and to the insecurities that others provoke in them due to their appearance.

Discussion forum 3

Mr. Jones has fulfilled a career, he is a hard-working person, and very good in his job. He works many hours per day and, even at home, he is constantly on the phone to solve work matters. It does not matter whether it is a holiday or not. Mr. Jones has a wife and two children, but does not devote much time to them, because the most important thing for him is his work. He neither has any specific hobby because he lacks the time and he does not really enjoy anything else apart from his job. It would seem that he only feels at ease when he works.
Do you think that this person might be missing something?
What would happen if he loses his job?
Do you think that this person could improve his quality of life (including his job) if he did something else?
Do you think that his development as a person could be complete?
Now substitute concern for physical appearance for the word "work".

When facing any particular physical appearance, we can choose between allowing concern and dissatisfaction to invade us, or trying to improve the way we see and feel ourselves and to get along well with our bodies. The latter will furnish us with time and motivation to devote ourselves to doing other things that will help us to feel happy.

Up to now we have seen the "breeding ground", the predisposing factors to have a positive or a negative body image. These factors can make us vulnerable and prone to having a distorted body image, which makes us unhappy. However, having a permanent negative body image depends also on certain circumstances that act as a "trigger" (precipitating factors). We shall now look at how a negative body image affects our everyday lives.

b.-Close influences

All the experiences mentioned above mean that we have been learning a number of things about our appearance, that is, to think in a certain way about it. Nevertheless, we have already seen that this estimation (body image) is not necessarily always correct or in line with reality.

After these basic assumptions have been created (our beliefs and values as regards what a perfect body is, what a perfect body means to us, if we are or not the "owners" of such an ideal body or are far from it), they will guide our behavior, above all in any situations that we consider important or in which we feel threatened.

These events, which act as "risk situations" to activate our basic assumptions, are normally to do with wearing certain clothes, showing our bodies (for example, at the gym), looking in the mirror, weighing ourselves, or going to a social gathering, In these situations we compare our body image with our ideal body image, with the one we would like to have. If our body image is too far from the body image that we consider to be "ideal", an "internal dialogue with our body", full of negative thoughts and emotions, will take place. We will thus end up seeing ourselves a lot worse than we are, with all the consequences caused by having a negative body image that we saw in the previous manual.

Activity 3 How does having a negative body image affect us?

Can you remember how having a negative body image affects us?
What do you think?
What do you feel?
What do you do?

After this pattern has been established, it works in a vicious circle. In theory, one may think that hiding some of our features, avoiding certain social situations etc. will help us to survive the hard time and will bring us temporary relief. However, what is really happening is that we entrench ourselves deeper in our negative body image. Thanks to these "strategies" we muddle through and do not give others a chance to see us how (we believe) others see us, but without providing the opportunity to see if the way we think about ourselves actually matches reality.

To sum up, we could say that the changes in one's own appearance are a natural part of human development: childhood, adolescence, and aging. As we have already seen, we have a choice as regards some physical changes, for example, a change in our hairstyle, but other changes are not within our control or up to us.

Remember: our body is not our body image. Some people have no trouble with having an appearance different to others, whilst for others that physical difference is a source of constant suffering. A person's outward appearance is not a determining factor in how one feels inside.

The influences from the past are factors involved in the development of our body image (either satisfactory or unsatisfactory) and, since they are important, we would like to propose an exercise: review your own past influences, your own history.

Activity 4: Review the circumstances that have contribute in the developing of your negative body image

- At school
- At your first communion celebration (*bar mitzvah* or other)
- In your early adolescence (12-14 years)
- In your late teens (15-19 years)

Try to remember how you looked at each of these times, how you felt, what remarks others made about your appearance, if you compared yourself or if they compared you with some other girl, or if you had some unfortunate experience as regards your physical appearance (a joke or rejection).

- Fit these experiences in the model that we mentioned above

There is no way you can change neither your culture nor what you have already lived through. However, knowing these factors and the power that they exert will give you a healthier and more objective perspective of your body image and help you to behave differently from now on.

Nonetheless, culture and the past do not condition us totally. If that were the case, most people would be unsatisfied with their appearance, would not accept their physical imperfections, would have unfavorable attitudes towards their physical appearance, and would get along very badly with their body, which does not in fact occur with most people.

It is important to get to know the influences from the past, but still more to delve into our close and present influences, which are the ones that affect how we experience our body image now. Rather than these past influences, it is those conversations we have with our body, what we tell ourselves, and the pejorative thinking about our body (negative body dialogue) what keeps a negative body image.

You can start to gain control over your body image. The aim of this program is to help people to develop a friendlier relation with their body. Although there are things about our body that we cannot modify, we can indeed feel more attractive and be less worried and anxious about our appearance. This way you will like yourself more as a person and improve your relations with others.

WHAT IS WEIGHT?

1. What is (bodily) weight?

We all know that weight is a measurement expressed in units of grams. We use this term to say things like: "How much weight I've put on / lost...". Many people talk of fatness or obesity as meaning "excess weight". This simplification leads one to the conclusion that obesity means excessive weight, but this is not strictly true.

Our body is a complex organism consisting of a wide range of tissues, muscles, bones and viscera, which are all essential for our survival. One of these is fatty or adipose tissue that, apart from protecting us from the cold, provides the energy that our muscles, our lungs or our heart require to be able to work.

When we talk of surplus fatty tissue in the body, this is when we are really referring to obesity, i.e. obesity is not excess weight, but excess fatty tissue. Though there is indeed a relationship between these two things we should never forget that they are not the same.

As a general rule, when people stand on the scales what they wish to find out is how much fatty tissue there is in their body. They will be very likely to take off their coats for example, so that their weight is more exact, but what they cannot take off are their bones, lungs etc., which are nevertheless also reflected in the final weight. All this also forms part of our weight.

Activity 1: Does the inside of our body weigh?

Imagine one of those anatomy games. Imagine that you open this and see all the internal organs that we have.

-Does each of those organs have a weight?

-When we lose a large amount of weight does this affect our internal organs?

2. We do not have ONE WEIGHT. We have a WEIGHT RANGE

We might be tempted to think that the rest of our bodily organs keep to a stable weight and thus what varies is the fatty tissue (the weight that we put on or lose). But this is not true either. A person's weight can vary several hundreds of grams during the day (which is why professionals recommend always weighing oneself at the same time), and also depending on a woman's menstrual cycle. For example, the week before the period the body retains liquids, which produces a sensation of swelling and an increase in weight. One should not forget that 70% of a person's weight depends on the water in the body. The normal daily changes in bodily liquids are what are responsible for the variation in weight.

If we think that we should always be the same weight and are not aware of these natural variations, it is quite understandable that our spirits should sink dramatically when we put on weight and we become so terrified of what the scales will say. But why should we spoil our day just through having weighed ourselves at the "wrong" time?

Discussion Area 1

We shall use the example of Carla, a person who had the same problems as you, and what she herself found out about weight. A few months ago, Carla was so concerned about her weight that she was constantly resorting to the scales: every time she went to the bathroom, before eating, after eating, before urinating, after urinating, before taking exercise, after taking exercise, when she didn't take exercise...

How do you think Carla felt?

What conclusions can we draw from Carla's experience?

How did all this affect Carla's habits?

This experience was useful for Carla to learn that weight varies greatly during the day and depending on the situations. She also found out for herself that the most logical thing is to weigh oneself at most once a week.

This is why it is no use becoming obsessed with a weight value. Our bodily weight normally swings through a range of 4 to 5 kilos depending on the situations, on the state our organism is in, on stress, on our activity etc. and the best part of all this is that the body has a natural

tendency to remain stable in this range, as we shall see later on.

Apart from this, as Carla learned, there is no sense in weighing oneself at all times, as the sensible thing is to weigh oneself once a week, on the same scales and more or less at the same time.

3. Can I have the weight (range) that I want?

We must all surely have said sometime when we looked in the mirror: *"I wish I measured 8 cm. more" or "I should like to have blue eyes"*. We might at worst have been a little upset, but did not feel any need to make ourselves grow by hanging ourselves up by our legs to try and stretch our bones, nor did we try to dye the pupils of our eyes with blue paint. In other words, we assumed our height and the color of our eyes as they are. All we did was forget all about the matter and accept these features of our body.

Height, eye color, hair color are all *individual qualities* of our physical appearance which are determined mostly by genetic inheritance. Everybody has them to some extent or other.

Another characteristic of our physical appearance, similar to the previous ones, is *bodily weight*. What a person weighs is determined by genetic characteristics just like our height and eye color. We are all different in our weight even though we may be of the same age or have a similar physical structure. Just as we cannot modify our height, neither can we modify the weight range that is genetically assigned to us beyond a certain extent, unless this is temporal and going against our own health.

Activity 2: Looking back on family photos

Do you want to know your genetic inheritance as regards your weight? How about trying this game? Look at your family photos: father, mother, uncles aunts, brothers and sisters, grandparents. Is there any constant in these photographs? Who do you look like?

This can not only be seen in your family. If you collect photos of other people that you know, or famous people, you will see exactly the same thing happening.

Wouldn't it be strange to hear someone say: *"I want to be the same height as such and such, and I'm going to do all I can to succeed"* but we are doing exactly the same when we insist on weighing the same as the Top Model or friend whose body we envy.

With today's pressure about "weight", most often the weight we would like to be is very like the advertisements for sales in which the most important thing is to be "even lower!" and even so that value will vary depending on the country we live in (England, the United States, Spain...). Nevertheless, EVERY single person has THEIR OWN "ideal" weight.

4. What is natural weight?

For some years studies have shown that the *range of bodily weight is stable in the long* term, which means that even though we may manage to reduce or increase this by diets or other activities, our weight range remains constant in the long run (if we let it). This is why it is called the *natural weight range*: our body's physiological mechanisms prevent a change in weight beyond certain limits, either through overfeeding or eating less.

Discussion area 2

Do you know a case of someone who was overweight and attempted to slim? What happened in the long run?

There are also people who need to put on weight because they are so thin. Do you know any cases of this? Do you know what happened in the long run?

In the fifties a team directed by Ancel Keys analyzed the effects of fasting on human behavior (known as the Minnesota study). This study was applied to 36 volunteers, all healthy males, and consisted in their eating half of what they normally ate, over a period of 6 months. This first phase was followed by a period of 3 months' food rehabilitation, during which they were gradually fed back up until reaching the amounts of consumption that they previously practiced.

During the period of food restrictions, the subjects lost on average 25% of their weight and underwent different psychological disorders fairly similar to what happens in eating disorders. But the point we wish to make now is about what happened to their weight during the "re-feeding" stage. In spite of several sprees on which they thoroughly gorged themselves, the volunteers did not get fat. None of them reached obesity. On average, they went back to their original weight plus 10%. Later on, over the following 6 months, their weight gradually started to drop. At the end of the follow-up period, they went back to the weight they were at the beginning of the experiment, that is, their original weight.

This natural defense of the organism designed to keep the weight that has been genetically determined applies both to wishing to slim and wishing to put on weight, i.e. natural weight is defended both downwards and upwards. This can be illustrated with a study that attempted to produce experimental obesity. In the late seventies, the team formed around another researcher, Sims, attempted to produce obesity in a group of males of normal weight. For 6 months they doubled their customary consumption. Most of them put on a few kilos fairly easily at first; but soon they became hypermetabolic and could no longer put on weight. In fact, one of those persons did not put on weight even though his calories were raised to 10.000 per day!. Later on in the following stage, when these people gradually went back to eating what they ate before the study, most of them returned to their original weight. The only exceptions to this rule were two who put on weight more quickly than the others and ended up with a few kilos too much. These were precisely the two people who had a family history of obesity and diabetes.

- *Keys and Sims' studies illustrate most people's extraordinary resistance to putting on or losing weight. According to the concept of "natural weight", the body weight is regulated by physiological mechanisms that oppose any departure of the weight from the value pre-set for the body, either by fasting or over-eating. This defense regulation is performed by the organism through the heart rate, the breathing rate, the blood pressure, the body temperature, the levels of glucose in the blood, etc.*

5 How is natural weight maintained?

Weight regulation works like the heating thermostat in a room at home. After the temperature has been set, the boiler gets going until this previously set temperature is reached. When it reaches this, the boiler temporarily switches off whilst that temperature is maintained, but if a window is opened and the cold gets in, the boiler automatically starts up as the temperature drops, burning fuel to return to the temperature previously set.

The human body works in a similar way and tends to maintain a bodily weight within a certain range, for all we might do to alter it.

Just as the heating system had a way of regulating the temperature, this would be the role played by the metabolic rate if we apply the example to the human body.

The metabolic rate is the amount of energy that a body burns up to remain alive. Even when asleep, our body is continuously performing all kinds of activities (breathing, cell life, digestion, keeping the body temperature at 37º, etc.) and producing heat. It is calculated that 75% of the daily calorie consumption is used on vital functions. All these functions consume a certain amount of energy and represent what we call the metabolic rate.

If a person's weight is over the amount determined by his or her natural weight range the metabolic rate burns more energy to carry out the same activities, and thus brings its real weight down towards its natural weight. On the other hand, if the person eats too little and does a lot of exercise, (i.e. their weight is under their natural weight) the body gets ready as if it were to go hungry. The metabolic rate drops by consuming a lower amount of energy to carry out the same activities. The result of this is that the body will again try to regulate a weight under the level it should be to bring this back to the natural weight.

When you go beyond your natural weight by reducing this, your metabolism reacts and starts

to go more slowly to attempt to keep energy. Your body starts to realize that you are in a state of semi-inanition and will attempt to use the few calories it receives in the most efficient way possible. You might start to sleep more, your bodily temperature might drop (which is why so many anorexic people complain that they are cold) and after a great weight loss, the menstrual period fails to occur. The reproductive system "closes up" because such bodies are no longer prepared to be able to go through with a possible pregnancy. Many people who go on diets undergo uncontrollable urges to gorge themselves in binges. This is because their body is telling them that it needs more food than the amount it is being provided with to function properly.

On the other hand, when the obese cut down their weight by means of fast and unbalanced diets, the amount of fat that they get rid of is known to be very little and what is in fact lost is water and lean flesh (part of the tissue of muscles and vital organs). What is more, it has been shown that only 3% of the people who have successfully carried out a weight loss program for 15 weeks maintain the weight reduction after 4 years.

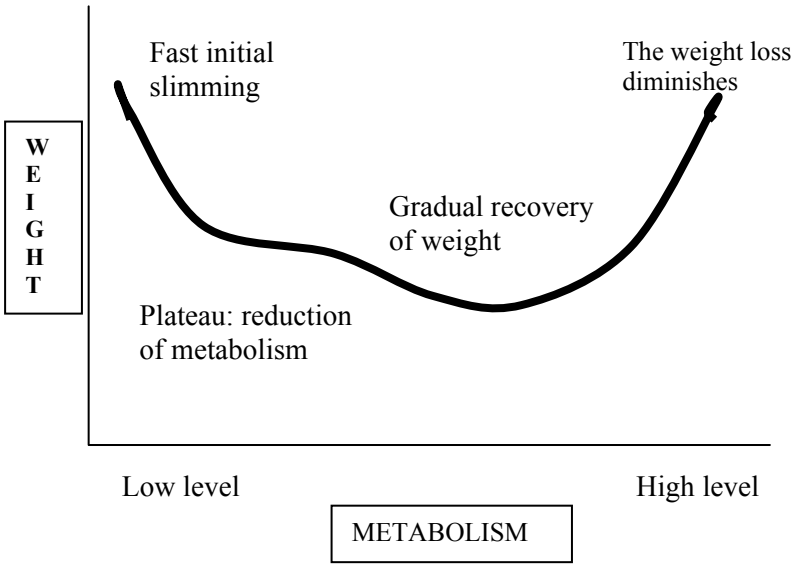
What can be learned from this is that some people's state of being "overweight" is really a "normal" or even an "ideal bodily" weight for them. Many obese people are constantly hungry and undergoing a chronic energy deficit, as they desperately try to keep their weight under the set point that is biologically predetermined for them, even though they feel under pressure to slim. So many people who are statistically overweight and try to diet might actually be biologically underweight.

People who go on a diet and people with eating disorders prove their capacity to "suspend" their bodily weight temporarily, but they are not freed from the constant physiological pressure to return to the natural weight that their body needs.

The process involved tends to be as follows. At first a drop in weight is achieved relatively easily. The dieter becomes very happy, thinking that the system is working, and starts to ignore the signals sent by his or her body. By some time later the metabolism inevitably starts to slow up its pace and the person will get angry because although he or she at first lost several kilos, no more weight is lost even whilst doing the same. The doubts as to whether they are doing something wrong or whether they should go on to an even stricter diet start to make the person despair, above all when they have one of those "horrible" days when they have eaten something they should not have and the cycle starts all over again.

On the other hand, as we have already seen, what the data indicates is that in over 90% of the cases the weight that has been lost is put back on in roughly five years. Furthermore, once this process has started, given that the metabolism will work at a slower rate, it will get increasingly difficult to lose weight. The greater the attempt to force the organism, the more it attempts to defend itself. The less we eat, the more our metabolism will slow up to compensate for this. The following graph illustrates this body defense.

- ***Loss of weight and metabolism***.
- *Taken from Johnston (1996)*[2]



One consequence of having this bodily mechanism is that when hypocalorie diets (low in calories) are abandoned, returning to a balanced diet with all its components, we accumulate more fat and gain more weight than we have lost, since the organism has become used to a minimum energy consumption. This is the "yo-yo" effect found, for example, in certain persons with eating disorders. This effect starts to regulate when food habits are stabilized and the person goes back to being in the range of their natural weight once more. As we will see, the "best method" to slim becomes in fact the most efficient method to put on weight.

6.- Why the natural weight is useful

As we have been seeing, people's natural weight is genetically determined. Any attempt to keep this under their normal level will trigger off the body alarm, which prepares its weapons to defend itself from the attack. The precise mechanism by means of which the body defends its bodily weight has still not been determined, but the evidence for this defence is unquestionable and this phenomenon has nothing to do with aesthetic preferences, which may vary from age to age.

Why do our bodies seem so capriciously rigid? In Nature nothing is left to chance. The fact that our body resists change and that our weight is physiologically regulated around our natural weight range (which the physiology of the body itself attempts to defend), has an evolutionary sense which has contributed to our survival as a species. For thousands of years of human evolution, one of the main threats to survival has been starving, going through times without food. If weight had not been carefully modulated, animals (including the human being) would have died when food was scarce. In fact, when hungry, any living being relegates all its activities to the primary impulse to eat.

Within this evolutionary sense of saving energy and the conservation of the species, it calls our attention that one of the first symptoms of an undernourished body (in the case of women) is the disappearance of the period. Why? There are many reasons for this, but one of them is

- [2] J. Johnston (1996). Porqué no me gusto. Barcelona: Paidós.

undoubtedly that, as the proportion of fat in the body drops, if that organism is not even capable of maintaining itself, how can it be ready to procreate another being?

Our organism is very wise and we are very well designed. Part of this design is its own regulation to defend its genetically determined natural weight, or in other words, our own biological defences.

Did you know that in the autopsies of the emaciated the degree of deterioration and reduction of tissues of vital organs (heart, liver, kidneys…) is proportional to the percentage of weight lost?

Our "natural weight" may well not be what is marked by fashion, nor that of the person we so admire, or who we like so much. But just as for our eyes, our height or the size of our hands, this is what is marked by our genetic inheritance.

It might be better to accept and learn to live with the body we have been given and not try to do things that we know in advance are ineffective. Our biology insists that we should cease to have a "desired weight". On the other hand, what seems sensible is to accept a weight range which may swing to and fro some 5 kilos. This range should never be under 85% of our natural weight, as otherwise we will start to undergo the physiological and psychological consequences of inanition (including occasionally gorging ourselves frantically, as has already been said).

7. The Body Mass Index

As we have been seeing so far there is a considerable amount of misleading information involved in assessing whether one is overweight or not. This is quite understandable, since if one takes the models, TV hosts or actresses as being normal and compares oneself with them, most people will indeed be overweight.

How can one measure fatness or thinness? As we already mentioned, weight has tended to be used as an indicator of fatness. Nevertheless, being fat is not simply a matter of weighing more. As we have seen above, when we talk of kilograms we are not only referring to the amount of bodily fat, but also measuring bone structure, liquids, organs and skin, meaning that “kilos” are not real indicators of somebody’s amount of fat or fatness.

Another way to measure this is to take into account the ratio between weight and height. But this is not a good method either, since people with a larger bone structure weigh more than others with a fragile or weak structure, and we cannot say that the former are obese.

One of the scales that has been used most widely in all western culture for determining “ideal” weights are the ideal weight Tables of the *Metropolitan Life Insurance Company*, which were drawn up in 1943 to determine the relationship between obesity and mortality. These tables were created to take into account the likelihood of the people insured dying and thus work out how much money the insurers would have to risk and how much the insured would have to pay. Nevertheless, later studies have confirmed that these tables are only applicable to the economic and demographic society of 1940s’ white America and not in the least valid for the society of year 2000, meaning that there is no sense in appraising ourselves with these tables. It would be like trying to measure ourselves with a 90 cm. meter rule!

What is more, the following points have been made about the “ideal weight” tables:

- They indicate that people should weigh 10 per cent less than the amount given in healthy weight indices.
- The tables are not fixed, but should be updated from generation to generation because the average height and consequently weight is increasing all the time.
- There is not a single ideal weight for each height but instead a wide range and there is no general agreement as to what point from the range to choose (which confirms what we said earlier about having to bear in mind not ONE weight but a RANGE).

The most serious thing is that we consider these tables - with their pompous title of *ideal weight tables* - to be the Bible of weights, and depending on whether we match the values given

in them we will either start to go on a diet or detest our own bodies.

When these tables started to be made, doctors were very much aware that the extremely obese had a great mortality risk (which is why insurers take such notice of the parties they insure). It is true that obesity entails a great risk for health, but being overweight is not the same thing as being obese. Now, fifty years later, when the whole world has insisted on slimming, they are also starting to be aware of the fact that extreme thinness also entails the same risk of death. It is healthier to be slightly overweight than to be constantly putting on and then losing weight.

The fact of a person's weighing 50, 60 or 70 kilos does not tell us anything, because this must always be compared with someone else to know if one weighs more or less than – whom? The best idea would be, as we have already said, to compare oneself with oneself.

The best way to determine if we have a healthy weight or to find out if we are over or underweight is an index which establishes a ratio between size and weight, the Bodily Mass Index, which is given by the formula:

$$BMI = Weight\ (kg) / Height^2\ (m)^2$$

This index can be calculated regardless of whether you are a man or a woman and is applicable to any bodily constitution. It furthermore gives a sound correlation with more objective measurements of the fatty tissue and is a good indicator of the individual's nutritional state.

BMI values
<16- Weight extremely low
16-18 Significantly low
20-25 Healthy weight
27-30 Overweight
30-40 Obesity
40 > Morbid obesity

Activity 3: Calculate the BMI

Would you like to know what range you are in? Calculate your BMI and find out what weight range you are in.

Try to guess someone else's BMI. Then, when you know their weight and height, work out the calculation and check to see if you were right or wrong.

Calculate the BMI of people who catch your eye a lot or with whom you tend to compare yourself.

8.-Ideal weight, yes, but …ideal for whom?

The fashion of being slim is a tenet only applicable to western culture. We are assailed with advertising models who are unattainable and unreal for most people. Nevertheless, as we have been seeing, our weight is an individual and natural characteristic, quite apart from being stable in the long term. The fact of the diets put forward not working, clearly failing even, and thus not attaining this canon of beauty produces frustration and psychological problems. If, on the other hand, we do attempt to attain it, this may result in serious physical problems.

After seeing all this – why do they continue to harass us with all this advertising about being overweight and in favour of dieting?

If you take a close look at the matter, there are magazines published dealing exclusively with matters of nutrition and diets, lots of advertisements, awful publi-reports on hundreds of treatments for slimming and - according to them - all of them are effective! But what is more, when these treatments fail, logically, they tell us that this is not the method's fault but the person's lack of willpower, of course.

This phenomenon is easy to understand if we realize just what kind of vast figures are involved in the slimming and nutrition business. For these big companies, there is indeed an

ideal weight which anyone can reach "just by making a little effort".

As Alemany states (1996) "...behind this advice on nutrition there lie intelligent commercial approaches, for example the constant struggle between sugar manufacturers and artificial sweetener makers, the one between olive oil producers and those of other eatable oils or fats. We only have to remember the huge amount of advertising given to *diet* products and the almost automatic association of these products with health" (page 52).

This business can be (as it is in fact proving to be) an inexhaustible gold mine making huge sums of money out of many people's suffering.

9. Conclusions

Being our natural weight is no illness, so the treatments which are said to be intended to cure us (such as slimming diets) are bound to fail, apart from causing us dissatisfaction and despair. We have to realize that it is far more dangerous for our health to seek to live up to ideals that are unattainable for most people through unbalanced diets and behavior patterns that are harmful for our body than to learn to live with our body and to love this as it is, i.e. unique and different to all the others.

What would happen if we did reach that desired weight anyway? Could we eat what we want and no longer feel that impulse to go on a binge? Would we like ourselves and no longer be worried about our figures? Would we be any happier?

The reply might well be no. If the problem is one of being unhappy with oneself, in spite of having lost a few kilos we would still be in a body which we continue to dislike. If people continue to have a negative body image, however much their body changes they would go on being ill at ease with themselves.

We should not desire the body that we had when we were 12 years old, nor the one we will have next year, but instead learn to love our present body. There must be people who like the way we look.

We are only going to have one body in this life, so we had better accept it, pamper and take care of it and above all love it.

How are others going to like us if we ourselves detest our body?

If we look horrible to ourselves, how are other people going to see us as pretty or handsome?

The first step is to accept ourselves as we are. Our body is not a coat that we can undo and take off, or change for another. It is difficult to live with our body if we do not appreciate this or like ourselves. Here we are going to learn to get to know it, to talk to it without insulting it and to improve our relations with it. Just think that acceptance is not the same as resignation. "Resignation" has a sense of frustration and failure. Resignation is only any good for moaning and relishing one's own miseries without seeking a way out. "Acceptance" has positive connotations. Accepting a situation is adaptive and healthy mentally. The situation is valued, one's own virtues and limitations are recognized and it is from this balance that we can get the most out of ourselves, as otherwise it would be like banging our heads against a wall.

Improving our body image is not a matter of irrationally "transforming" our body but instead of changing the way we treat and appraise ourselves.

Beauty is not only the physical appearance: there are many people who look attractive and pleasant in our eyes and yet who are very far from what we consider to be a Top-Model. These are people who are happy with their body and this is reflected in their physical appearance; they pamper their bodies, take care of them and enjoy showing them off.

Probably one of the healthiest and important things we can do for ourselves is to learn to accept, love and respect ourselves.

WHAT IS BEAUTY?

1. The value of appearance

A person's physical appearance is a source of information about some characteristics of people: their sex, age, race, etc., which is why it is not outlandish to consider that we often tend to judge people by their physical appearance.

But physical appearance only lets us discern a person's external aspect, not the way they are, their intelligence or their friendliness. This is why many of our attitudes and beliefs about the physical appearance are wrong and lead us to the mistakes typical of being swayed by "the first impression".

Discussion Area 1

Answer this: Would you buy a book going only by its cover?

Does judging a person by their physical appearance give us any reliable information as to what that person is like?

Activity 1 Would you let yourself be swayed by the first impression?

Let's try a sort of experiment:

Tell me the things that are most important for you and what you notice when you get to know a friend. By order of preference these are:

1.-.....

2.-.....

3.-.....

4.-.....

5.-.....

You must surely have mentioned many facets apart from their physical appearance. If you judge others by a set of qualities, why do you judge yourself only by a small part of your physical appearance?

If we can see that it is a mistake to judge people only by their physical appearance, can we judge ourselves only by the way we look?

Now, let us go a little further and see another of the mistakes concealed behind letting ourselves be taken in by appearances: thinking that "what looks good *is* good", in the sense that we think that a person who we consider to be attractive is a happy person, someone successful, interesting, balanced and sociable. There might well be some truth in these "prejudices" because to a certain extent people with the best physical appearance can occasionally have certain social advantages and in theory people prefer to see attractive persons as friends, lovers or employees.

That is why it is not strange that people should want to look better and spend millions of pesetas every year on fashion clothing, cosmetics, diets, hair-restorer and surgery for molding certain body parts. People logically expect to reap the benefits resulting from this physical attractiveness, but they might not manage to become all they expected to be. If this were the case, attractive people would be much happier than less attractive people.

Discussion Area 2

Are attractive people by definition happier than people who are not so attractive?

The reply to the previous question would seem to be NO. Attractive people are not always happier; what is more, research has been done which shows that attractive people can sometimes be seen negatively by others: they may be considered selfish, conceited, unreliable, too delicate to do certain work, or could be treated with envy, jealousy or seen as a "dumb-blonde" type sexual object.

From what we have seen, perhaps the best thing would be to lie around the average of physical attractiveness, to be "one of the crowd". Another interpretation that we could make is that rather than being a 9 or 10 on the attractiveness scale, it is better to feel at ease with oneself, amongst other things, with one's own physical appearance.

Do you remember what we said about the body image? The body image consists of the

attitudes that we have about our own body, or in other words the thoughts, feelings and emotions which we have in respect of our own appearance. This is the very reason why we can get to know someone who, in spite of being "very attractive" does not *feel* that they are in the least; i.e., being handsome or beautiful does not offer any guarantee of feeling attractive, or at ease with one's own body, or happy in life.

2. What is beauty?

Fashions dictate what is desirable and what is attractive and, as we have already seen, play an important role in developing the body image. There is no doubt that at present, in western countries, we are living in a culture whose ideal of beauty is to have a slim body.

If we were to look through *Playboy* magazine for the last 30 years, especially the center spreads with their "Girl of the Month", we would see that the weight and figures of these models has gradually dropped; smaller busts, smaller hips and smaller thighs. Nevertheless, due to better eating and living conditions, the average weight of western women has gone up over the last few years. Now that we could almost all be those wonderful women who would have been the envy of people in ages past, yet again (as we will see further on) only a few are chosen, because the ideals of beauty involve becoming increasingly thin.

Discussion area 3

- *Do you think that this contradiction has anything to do with the increase in eating disorders?*

This pressure for having a thin body can be seen reflected in the world of fashion, in which models get thinner and thinner and with such unfeminine figures that these go against nature. In advertising too, we are continually bombarded by pictures of tall women, elegantly dressed, without a gram of excess fat, seductive and who, thanks to their beauty and slimness, would have us understand that they are successful in their lives, in their work, getting their man, who is in turn perfect too, and so on. All of this is within their reach, and also without any effort.

The continuous barrage of messages of this kind affects the way we accept our own bodies and makes us compare ourselves and wonder… where on earth am I going looking like this?

We would all like to be like the people seen in advertisements, but we are normal, we have normal friends and normal lives. This is often the time when we use the contraptions shown in advertisements or attempt to follow the diets that become popular, and see that we have not achieved what was promised, then feeling a failure through not being able to be like those people in the advertisement; people who do not actually exist anyway, but are the product of advertising tricks and set-ups.

If you open any magazine it is easy to find some reference to "*keeping fit", "losing weight" or "going on a diet*". It is a much more difficult matter to find an obese person reflecting delight in their face or who is happy.

Advertising gives us the message that it is easy to change, that nature can be altered, that we are responsible people if we are concerned with our appearance and that with a little willpower we can modify this, so we should make the effort to change, but on the other hand, if we do not try, we are lazy and awful people.

Culture which elevates slimness reproaches obesity and excessive weight. Obesity is stigmatized. The obese are considered to be lazy, sad, embittered people, unsuccessful in life, unsociable and lonely. There is a belief that "what is fat or ugly is bad" and "what is thin and pretty is good".

On the other hand, messages that stress slimness as the beauty ideal are directed especially at women, since the masculine ideal demands a big sturdy body. Even obesity is better accepted in men.

The large number of people suffering from eating disorders in western societies (Western Europe, North America, Japan, etc., places where diet conditions have considerable improved) and the absolute lack of these in the third world (where people die of hunger) makes us think that

it is culture and not geography that has to be taken into account in the development of these disorders. This is confirmed by observing that when they start to live, study and work in our countries, immigrants coming from the third world also develop these problems, which are non-existent in their native countries.

But have women always tried to be slim?

3. Is beauty universal?

The ideals of beauty are not determined by biological factors but by cultural aspects. This can be seen from the enormous variety of such very different beauty rituals all over the world. There are for example societies in which baldness is a serious problem for sufferers (the West) but for many African peoples having one's head clean-shaven is a sign of nobility.

Another example of evident changes in fashion are people's preferences as regards skin color. In the 17th-19th centuries in western societies a pale or white skin was a sign of distinction and nobility, which distinguished the aristocracy from country workers. Such was the importance of this color that men and women alike used rice powders and vinegar to look whiter. But nowadays, on the other hand, a suntan is a highly valued asset for all westerners, as brown skin is tantamount to saying "this person can spend their time sunbathing while everybody else is stuck in an office working!"

As regards the figure, a woman's obesity is a sought-after asset for its reproductive connotations in certain African societies in which food is scarce and it is difficult to survive. For this reason their women are overfed as soon as they have left puberty behind so as to be more ready to have and bring up their children. As we are seeing, the ideal of beauty varies in different cultures or countries, but within the same culture or society this idea too is constantly changing.

Just look at the way the ideal of beauty has gradually changed over history in western culture:

- To start with, in Greek society the standard of beauty was not the woman at all, but the young slim and athletic man.
- In the Middle Ages the "reproductive figure" was the ideal of beauty. The "lovely" woman was corpulent and more highly valued for having a big belly, as this was a symbol of her fertility.
- Until roughly the 18th century, in fact, the woman with reproductive characteristics - full breasts and a broad torso - was considered as being beautiful, attractive, erotic and fascinating.

Discussion area 4
Can you remember the paintings of women done by Rubens? What were their main features? Why? Are they pretty? Would you like to be like them? And at that time?

Nowadays, heading into the 20th century, the curvy woman is starting to be superseded by a figure from which full breasts are disappearing, abandoning corsets and starting to dress in such a way that the silhouette is being smoothed out. For the whole 20th century models of beauty have been swinging to and fro, from the marked feminine characteristics of Marilyn Monroe or Sofia Loren to the tubular anorexic look of the 60s.

Activity 2. What if we question the standards of beauty?
Could you give me some examples of styles that were in fashion for a time and have then been abandoned? Could thinness be one way the powerful use to seek distinction, in a society in which there is no shortage of food and therefore no danger of under nourishment? Do you think that there will come a time when thinness, like all the fashions we have mentioned, ceases to be the prevailing canon of beauty?

Fashions vary continuously. What is in fashion today will not be tomorrow. What does not vary is that people who do manage to comply with the demands of the particular ideal of beauty that has fallen to them by lot also stand for the aesthetic indicators associated with economic and social power. As society advances and scientific and technological advances make it possible for most people to attain what is considered to be "the ideal", this fashion ceases to be something people prefer (because it no longer distinguishes anyone) and becomes something outdated, old fashioned, so another trend thus starts to be created.

Perhaps now we can start to see one of the reasons why being fat is a sign of wealth and power in third world countries, where food is scanty, whilst in western societies, in which food is even wasted and where we have a more sedentary life thanks to technological advances, being a few kilos overweight has ceased to be in fashion.

There can be no doubt that the current ideal of beauty is thinness. Studies nevertheless show that women are over- demanding with this ideal, as if they were somehow "more catholic than the Pope". When they are asked what kind of woman's body a man prefers, they tend to describe a very skinny female body practically devoid of curves. But when men are asked what physical type of woman is most appealing to them, they prefer a feminine body, more voluptuous and with more curves than women themselves would have imagined.

4.The search for beauty at a painful price.

The prevailing ideal of beauty has been tenaciously pursued in all cultures in all ages, even though this might almost go as far as mutilating the body itself. Just look at a few examples:

- As early as the age of the Pharaohs, noble men and women used "cosmetics" (green malachite, mercury sulphite) to alter the color of their skin, eyes and lips. These precursors of cosmetics were made with highly poisonous chemical substances that produced "premature death" when absorbed by the skin.
- High society Greek and Roman families had the custom of deforming the skulls of newborn children. The commonest practice was to exert pressure on the skull during the first weeks of life to make the head round, flat or long, depending on whatever taste was currently in vogue.
- Even today there are tribes in Central Africa who pierce their cheeks with a skewer, since scars are signs of important events.
- Many cultural groups consider disturbances of the mouth and teeth to be a sign of beauty, such as certain tribes of Africa and Brazil who gradually insert larger and larger wooden plates into their lips. The historical explanation of this practice would seem to be connected with making sure women were not attractive in the eyes of slave traders or rival tribes. History's legacy has thus led to the deformation of lips being considered a desirable and commendable feature, in spite of totally disfiguring the face, modifying the facial expression and making it extremely difficult to eat and speak!
- In ancient China, it was customary practice to alter the feet. Having small feet was an indicator of beauty, so women considerably reduced their foot size by binding their feet very tightly from a very early age. When girls were 6 or 7 years old their feet were bound in such a way that the toes were left under the sole pointing backwards. The result of this "beauty" trait meant suffering excruciating pain and walking on extremities that were actually more like stumps rather than feet.

Nowadays, eating disorders are a good example of this search for imitating what is considered beautiful, even at the cost of one's own health and not living for anything else.

As you know, one of the consequences of starting to go on a strict diet with a view to eliminating or reducing the part of our own body that we do not like is falling into the pit of ANOREXIA and BULIMIA. It might all start by going on a diet just to lose a few "extra kilos" and trim down the body parts with which one does not feel at ease, but when that aim is finally accomplished it never seems to be enough and people go on with the diet with the firm intention

of becoming slimmer and slimmer. This starts an escalation process which seems unstoppable; weight beings to be lost very quickly; there starts to be confusion as to what one is really feeling, not wanting to meet friends, not wanting to go out for supper, nerves in shreds all day, ceasing to enjoy things that one previously liked; coexistence at home with parents, brothers and sisters or one's companion becomes impossible, thinking about food all day and no longer living for anything else.

When insisting on so much dieting, control over food might also be lost and this is when binge eating and vomits start. People fall into a vicious circle from which it is very difficult to extricate themselves. Sometimes such people have to go into hospital. If you have suffered from one of these disorders you will understand me perfectly.

Apart from the emotional consequences and relations with other people, eating disorders also have serious physical consequences. Have a look at a few of these:

- Loss of the muscular tissue and fatty tissue, both necessary for the body to function properly.
- When you cease to have the period your hormonal functions alter. Your growth stops.
- There are changes in the skin, dryness and cracking, often becoming covered with hair. Nails become brittle and breakable.
- Hair loss.
- Your immunological system is weakened, so you are prey to constant infections.
- When a person vomits, the stomach acid corrodes the enamel of their teeth, which might entail losing their teeth.
- The throat is inflamed.
- Sores are produced in the whole digestive apparatus.
- Constipation and abdominal pains.
- Sleep disorders.
- When you expel the nutrients required by the organism (sodium, calcium, potassium) this leads to dizziness, lack of concentration, extreme fatigue, etc..
- The heart beats more slowly and can lead to arrhythmia and the blood pressure drops dangerously.
- The kidneys malfunction.
- In the most serious cases there is structural disturbance of the brain, with expansion of the sulci and ventricles.

These and other consequences can be so serious that it is sometimes necessary to be taken into hospital. Fortunately, most of these physiological consequences disappear after recovering the proper weight, and one goes back to normal, though there are people who may be left with certain after effects.

As we can see, the wish to be yet another example of what is considered beautiful, even at the expense of the health and pain of those who irrationally insist on this, is nothing new. This has not only happened in our society this century.

Members of both the "developed" societies and the "non-developed" ones would seem to have a tremendous capacity to undergo an incredible amount of pain just to attain their particular group's beauty ideals.

In one issue of the magazine "Dunia", nº 463, September 1998, there was an article with the title: WE ARE WOMEN, NOT TOP MODELS, which gave a number of data and opinions under the title "Nine weighty reasons":

1. 75% of women from the developed countries are on a diet.
2. Only 16% are clinically obese, yet 90% nevertheless wish to slim.
3. 95% of slimming diets have no effect.
4. Only in the United States, the industry connected with dietetics and slimming obtains profits

of 33 billion dollars a year.

5. Studies made by the nazis in concentration camps established that the minimum diet for human survival was 900 calories per day, the same as they apply today in the most luxurious slimming clinics.
6. Every year anorexia affects a million young people in the United States and causes the death of 150.000. In Spain this affects 250.000 people, 90% of whom are women.
7. Today professional models weigh 23% less than other women. 25 years ago they only weighed 8% less.
8. "The ideal of thinness is not aesthetic, but political and economic. It destroys women's self-esteem and turns their body into the prison that the home used to represent for them". Naomi Woolf. "The Myth of Beauty".
9. "It is not possible to think well, love well, sleep well, if one has not dined well", wrote Virginia Woolf, the author of "A Room of One's Own".

Then the article goes on with a sort of manifesto, whose final words are given below:

"We are fed up of the hunger cult! Of the myth of beauty measured in kilos. Of the natural curves of the woman's body being a crime by decree (decreed by whom?) We wish to point out the obvious - that between the complex of not coming up to the mark and living as slaves of diet there is a possibility of being normal and different, every different person with their tastes and measurements, without following an ideal imposed by anyone. And much less, the unattainable one of a "top model"... And this is what we wish, for their health and true beauty, for all our readers."

Discussion Area 5

What do you think about the "nine weighty reasons" given by the magazine?
Would you add any statement of your own to the manifesto?

What would happen if the giraffe-neck deformation started to become fashionable in our culture? Would we start to feel dissatisfied, ugly, inferior, with no chance in life, through not having a deformed neck, just because someone considers this to be beautiful or interesting?

Activity 3: Put it in the scales

We propose an exercise. There is nothing 100% wrong or right and you can always decide. One intelligent way to decide is to analyze the pros and cons of the situations, that is, their advantages and disadvantages. Make a list of the advantages that you can find in your desire to be thin. Then make a list of the disadvantages involved. Finally analyze both lists very thoroughly.

Work methodology for the therapist:

N.B.: in this module it is useful to have graphic material to illustrate the cultural prototypes of different ages, the deformations that all cultures have applied to achieve "beauty", including photos of bodies with eating disorders, etc. and advertisements.

THE IMPORTANCE OF THOUGHT (A-B-C)

1. The importance of thought

As has been seen above, there are some people who are not too affected by having some physical defect, by being bald or being a little overweight. On the other hand, there are people who feel very unfortunate and are very ill at ease with their bodies, even though they have an average or even very fine body. This section will teach you that the main reason for being dissatisfied with your appearance is not your body, but the way you think about it.

Psychologists have for some time known that the reason for feeling happy, sad, angry or frightened is not because of the situation we are living through, but the way we think of this. I suppose that this might surprise you, but let me give you a few examples:

Imagine that you are at home alone at midnight, lying in bed, when you suddenly hear a noise of breaking glass[3]:

a) You think: *"A burglar has got in through the window"*
What would you feel?----------
What would you do?----------
b) On the other hand you think: *"The wind has broken a pane"*
What would you feel?----------
What would you do?----------

Let's analyze the two situations. What differences are there between them? ----------
What conclusion can we draw from this?----------

You may well have reached the following conclusion: what we feel and the way we behave are different depending on the way we interpret a situation.

If our interpretation of a noise is "It's a burglar!" we might have a fear response with all its bodily and behavior consequences. If on the other hand we understand that "that noise is only the wind", we will surely react in a different way.

Now let me give you an example closer to you. It is Saturday evening and you have arranged to go out with your friends to have supper at your favorite restaurant. Before going out you decide to have a shower. When you are about to get into the shower you see your body in the bathroom mirror:

a) You think: "*I don't want to look at myself. I'm a fat slob. I make myself sick."*
How would you feel?----------
What would you do? Would you go for supper with your friends?----------
b) On the other hand you think: *"I'm going to have a shower to feel better and get ready to go out."*
How would you feel?----------
What would you do? Would you go out for dinner with your friends?----------

Let us analyze the two situations. What differences are there between them? ----------
What conclusion can we draw?----------

This example is intended to stress the importance of the role played by thought. Just remember that the interpretation of a situation may mean there is a response of fear, distress, sadness, or even make this situation not actually occur.

2. What is the A-B-C?

When we talk of the A-B-C, we are referring to the importance of thought in how we feel or how we behave. In the previous example we can see the following:

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[3] Beck, A. Rush, A.J., Shaw, B.F. and Emery, G. (1979): *Cognitive therapy of depression.* New York: Guilford Press.(pp. 147-148).

1.- When you look at yourself in the mirror, in the first situation, you feel bad, depressed, not liking yourself. We can see that there is an Antecedent (s*ituation)* that is looking at your naked body in the mirror, which we shall call A.

2.- This situation causes emotional and behavioral Consequences which we shall call C.

3.- However, we can see that depending on what we *Believe* or the *interpretation* (which we shall call B) that we make of the situation, these consequences can be either positive or negative. This means that, lying between the A (Antecedents) and the C (Consequences), is the interpretation or the believe that we have of this situation, which is B.

As we can see, it is difficult to change the situation, but we can indeed change the interpretation that we make of situations or the way we think about these, so that they do not cause distress or great interference in our lives.

To help you understand what we have been saying we will perform an experiment: Close your eyes and experience the following situation "I am drinking water... how unpleasant! I feel more and more swollen - how horrible - I feel awful!". How did you feel? Now close your eyes again: "I am drinking water... mmm! How cool and nice, it's really doing me good. Just what I needed to quench my thirst!". How did you feel this time? And yet the only difference was how you interpreted the same situation.

The situations or events that occur in our lives are not what lead us to sadness, nor despair, or dissatisfaction with our body, neither do they lead us to doing certain things like continually checking our appearance or avoiding certain places. It is we ourselves: we are the main factor that makes us feel one way or another, according to how we value or interpret the events that take place around us.

3. How to identify negative thoughts

Automatic negative thoughts are mistaken interpretations that we make of situations arising in our lives. We have seen that these interpretations or automatic thoughts produce unpleasant feelings like dissatisfaction, sadness, despair or anxiety, and we will thus have to learn to identify such automatic negative thoughts in order to replace them with other more adaptive ones.

The first step towards defeating an enemy is to know it well, which is what we now propose. To identify automatic negative thoughts producing sadness or dissatisfaction with your body or other unpleasant emotions negatively interfering in your life, you will first of all have to learn about them and know what they are. Look:

- These are automatic: they come to mind very quickly and sometimes confuse us. But the sign that they have been there is the emotional traces that they leave in their wake. This is why it is easier to identify them by the emotions that you feel (the C of consequences).
- They tend to start with "I should/ought", "must" or "have to". This de-adaptive way of thinking uses absolute terms that prevent one from thinking any other way. "I should be slim", "I should be thinner so that things will start to go better for me". With this kind of approach it is very difficult to find a way out, given that there is only one alternative to choose from and if this is not fulfilled we feel bad. It is very useful to replace them with "I would like".
- Words like "Everything, Nothing, Always, Never" will tend to come up. These language terms are misleading. "I always have to look impeccable"... this would seem to be an impossible task or at least very tiring. "Always"? At all times? Can't I take a rest? We could say the same of "Never" (are you sure it means never, ever?) "Everybody" (there are too many people in the world not to find one conflicting opinion)...
- They bode catastrophe and guess the future. We tend to anticipate situations, but in this case, it is rather a matter of being persuaded that what is going to happen will be something horrible and an accumulation of disasters. "He won't like me", "I will look stupid". We do not have a crystal ball. For a start, there are the same possibilities of looking stupid as not looking stupid.

We can change the way we think, and will soon see that it will be useful to question such thoughts, to come to more realistic interpretations or thoughts that do not give rise to the distress or discomfort in our body image.

Work methodology for the therapist. In-session exercise:

- Objective: To explain what the A-B-C is and the importance of thought. Introduction of cognitive re-structuring. To show the use of the ABC record for patients to use it during that week.
- Implementation: Remind them of the role of thoughts in the model of how a negative body image is formed. Use the example of one of the patients in some situation in which her physical appearance made her feel bad to show how to use the record.
- Instructions:

-Think of the situations in which you have felt sad, bad, angry
-Describe the situation as objectively as possible
-Identify the emotion that you are feeling
-Identify its intensity (0-10)
-Identify the negative thought that lies behind it
-State how much you believe that thought (Degree of belief from 0 to 100)
-Give your remarks on what happened afterwards.

HOW TO OVERCOME NEGATIVE THOUGHTS COGNITIVE DISCUSSION (ABC-D) MANUAL

1. Introduction

As we have seen in the module entitled "What is the body image?", this consists of the thoughts and attitudes that we have about our body.

The thoughts or the non-spoken messages that we send ourselves play a central role in forming and keeping a negative body image and, with this, our dissatisfaction with the body.

Studies show that when one day we think or believe that we are unattractive, we will then see and feel ourselves to be ugly people, devoid of interest (as a result of this belief).

The positive part of all this is that we can detect and change automatic thoughts or this private dialogue with the body that makes us feel bad and behave in such a way as to maintain dissatisfaction with the body. We can learn to gain control over these.

2. How to change automatic thoughts

Last week we suggested that you should take note of:

- any situations in which you feel depressed, guilty, critical with your body, nervous or emotionally upset.
- any thoughts that you have at these times.
- what happened afterwards

There might be thoughts of the following kind in some of your records: "everybody looks better than me" or "I must lose 5 kilos or I will never find a man/woman".

Most of these thoughts become so obvious and momentary that you might not even be aware of them. It is difficult at first but don't lose heart – after you have got used to seeking out such thoughts you will quickly start to find them.

After we have identified automatic thoughts the following step is to challenge them. This means that we are not going to trust them, but doubt them, put them to the test, find out if this is indeed the only way to see things. To put them to the test you can take the following steps:

1.- Identify the emotion and give its intensity from 0 to 10.

2.- Identify the thought as objectively as possible and value to what extent you believe this, from 0 to 10.

3- Have a cognitive discussion involving the following steps:

a. Analyze the evidence or proof in favor and against such a thought being true.

b. Think what the real probability is of what the negative thought says actually happening or being true.

c. Think of possible more realistic alternative thoughts.

d. Take the drama out of the situation. Think whether the consequences of what the irrational thought says really are so catastrophic.

e. Ask yourself what use that irrational thought is for you, what advantages it involves.

4. Reappraise the intensity of the emotion and to what extent you believe in the thought.

The example given below might help you to understand the way to apply each of these steps for putting irrational thoughts to the test (it would be even better if you could take an example that a patient has recorded from their ABC for the week).

"Sonia is in a pub with several of her male and female friends. She has always thought that she has a few too many kilos to have the body that she would like, though her family and friends always tell her that she is slim. In the pub, the subject of the conversation was that three of the girls were going to enroll at a gymnasium to improve their physical fitness. Suddenly they asked if Sonia would like to sign up with them to take advantage of a special discount in the enrolment fees, to which Sonia angrily said no. She straightaway started to feel the center of everyone's attention, and felt observed, depressed, sad and a little nervous. The thoughts that went through her head were as follows: *"They told me to enroll at the gymnasium, so they must think that I'm fat", "The boys will realize that I'm fat and will think I'm good for nothing", "The best thing would be to go on a diet as soon as I get home".* In the end Sonia felt upset, made an excuse and

went home.

Let's take one of Sonia's thoughts as an example: "*They said that I should enroll at the gymnasium, so I'm sure they must think I'm fat*". This thought makes Sonia feel ill at ease. What should Sonia do at this time? Question this thought and discuss it, going through the steps that you have learned:

Sonia would start by appraising the intensity of the emotion and the degree to which she believed the thoughts. Then she would go on with the cognitive discussion:

1. What proof do I have in favor of the idea that *the others think that I am fat*?:

   (Sonia starts to think and reaches the conclusion that there is nothing factual to confirm that other people think she is fat)

   And against this?

   -It has been a long time since anybody has said I am fat, and on the other hand, my family constantly tells me that I'm thin.

   -I have a BMI of 20.

- *2*. So what likelihood is there that I am fat and that this is why they have advised me to sign up at a gymnasium? The truth is the probability is not very high because nobody has told me I am fat.
- *3*.- What other more realistic interpretations or thoughts of the situation could I have? Instead of thinking that, it could have been because they like my company, as I have always been very interested in gymnastics, and anyway we would be taking advantage of the group rates to enroll at the gymnasium together.
- 4. Anyway, even if it were confirmed that they think that I am fat, are the consequences of them thinking I'm fact actually so serious? Not really. It doesn't matter if they think something about me, as there is no reason why they should be in possession of the truth; they can think what they want, there are other people who think otherwise.
- 5. Lastly, what good does having that thought do me? None at all, all it does is make me sad, make me feel guilty and end up having an awful time and running out on a situation that could be pleasant for me. And it also makes me do things that I know are bad for my health.

Finally, she could appraise the emotion and thought again, and that would bring the process to a close.

It is important to stress that the new alternative thought that Sonia generated could mean that:

- An unpleasant emotional response is not triggered off.
- Sonia would not start to blame herself for her physical appearance and her self-esteem would not drop.
- She would not get involved in processes for slimming.

From this point, we would like to ask you to start to question your negative interpretations so that you can learn to control your unease with your body image this way.

Work methodology for the therapist: In-session exercise:

- Objective: To teach how to have a cognitive discussion and make use of the ABC-D record, for this to be applied weekly.
- Implementation: With the example of the ABC record of one of the patients who pointed out a situation in which they felt bad because of their physical appearance that week, patients are shown how to use the ABC-D record for them to apply it from that time.
- Instructions:

-Think of situations in which you have felt sad, bad, angry
-Describe the situation as objectively as possible
-Identify the emotion that you are feeling
-Identify its intensity (0-10)
-Identify the negative thought that lies behind this

-State how much you believe this thought (Degree of belief from 0 to 100)
-Find a more adaptive alternative thought and how much you believe it:
    -Proof for and against
    -Real probability that what the negative thought states is true
    - Take the drama out of situations
    -Ask about its utility
-Reappraise the emotion (0-10)
-Reappraise your belief in the negative thought
-Talk over what happened afterwards

NEGATIVE BODY TALKING. WHAT ARE COGNITIVE ERRORS? [4]

[4] Based on Cash (1991)

1.-Introduction

As we saw in the A-B-C manual, we are constantly coming up with a large number of Automatic Thoughts, and we could even say that we have a private dialogue with our bodies, a conversation which consists of statements about ourselves and interpretations of important things in our lives. This private conversation is under way when we drive, when we walk or when we are eating, and we do it automatically, without being aware of it.

We know that people have these internal dialogues and that what is said in them has a great effect on the way that person feels. On the other hand, these dialogues occur so quickly that we do not realize that they are occurring. But what we do indeed recognize are the feelings that stem from these, but which we never attribute to this internal language.

To overcome the problem of the negative body image, the first thing we have to do is give greater attention to this internal dialogue that we have about our body and our appearance.

Let me give you an example of how this private language affects your body image. This is the case of two women who are identical twins. One day they go to have supper at a restaurant and just before going out they look at themselves in the mirror of their house. One of them feels unattractive and does not like herself, but the other twin seems to feel especially at ease and very positive with herself. So if both are physically the same what is happening then? Let us compare their internal dialogues:

When she looked in the mirror, the first woman thought: *"Oh! I look so ugly that nobody is going to like me if I don't lose two or three kilos, and anyway everyone is going to think that I am fat. Yecch! The color of my cheeks is so hideous. My boyfriend told me today that he is going to enroll at a gymnasium, so he must surely have thought that he is going out with a fat slob and that I should do the same as him."* This girl felt rejected and bad with herself. Let us compare this with the internal dialogue of the second twin, who thought as follows: *Hmm! Today I feel good. I really like the way that new lipstick looks on me. It was a great idea to go to the hairdressers. I might look better if I lost a few kilos, but if I don't, it doesn't matter. Today I feel a lucky woman.* As we shall see, we provoke different emotions by means of different internal dialogues with the body.

2.-The 12 Cognitive errors

People with a negative body image use wrong ways of interpreting the data from their experiences, "COGNITIVE ERRORS", that make us have a negative private bodily dialogue, which in turn intensifies our dissatisfaction with our body.

Cognitive errors produce thoughts and feelings with a negative body image. We will now have a detailed look at each of these cognitive errors along with a few examples. You might not have them all, but some of them will be very familiar to you. You should consider these errors to be the enemies of your positive body image, so you should get to know them well. After we know all these cognitive errors and learn how to detect them the next step will be to learn to eliminate them.

*"Beauty or beast***".** This refers to the custom of thinking about our appearance in extreme terms. For example "*I either weigh what I want to weigh or I'm fat". "I can either get into those trousers (one size too small) or I must be a fat slob", "I am either the prettiest girl at the party or I am nothing at all".* The truth is that reality is not "either black or white", but all the other colors that lie between these two.

Another example is when we put on an extra kilo, and then *I'm a fatso"* comes up in our private body language, but if we manage to lose a kilo we say to ourselves *"today I am slim and perfect".*

"The unreal ideal." occurs when we compare our body with the ideal of beauty at present existing in our society, which can be seen in the magazines and on television and which is only reached by a very small group of people, and even so is not always attained (it thus being an

unreal ideal).

When we look in the mirror and say to ourselves "*I'm short, my breasts sag, my hips are wide and I have fat thighs",* these conclusions are drawn when comparing our body with the ideal of perfect beauty (which we cannot attain). The result of this is dissatisfaction, frustration and not accepting our own body.

"Unfair comparison." This occurs when we constantly compare ourselves with people close around us, whom we consider to be very attractive, and when we do so, this makes us feel bad. They tend to be comparisons with people who we see have characteristics that we should like to have. Look at María's body dialogue: "*When I am at a party, with attractive women, I see myself as something horrible, I feel fat and unhappy, so it makes me want to go home" or "I should be as perfect as that girl".*

"The magnifying glass." This consists in concentrating only on the negative or imperfect aspects of your appearance and exaggerating their importance. This happens when we think that a particular part of our appearance is horrific and that this part that we don't like is the most important one for our physical appearance, both for us and for others, over and above the other body parts, so that your body image depends only on the way that particular part looks.

For example, Rosa has a very pretty silhouette, but she looks only at the size of her thighs, which for Rosa are too big, so she is not at ease with her body as a whole.

"Blind mind" As a complement to the previous one, this cognitive error refers to the fact that many people ignore the positive and pleasant features of their appearance. In the example about Rosa she does not "see" that she has nice hair, green eyes, is tall and has a nicely proportioned figure. If we only see the negative side of our body and we are blind to the positive parts of our appearance, this results in our having a negative body image that does not objectively match our appearance and this causes us problems.

"Expanding ugliness." This means when there is some part of our appearance which we do not like, and then this feeling of dissatisfaction is spread or generalized to other areas of our body that we do not like either, thus becoming dissatisfied with our whole body.

Look what happens when María concentrates on parts of her body that are not smooth and firm. She looks at her forearm and thinks *How awful! I'm all flabby!* Then her mental search starts and she looks for all the flaccid bits that she can find, as irrefutable proof that she is all flab. María will undoubtedly find what she is looking for or even more.

"Blame game." People who feel dissatisfied with certain parts of their body often automatically assume that these negative aspects of their appearance are what are responsible for the slips or disappointments in their life. For example: "*it is all these horrible hips' fault that that boy does not want to get anywhere near me".*

"(Mis)reading the mind." This error occurs when thinking that one is unattractive or looks awful, in that not only does one think this oneself, but everybody else must also be thinking the same thing. The error therefore consists in being sure one knows not only what others are thinking (which is practically impossible) but also that what they are thinking is always negative (really taking the biscuit!)

"Predicting unhappiness." Often people with a negative body image believe that the parts they do not like about their bodies will be the cause of the negative events happening to them in the future. For example; due to a negative body image, a girl might think: *"My appearance is to blame for the fact that I shall never be able to go out with boys."*

As you can see, all these ways of thinking make us become thoroughly disheartened, which produces further dissatisfaction with ourselves, with our bodies, and thus worsens our body image - a vicious circle in fact.

"The bond of appearance." This involves not letting ourselves do certain things, or thinking that we cannot do them because we do not like the way we look. One example is the following private dialogue that Mary has with her body: "This week I have lost 2 kg., so I'll be able to go

to the aerobic class, but I shan't be able to go to the beach because I am still a few kilos overweight".

"Feeling ugly." This error comes about when the cause of something proceeds wholly from how I feel. For example, a person who feels angry thinks: "I feel as if something bad is going to happen, so something bad *will* therefore happen". If this is transferred to the body image, it becomes the cause of a negative body image because "if we feel ugly and negative experiences occur about appearance then we will conclude that we must surely be ugly, without any other explanation being plausible". The result of this is obviously that the feelings of the negative body image will become worse.

One example is when we feel ugly and even though our boyfriend tells us we are pretty, attractive and that they like us, our conclusion is that we are ugly. Haven't you heard people make this mistake talking aloud to criticize something about their own appearance? And surely, isn't your impression of the features criticized less negative than theirs?

"Moody mirror." This error implies emotional reasoning. When you are in a bad mood for some reason, this bad mood extends and affects your private body dialogue, you start to criticize your body and your appearance in features you do not like. With the example of Mary you will understand this better: "Mary studies at secondary school. This morning she gets up in a good mood, makes herself look nice and goes out, feeling fine. Half way through the morning, the day starts to go wrong because the science teacher tells her off for the results of the previous test. Mary starts to get weighed down by these complaints. When she gets back home she is angry. Then she starts to look at her hair, her hips, her weight. Her anger starts to spread to her body, and even though she has to go out later and she gets dressed up, far from finding something that suits her well, she does not like herself in the least.

In this manual we have shown you the 12 cognitive errors that keep your body image negative. It is a good idea for you to know of and detect them so that you can start to question them, as these are largely to blame for your feeling dissatisfied with your body.

Work methodology for the therapist. In-session exercise

- Objective: to identify the most typical errors leading to a negative body dialogue.
- Implementation: whilst a common pool is being made for each of the errors, guided by the therapist, the patients fill in the "COGNITIVE ERROR SHEET".
- Instructions: gives the frequency (from 0 to 4) with which you are beset by these errors in your particular case.

Realizing the errors that we make in our dialogue with our bodies is a very important step for success in treatment and improving your body image. Furthermore, this is the first step that has to be taken to be able to eliminate these errors.

SELF-ESTEEM MANUAL

1. What is self-esteem

Human beings do not only wonder about the world outside; we also reflect on ourselves. The ideas that someone has about themselves all go to shape the concept that they have of themselves - their self-concept, and the assessment that they make of themselves is their self-esteem, i.e. the way they think, judge and value themselves. When a person concludes that they are useless and do not like themselves they can be said to have low self-esteem.

These thoughts about oneself may be about what one does ("*I shall make a fool of myself*"); about what one thinks of oneself as a person ("I am stupid"); and also about what one believes that others think about oneself ("*other people think I am stupid*").

2. The role of language in self-esteem

The words that we use to describe reality are not neutral and we should be observant as regards the things that we say to ourselves. Language is a wonderful instrument to deal with things, with reality. Its symbols mean that we can succeed in something as important as representing reality, thinking about this, conveying what we think or feel to others, etc. But one should never forget that the symbols of which language consists only represent reality, and are not reality itself[5]. An example might help us to understand this distinction. If we draw a map of Spain on a piece of paper, would you say that those lines on the paper are really Spain? Or are they just a graphic representation of it?

Words are also representations of reality that we wish to convey to others or to ourselves. Nevertheless, we sometimes confuse the symbol with reality, mistaking the way we represent ourselves with the way we are. Let us look at one example:

a. María starts to feel ill at ease at the gymnasium because two girls who according to her have very pretty legs have turned up that day.
b. María starts to think that it is not just a matter of her having bigger thighs than those girls, but that she is a mass of blubber from top to bottom.
c. María starts to be increasingly upset and nervous. She does not do the exercises that she intended to do because this would force her to be in the center of the room, so she gradually retreats to a corner until she finally decides to go home.
d. María finally concludes: I am useless, good for nothing, and will never be liked by anyone.

At that time María feels very upset and wants to get out of the situation. But she is not bearing in mind that language is a set of symbols that cannot grasp reality as a whole (remember, the map is not the country). There may be aspects of that reality that she is not taking into account. For example having big thighs does not turn you into a whale, nor mean you are useless, nor mean nobody is going to like you. The danger lies in taking language as an exact representation of reality without considering what other aspects are being left out or not being taken into consideration.

Now let us look at several symbolic representations of oneself:

What I am
What I do
What I think I am
What others say about me
What others think about me
What I think others think about me

What I am is actually an abstraction, an essence that nobody, not even oneself, will ever know. Even with all the tests that we have given you to take, we do not know our essence. We do not

[5] Korzybski, A. (1958). Science and Sanity: An introduction to non-Aristotelian systems and general semantics. Lakeville, Connecticut: The International Non-Aristotelian Publishing Co.

know what we are at the bottom of it all, this is a supposition on which we talk.

What I do gradually forms what I am or what I think I am. I can base myself on what I do to know what I am like, but I am more than what I do. What is more, I can change what I do and thus have repercussions on what I think I am.

What I think I am is the appraisal that I make of myself, but is not necessarily what I really am, and only the opinion that I have of myself.

What others think I am is not the same as what I am either. Others may think a thousand different things of me, but these are only their opinions.

As for the last part, *What others say I am,* we cannot know this unless we are told. This is the opinion that they have of me and they tell me so verbally. This may be what they "really" think of me, or not, and even so, this does not make me more than what they say I am, for good or for ill, - not making us any worse or better. It cannot be confused with what I really am.

Lastly, it is very hard to be right in *what I think others are thinking about me* as we would be reading their minds. In fact, this symbolic representation is none other than the opinion that I myself have of others' appreciation of me. But what "I believe" they think about me is not necessarily what others are really thinking.

In these symbolic representations of oneself it is common to confuse all these opinions with what I really am. This may have negative consequences if such opinions are negative.

If I mistake what I think I am for what I am and make a negative assessment of myself, I may feel very bad. For example, if I think I am stupid, that does not mean I *am* stupid (remember that language is a representation of reality, not reality itself), and is only a judgement about myself that could be wrong. At least let us question this. When we judge other people we may be wrong. Remember that time when you were introduced to someone who at first seemed unpleasant for what they said or did on that occasion, and later on, when getting to know them better, you changed that judgment. I could also be similarly mistaken when I appraise myself. Perhaps I do not value myself and only go by negative aspects and not positive aspects of my person. The result of this is that I undervalue myself and harm my self-esteem.

If I confuse what others say about me with what I am, I am giving the others an opportunity to hurt me. Let's imagine the following situation: you are expressing your opinion in a conversation and the other person says: "you are stupid". If you confuse what you were told with what you really are, you will think you really are stupid. But your opinion may nevertheless be wrong: The person who told you that you were stupid might simply have meant that he or she does not agree with your opinion and does not really think you are stupid, this being just a way of talking. Or they might indeed believe this, but the fact of a person believing you are stupid does not mean that you actually *are*, this just being that person's subjective opinion.

If I confuse what I believe other people think about me with what they do in fact think about me, or with what I am, the result is that I am making "rash" judgements, not only about myself but also of what others think. That is, I "guess" what others are thinking about me (something that is fairly difficult, if one does not have supernatural powers) and I also confuse this with what I am, without stopping to think that I might possibly be wrong. For example, I am at a gathering of friends and acquaintances and I think "others think I am stupid". I accept this and also think that I really am, without having any proof of this, confusing a "guess" with reality.

To sum up, the consequences of all this confusion are: having negative feelings such as sadness or distress, avoiding situations in which I or others might be able to judge me, and letting things and others hurt me easily.

3. What are the consequences of having low self-esteem?

Having low self-esteem means that someone does not like themselves, and considers themselves to be a non-valid person, fully or partially rejecting themselves. When this is the case

there are a number of repercussions:

The fact of having a negative concept of oneself produces feelings of insecurity and incapacity in the person. Such persons think that as they are not good, they are unable to do certain things and if there is no way of getting out of doing them, they will feel unsure and nervous about what they are doing.

The person will also start to set up barriers ("dig themselves in") to thus avoid any negative opinion and feel rejected. This means that, in order not to feel bad, they will avoid doing anything that involves or that they think involves difficulties; wearing particular clothes, going to the beach, going out for supper with people, being the center of attention, etc.. This will limit them and lead them to a progressive isolation from which it will be increasingly difficult to get out, thanks to the "security" that it provides.

4. Can self-esteem be bettered?

As we are now seeing, self-esteem is the way we think about ourselves and value ourselves. One should therefore be well aware of its constituent parts. Do not forget the role of language as representation and not as true reality. It would be healthy to start to doubt these negative opinions about yourself and analyze just how much truth there is in them. To do this you can help yourselves, as we already said, by overcoming your negative thoughts, that is, by questioning the negative thoughts that you have of yourself or the judgement that others made of you, and after putting these to the test, find out that we can analyze the situation with other more adaptive thoughts (the ABCD).

We can also help ourselves by making a general analysis of ourselves to see if the opinion and appreciation that we have made so far is wrong and we can change this. The aim of this is to value ourselves more objectively.

Lastly, if you do not like yourself, you will not pamper yourself either. Carrying out activities that you had given up doing, or starting new ones that you had not even dared to try up to now will help you to strengthen your self-esteem.

5. Training in self-esteem

The problem with low self-esteem is that people do not judge themselves objectively; they tend to minimize their positive characteristics and magnify the negative ones. One way of changing this incorrect and incomplete appreciation is to learn to self-appraise oneself as objectively and accurately as possible. To do so a number of steps should be taken (McKay and Fanning, 1987):

5.1. Accurate self-assessment

a) Observe and assess your characteristics

- Think of facets of yours as a person: make a list of things that define you and which form part of you; you as a student, you in relation with others, you as a daughter, you as a sister, your physical appearance, your personality, your skills, and lastly your overall valuation.
- Assess yourself in each of these facets going by the following scale

0------1------2------3------4------5------6------7------8------9-----10

Very Very

Negatively Positively

- Using adjectives or very short phrases, describe the characteristics which define you in each of the facets that you have previously listed

b) Assess your description.

- Assess each of the adjectives or phrases that you used in the description, by qualifying these as positive (+), negative (-) or neutral (=).

c) Review the negative self-descriptions.

- Review and correct the negative self-descriptions taking the following into account:

1) Use language that is not derogatory. Remove all the pejorative words and expressions and replace these with others (E.g.: "fat as a cow" = big thighs; "I am useless" = there are certain things in which I am not as skilled as in others; "I have flabby thighs" = the firmness of my thighs could be improved on, etc.). Remember that language is not what it represents. By using words for so long we end up believing not only their overall meaning, but that also what they express is absolutely real. It tends to happen that people who do not like their thighs -either because they distort their size or because they are big - end up thinking of themselves as being grotesquely fat as a whole, though what really happens is that there is one zone of their body that they do not like; but this is not the same thing.

2) Use precise language which does not exaggerate, but which describes and restricts itself to the facts (e.g. "I am useless" = I should have liked to get a better mark in this examination).

3) Language should be as specific as possible instead of referring to things in general, discarding terms such as always, never, all, nothing, completely … (E.g. "I never know what to say" = when I am with people whom I don't know starting to talk proves difficult for me). This is a matter of perceiving the difficulties specifically instead of as overall problems that occur in all situations and with all types of people.

4) Find exceptions and stress your skills or characteristics (E.g. "My arms are horrible" = I don't like my arms; but my bust is very good).

After completing the review, make a new list of your negative aspects in the new version.

d) Think your positive characteristics over.

Go back to the list of self-descriptions and add all your characteristics, even the ones that you have not yet put. This does not tend to be easy, but it will help you to remember the complements you have been given, the skills that you have found in yourself, the achievements you have succeeded in, however small these may be, or to consider if you can apply some characteristic of someone whom you like or admire.

After completing the review, rewrite the list of positive characteristics with long sentences in statement form.

This task is not easy. Remember that you have probably been making excessively negative judgements on yourself for a long time and complaining about this. Now it would be good to try and relish the positive aspects, for a change.

5.2. A new description of yourself.

Make a new description of yourself by joining the two self-descriptive lists reviewed by areas. This new list will combine both the positive and negative characteristics described, always without moving away from reality. The aim is to be objective with oneself.

5.3. Assimilate the new description.

Read your new description of yourself aloud, slowly and carefully every day. You need time to start to change your way of thinking about yourself.

5.4. Take the new description as your own.

Your former way of judging yourself and talking to yourself has for a long time been a deeply-rooted habit and it is understandable that it should assail you almost without realizing this. This is why you have to reply every time you surprise yourself with derogatory language, with the new more accurate language that you have now learned. There are certain strategies that can help you. Look at one of your traits and take it as your own; think about it especially when you are assailed by the old language; put reminder notes in places where you can read some of the statements from the list (in the bathroom at home, in your wallet, outside, for example).

Sometimes it will help you to think about the things you like least about someone you like

(nobody is perfect) and which do not however make you like them any less.

EXPOSURE MANUAL

If you remember the module called “How is the body image formed?” which we presented above, another of the items which contribute to keeping a negative body image is avoidance, that is, not facing up to situations in which you feel uncomfortable, not wishing to see the zones of your body that you do not like, not looking at yourself in the mirror, trying to camouflage the part of your body that you like least, etc..

Activity 1: The things that we are missing

Think about all the situations or places that you have given up going to and the body parts that you avoid looking at, or with which you feel ill at ease. What are the reasons for this?

The clearest form of avoidance is not allowing situations to arise, not facing up to them, for example, not wishing to go somewhere or do something which means you have to show the parts of your body that you do not like to other people, not wishing to go to places where you think your body may be seen by others such as swimming or to the beach. Another way to avoid these is, as we said before, to attempt to “camouflage” the body, for example, by using loose clothing, using makeup or hairstyles in a particular way; that is, concealing aspects of your body that you do not like so that others do not see your figure.

People with problems with their body image have learned to reduce that unease and anxiety about their body by avoiding these situations. But as we will see further on, this type of behavior interferes with both their social life and their self-esteem.

In this manual we will see a number of aspects of fundamental importance in improving the body image. In particular we will learn to face the situations feared and learn to tolerate the zones of our body that we do not like by means of a technique called exposure. To do this we will analyze:

1. The consequences of avoidance.
2. What is exposure?
3. How to carry this out.
4. Another form of avoidance.
5. Handling anxiety and distress.

1. The consequences of avoidance.

Up to now you have avoided the situations that you fear through the relief that "not going", or "not wearing ", or "not looking at yourself"... could bring. This means that at first, by avoiding what you fear or what bothers you, anxiety and unease are diminished, the thoughts about your physical appearance, about what others will think, about the dissatisfaction that that part of your body brings you and so on all disappear. Unfortunately, this “relief” involves several problems.

Discussion area 1

We have already talked about the advantages which avoidance seemed to have in theory. Can you think of any disadvantages that it might involve?

Here there are several disadvantages of avoidance:

- The relief is only momentary, short-lived.
- Each time you avoid something, it becomes more difficult to face up to it the following time.
- Little by little one starts to wish to avoid more things and more body parts.
- It prevents doing things that you used to like doing and which you enjoyed.
- It prevents finding out what you think about your body is true or false.
- It prevents finding out if your beliefs (in general) are wrong or right.
- It reduces the probabilities of overcoming the problem.
- One ends up losing confidence in oneself

If we make a balance of the positive and negative consequences of avoiding situations connected with the body, we observe that even though avoiding brings relief in the short term,

this could in the long run cause serious problems for us. This is why one of the main objectives of the treatment consists in facing up to the situations feared. This can be achieved by a technique known as exposure.

2. What is "exposure"?

Exposure is a treatment technique whose objective is to learn to face up to situations that are feared. At first, only the idea of facing up to what you fear may seem horrible to you and you may feel incapable of doing this. Nevertheless, this is not a matter of facing up to all the situations that you fear at the same time, but for every situation to be practiced by stages, step by step, first doing the easy things, and then gradually going on to the harder ones.

Do you know any way of learning to swim that is not by swimming? And even so, learning to swim does not mean that you are plunged into the stormy open sea in the first class; you have to start with easier circumstances. It is highly possible that you undergo fear and distress when you face up to the situations feared; what is more, you might believe that this distress will go on infinitely increasing more and more. But this is not what happens. Anxiety and unease, however intensive they might be, increase to a certain point and then start to drop. To help you to understand this, think of the image of an arrow soaring into the air: however strongly the bow is braced the arrow will go up to a point from which it will start to drop.

The other good piece of news is that, as exposure to each situation is practiced, the person finds out that anxiety and unease do not rise so far, last less and drop more quickly.

However it is important for you not to abandon the situation once exposure has started, since it would make the improvement process decline. This may require some time. Anyway, one should not worry if anxiety or unease takes longer to drop than had been thought.

In the event of the situation being abandoned, in spite of it all, for some reason before the anxiety or unease diminish, one must attempt to run away as little as possible, calm down and return to the situation as soon as possible.

Another important part of exposure is to practice this regularly, if possible daily, as this will help to you acquire the habit of facing up to situations that you had been avoiding up to now.

When carrying out exposure tasks you can use the techniques hat you have learned up to now, that is, thought strategies. This will help you to make the exposure a success.

Lastly, your involvement and interest in achieving the exposure is very important, since this requires devoting time and effort to getting good results.

3. How to do this

Stage 1:

The first step in exposure treatment is to make a list of the specific situations that you avoid. Choose the ones that are most important for you and rate them according to the difficulty that facing them involves for you. You will thus get a hierarchy.

Situations are rated using a scale of 0 to 10 of Subjective Anxiety Units (SAU) or unease units *(At the end of this manual you will find the models of hierarchies – the clothed body, the naked body and social situations- and in the sessions these will start with those of the clothed body).*

Stage 2:

In this stage we will comment on how an exposure task is carried out. Exposure tasks will be performed on one hand at the clinic along with the therapists and the other members of the group and on the other as "homework".

a) Before the exposure:

- Select the situation of the exposure hierarchy, according to the difficulty levels. Remember that you should start by situations that produce moderate anxiety/unease levels (on a scale

from 0 to 10, in which 0 means tranquillity and well-being and 10 the maximum anxiety and unease, start by a 4 or 5).

- Specify the content of what you are going to do, to what you are going to expose yourself: specify the aspects of the situation which you are going to face up to, taking into account the physical environment, the persons who will be present, the approximate duration of the task, etc.
- Establish the appropriate objective of what you are going to do: remember that it has to be a specific and *realistic* objective. Specify this, indicating the behaviors that are the objectives for today.
- Carry out the task, incorporating cognitive techniques. Before facing up to the situation, have the cognitive discussion about possible thoughts that might appear. Remember:
  1. Imagine yourself in the situation and pay attention to the thoughts that may come up.
  2. Identify the possible automatic thoughts and record them.
  3. Use challenging thoughts.
  4. Generate more adaptive alternative replies and write them down on paper.
  5. Analyze what emotions you are feeling.

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  Don't forget: everybody has parts of their bodies that they like (look for yours) and parts that they don't like. The fact of not liking them is not the same as feeling "disgust" or distress about them. It is this distress that we are fighting. If during exposure you reach the conclusion that there are parts of your body that you don't like, all right. But then think – what do you use it for? Does it have any function? What would you do without that part of the body? The final objective is to tolerate and accept your body, your legs, your abdomen or your waist. Remember that acceptance is not the same as resignation.

b) During exposure:

1. Take into account the level of anxiety/unease and how this changes.
2. Do not give up the situation if your anxiety/unease starts to rise. Remember that it is bound to drop.
3. Read or think of the rational replies to negative thoughts when these come up.

c) After the exposure:

1. Review the objective and assess if this has been attained.
2. Reconsider if the automatic thoughts that had been foreseen actually occurred.
3. Evaluate the use of alternatives to those thoughts.
4. Reconsider if other unforeseen automatic thoughts came up and how they were faced.
5. Examine the relationship between automatic thoughts, rational replies and levels of anxiety. An anxiety graph should be made.
6. Make a summary of the main points of your execution. Ask yourself – What have I learned today?

Repeat the exposure task as often as you consider fit. You should anticipate some ups and downs from day to day, depending on your state of mind. Though you think you have got over the first situation, try it a few more times to make sure, before going on to the next one. Remember that it is essential to take note of each exposure practice in the self-record that you have been given.

Continue to expose yourself to the remaining situations that you fear in the same way, until overcoming the most difficult one.

Stage 3:

If the anxiety/unease is too great and does not drop, and you therefore cannot go on advancing through the exposure hierarchy, the most likely thing is that the situation you have chosen is too difficult for you at this time.

First of all, find out if the order of difficulty of your list has changed for some reason, that is, some situations that seemed very difficult in the beginning might well now seem easier than the situation in which you have got bogged down.

If this is not the case, you will have to do certain "intermediate" practice exercises between the situation in which you find yourself now and the following objective to keep making progress.

Imagine for example that after successfully getting through situation (1) "Seeing my thighs with tight leggings on in the mirror", the next stage might be (2) "Exhibiting my naked thighs in the gymnasium". Your task will consist in facing certain situations whose difficulty is between (1) and (2), for example "seeing my naked thighs in the mirror".

4. Another sort of avoidance

Up to now we have seen avoidance as "not facing up to the situations which one fears". Nevertheless, there is another type of avoidance which is not so visible and which may arise even if the person is facing up to the situations being feared, cognitive avoidance.

We will explain this by means of an example. Let us imagine a person to whom the same thing as you happens. One of the situations that they dread most is being at social gatherings where they think that others are going to judge them by their appearance and they thus tend to avoid them. Nevertheless, this person is forced to go to a party for professional reasons and just cannot say no. To their astonishment they do not get as nervous as they expected, but still spend the whole meeting without getting up from the table, without going to dance, nor to chat with companions from other tables. In fact, this person thinks that he or she has stood up to a situation that was feared, but this is not strictly true, as even though he or she was physically present at the party, inside their head it is as if they were somewhere else.

Let us look at a few instructions that may help you to overcome cognitive avoidance when you face up to situations that you yourself dread:

1. Respond to the sensations of anxiety/unease by withstanding them and not by avoidance (get closer to them, and do not run away).
2. Remember where you are and do not imagine that you are anywhere else.
3. Try to detect what negative thoughts are assailing you and face up to them.

5. Handling anxiety

When you expose yourself to situations, you will undergo symptoms of anxiety or unease. We will now show you certain weapons that might be of use to you to confront these symptoms.

- Breathe slowly and deeply before and during exposure tasks. Breathe in deeply (counting up to 3) and breathe out, so that you take 8 to 12 full breaths per minute. This is a way to replace fast and labored breathing for slower and more relaxed respiration.
- In order to be able to think more clearly during exposure and to concentrate on the task in hand you can use the following strategies:

Do not add any negative thoughts.
Describe what is happening to you.
Wait until the fear/unease goes.
Observe when this disappears.
This is an opportunity to move forward.
Think about what you have done.
Plan what you are going to do afterwards.
Then start slowly.

Work methodology for the therapist: work on the exposure in session.
Objective: To train the patients in exposure. The first time joint exposure of all the patients is performed with all of them dressed in front of the mirror.
Implementation and instructions:
-Prepare exposure:
What is it and what it is used for
How it works
How it is done
Draw up the EXPOSURE HIERARCHY. On the first occasion only the clothed body hierarchy is used, leaving the other two hierarchies for other sessions.
Integrate the cognitive component in the exposure exercise.
-Before carrying out the exposure exercise:
Identify potential automatic thoughts that may arise during exposure.
Use challenging thoughts.
Generate rational replies and take note of them on the blackboard.
Establish the appropriate objective for the exposure exercise: this should be realistic, and specified.
-Patterns to use during exposure:
All the patients (jointly) are exposed to the mirror in session.
For those for whom this is particularly aversive, the mirror can be partially screened so that this only exposes the zone indicated by their hierarchy.
Each patient informs of their SAUs every 5 minutes.
The patient reads the alternative thoughts (written on the blackboard) when he or she informs of the SAUs that they had previously created when preparing the exposure.
Make a graph of how the levels of anxiety/unease have been evolving.
-After the exposure.
Check the aim of this particular exposure and assess if this has been achieved.
Go over the occurrence of automatic thoughts that had been foreseen.
Assess the use of alternative thoughts.
Examine the relationship between negative thoughts, alternatives and levels of anxiety. Make a graph on the blackboard of how anxiety/unease has been evolving.
The patient sums up the main points of its execution. She asks herself what they have learned here that is useful for their everyday lives.
The exposure goes on outside the session. To do this the patient should analyze their progress and take note of the exposures in the EXPOSURE RECORD.
Exposure task: this is filled in with the corresponding hierarchy item.
SAU (0-10): the evolution of anxiety/unease is recorded during exposure, taking note of the level before starting exposure, its maximum point and at what level this is left after completing the exposure.
Negative thought and alternative thought: any negative thoughts arising during the exposure and alternatives that have been generated are recorded.
Duration: total time of the exposure task

WHAT ARE SAFETY AND CHECKING BEHAVIORS?

1. What are safety and checking behaviors?

When we went through the exposure manual, we saw that this was a technique that allowed us to lessen the power of avoidance. Avoidance was one of the aspects helping to maintain and fortify a negative body image by not facing up to situations which we do not like, not wishing to see body parts that we do not like, or attempting to camouflage the zones of our body that we like least etc.

The clearest form of avoidance is simply not to get out of those situations, not to face up to them. Another form of avoidance is, as seen above, to attempt to "camouflage" the body, for example, by using loose clothes, using makeup or hairstyles in a certain way, i.e., concealing aspects of your body that you do not like so that others do not see your figure and thus get a sensation of "security".

The avoidance of a Negative Body Image can thus include avoiding specific practices (weighing oneself, wearing certain types of clothes) particular people (attractive people...), different places (gymnasiums, beaches) or certain poses or gestures (the ones that one does not like).

These manoeuvres can offer temporary emotional relief and make us feel "secure" because they apparently reduce our negative body experiences (anxiety, shame). Nevertheless, if you remember the model of the body image, what they are in fact doing is paradoxically maintaining dissatisfaction and unease with our bodies.

One must be aware of these "camouflaging" or dressing up practices, which are used to "conceal". They can be classified in at least two categories:

- The ones that *take up time*: perfectionist or rigid behavior patterns, because one always has to do the same thing in the same order to modify one's own appearance;
- *Checking patterns*: looking at oneself in the mirror all the time, continually weighing oneself, always asking others' opinions to be sure...

Let us look at these behavior patterns more closely.

2. What is their function?

As we have already said, security behaviors[6] are strategies that a person uses in the situations dreaded to prevent the "catastrophes" feared from coming about. For example, if a person is afraid of others seeing their hips, because this is a part of their body that they do not like, what they do is wear a loose tee shirt to cover these, not wear tight clothes to avoid being aware of their bodies, or keep up particular body postures to avoid revealing the body zone that they do not like.

In spite of this behavior being intended to prevent what is feared from occurring or to prevent thinking about what we do not like, what actually happens is that negative thoughts are maintained and with them the negative body image. These behavior patterns keep our thoughts negative in at least four ways:

- They make both one's own and others' perception of the unsightly feature probably increase. Think of the example of bald people who let their hair grow on one part of their heads and use this to cover the bald patch with; such "camouflage" means that nobody misses the fact that they are indeed bald and above all want to hide their baldness. A person who dreads showing their body because they consider this to be fat or ugly and dresses to camouflage these parts or assumes postures to hide the belly only manages to be seen in a strange and artificial posture, meaning that in the end they may indeed look "odd" even for others.
- They prevent the negative thought from being disproved. For example, let us imagine a person who believes: "If other people see my thighs they will think that I am fat and believe

[6] Wells, A. (1997). Cognitive therapy of anxiety disorders. A practice manual and conceptual guide. Chichester: John Wiley &Sons.

I'm worthless". To avoid this, they put some safety behavior into practice, for example wearing a sweater tied around their waists. This is a way to succeed in not letting others see their thighs, but they will never know if the others will actually disparage their thighs when they see them.

- They maintain self-attention. This means that they make the person be constantly concerned with not letting what they are afraid of occur and only be aware of their negative body parts. For example, if you are at a gathering of friends and you do not like to sit on the floor because your thighs look bigger when you do, all the time you are standing you will be thinking "how ugly my thighs are and I can't sit down", missing out on other positive aspects which are taking place in the situation, such as your conversation.
- They make a person believe that the catastrophic consequences expected did not occur because of his or her behavior, because they "protected themselves" and not for any other reasons. For example, let us imagine that a person, when they are going to work, wears a long loose tee shirt that covers and hides the hips. This person knows that colleagues at work do not make any comments about them being fat or even tell them that they look good. What they think is that this has occurred because nobody has been able to see their hips, the opportunity never arising to see whether this is true or not.

3. How to fight these

As we are seeing, security behavior patterns have a very powerful effect on maintaining a negative body image and dissatisfaction with the body. This is why one way to neutralize this effect is to stop using them. From now on, we ask you to face up to situations without using these patterns.

First of all go over what security behavior patterns you normally use. Then write them down:

Situation	Safety behaviort	What do I use it for? What am I avoiding?

Bear in mind these behavior patterns when you put your exposures into practice at home.
Carry out the following experiment:

1. Cope a specific situation using the safety patterns that you normally use.
Take note:
Anxiety level from 0 to 10 --------
Negative thoughts:----------
Level of belief in negative thoughts, from 0 to 100:-----

2. Then carry out the same confrontation, but this time without any security behavior patterns.
Take note:
Anxiety level from 0 to 10 --------
Negative thoughts:----------
Level of belief in negative thoughts, from 0 to 100:-----

3. Compare the two copes and talk them over with your therapists.

Work methodology for the therapist:

- Objective: To identify and gradually eliminate safety behavior patterns.
- Implementation: Make a common pool of the pros and contras of safety behavior patterns. In session the "IDENTIFY YOUR SAFETY BEHAVIORS" record should be filled in.

Instructions: The same as were remarked on above. Patients are encouraged to put these into practice.

4. Carrying out Behavior Tests. Verification of Reality and Work Methodology for the therapist

By going through the exposures that the patients are carrying out (to the body and to social situations) stress what they are achieving; confronting fears; finding out erroneous beliefs and realizing that what they fear so much does not happen.

An experiment can be proposed to the patients in the form of an exposure undergone all together, taking advantage of the security of the group, eliminating one of their security patterns and finding out as a group what happens.

Patients tend to fear:

- That everyone is looking at them and that they are furthermore staring at their belly, hips or the part of the body that they do not like.
- That when they look at them the others are going to think that they are fat.

To face up to this fear we are going to perform a verification of reality:

a) To make patients aware of their security behavior patterns and eliminate them, taking into account each person's behavior hierarchy.
b) Go to a crowded place (pub, supermarket, pavement café etc.) to see what happens.

How to prepare the test on behavior patterns:

Before exposure it is important to make the following points quite clear:

- When one goes into a place it is quite normal for people to turn to look who has come in. This "orientation reflex" will be greater when it is a group of people who arrive.
- After a few moments people cease to pay attention to "the newcomers" and they go on with whatever they were doing.
- Define the limits of what is going to be done in the chosen place; standing at the bar of the café, walking around the premises, asking someone the time, asking someone for a light, asking for a cigarette, etc...

It is very important not to make use of cognitive avoidance or apply safety behavior patterns.
Have a prior cognitive discussion.

- Analyze in session the thoughts that may arise when going to the place chosen.
- Have a cognitive discussion of those thoughts in session.

During the test:

- Carry out the behavior test all together outside the place that has been chosen. During the behavior test the patients should be aware of their level of anxiety and that of the negative thoughts that come up, so they can replace these with the alternatives, based on the proof against these, that they can see in the situation.

After the test:

- When back at the session remark on how the behavior test has gone, what thoughts came up, and how these were challenged, as well as the level of anxiety that they have experienced. Stress what they have learned through this experience.

RELEARNING TO LIVE AND PAMPER YOUR OWN BODY

You have been mistreating your body for a long time. Sometimes you have treated it as a stranger and sometimes as an enemy. And instead of forming part of our being, the body understood this way becomes an uncomfortable shell, too sensitive to what is going on inside and outside us, a coat which we do not like and which we should like to shake off because it makes us feel bad.

If you do not like your body you may well reject it, you will be off its wavelength and out of pace with it, and you will ignore its signals.

What we are suggesting now is for you to learn to live your body, to feel it as part of you, as an expression of you, and to enjoy it more. It is more than our covering, it is quite simply ourselves.

1. Our body and its functions

We are too accustomed to thinking about our body only in terms of a "body", as a physical aspect. But it has other functions.

- *Discussion area 1 What do you do for your body?*
- *What do I do for my body?*
- *What does my body do for me?*

In our answers to these questions we will find at least three aspects, three functions of our body:

- Physical appearance.
- Health and physical state
- Sensorial experiences (my body lets me feel)

It is customary for people with negative body images only to think about their bodies in one dimension (its physical appearance) ignoring the rest of its functions and their potential. There are many things that they could do and do not do because they only think of their bodies in terms of physical aspects. They also treat them as objects (and not very dearly loved ones either). Our bodies are also instruments of action, receivers and creators of sensorial experiences.

To realize all the potentiality of your body and be able to enhance your body image it would be useful to go over these three functions:

Physical appearance: this is one of its dimensions, and we have to take notice of it. Investigate the aspects you never previously dared to look into (you always wear the same type of clothes... try something different, some other colors). Be careful with checking or grooming behavior patterns.

Exercise: Regular exercise benefits the general health, and makes us feel better. It causes toxins to be burned, an increase in adrenalin, effort, sweating and later relaxation through tiredness. But one precaution: this is not a matter of burning calories, this is neither a "must" nor an obligation to lose weight. What it really involves is doing it just to enjoy it.

Feeling and Experiencing. Our body is our source of sensations. Thanks to our bodies we can experience beauty, music, smells, feel the pleasure of tasting things, dancing or feeling the caress of someone who loves us.

Our bodies can give us all this, but if we are concerned only by the physical appearance dimension, we do not realize the other capacities of our bodies.

2. Carry out pleasant Body Image activities

To start to get to know and care for our body first we will think of bodily activities done this year or last year, stating how often you did these (from 0 to 4). Also take note of how much command over them you had and the pleasure or joy you feel when doing them (also from 0 to 4). You can also include the activities that you did not do but would like to do in your list, also stating the level of command and pleasure you think you would have doing that activity. (In session use the LIST OF BODILY ACTIVITIES).

Secondly, taking into account what you like, what you used to like or what you would like to do, select an activity from each of the categories (Physical appearance, Exercise, Sensations).

Thirdly, during the week, carry out an activity from each category and lastly write in the RECORD OF BODILY ACTIVITIES what the degree of mastery and pleasure that these produced in you were.

3. Becoming reconciled with our bodies

Sometimes we hate and fear what we do not know. Reconcile yourself with your body. Our body is like a friend with whom relations will quite understandably be pretty bad if we insult, hit, hate and criticize it.

We propose the following exercise:

Activity 1: A letter of reconciliation with your body

Consider it as a friend whom you have insulted, criticized, rejected, avoided, ridiculed and mistreated. Write it a letter in which you apologize for the mistreatment, for all you have done to it and undertaking from now on to change your relationship with it; saying that you are going to attempt to make peace with it and create a new relationship. Tell it what you would like to do with it in this new relationship and how you intend to make your relationship better in the future.

Think what your body would reply to you.

Another of the things we can do to recover our body is to pay it a compliment from time to time. When you see it in the mirror, don't go away without saying something nice about your body. Get rid of that "mental blindness" and rediscover the traits that you like: your hands, your eyes, your bust, your shoulders… You might well feel a little ridiculous at first talking to yourself in the mirror, but remember that you have been saying very negative things for a very long time even though nobody could hear you. It could also be the case that you don't really believe those positive statements about your new description - but don't worry about that and pay your body a complement, just give it a chance!

PREVENTION RELAPSE

1. Preventing relapses

We are now beginning to draw near the end of our meetings. It is time to make an appraisal of what we have done up to now.

Activity 1: Appraise the situation
Have you seen any changes in yourself since we started? What worked best? What parts of your hierarchies have you overcome? And your safety behavior patterns? What is it that you are starting to value about yourself? What parts are you still having difficulties with?

We have gone a long way so far and we want to congratulate you for not having dropped out. If you have appreciated any changes, do not forget that these changes are due to your own work. Our meetings are going to end, but the programme continues with you. What we have seen here are strategies that have not only been useful for you over this particular period but are tools that you can apply each time this is necessary. You can take them with you!

2. Situations that make us vulnerable: knowing risk situations

Everybody has a number of situations that make them more vulnerable. This will be the first step to be taken to protect themselves: identifying the situations that may be problematic and planning them in advance.

Discussion area 1: What are our own risk situations?
What are the situations that may be distressing for you, because you feel vulnerable in these?

Some of the situations that are common to almost all people are:

- Stress situations
- Feeling overwhelmed by feelings and emotions
- Problems with one's partner, family problems, problems with friends
- Feelings of being lonely or abandoned
- Going to some place where you know there will be young men, prettier people, and everybody will be wearing a swimming costume...

What can you do?

- First of all, personalize this list, i.e. think of any situations in which you might feel more vulnerable.
- Think of how to plan these, of how to prepare yourself for them.
- Live through this situation and turn up to it with your plan
- Value how this worked out and if you can improve the strategies for future occasions.
- Attempt to solve problems without adding others.
- Identify negative messages that you send to yourself and try to change these for more positive and useful ones.

3. Differentiate between a slip, a lapse and relapse

If you remember the model of how a negative body image is formed, you will understand that you have been using a negative language with your body for a long time. You have to be aware that you are someone who is vulnerable to this problem, that concerns with eating and the body have taken up a great deal of time in your life and it is quite likely that these concerns will raise their heads once more, above all at difficult times. So think of this as a possibility (like people who are more prone to colds than others) and be ready to face up to them.

There are subtle but big differences between what we call a slip, a lapse and a relapse. To appreciate these differences, we could use the example of giving up smoking. When someone

who is trying to give up smoking smokes a cigarette, this could be said to be a slip. Smoking a cigarette is not so serious. But if this person considers that either the situation is under control or that the matter has got the best of him, and lights up another one, then we would be talking of a lapse. At this point the person in the example might think that there is no solution, that whatever he does he cannot give it up, and straight away start to buy his cigarettes, his lighter, starting to smoke as before and considering himself to be a lost case with no willpower. This would be the relapse.

The difference between these three situations is not only a matter of quantity, but of the attitude lying behind each of them. Anyone can have a "slip". A “lapse” is an invitation to get back up, to analyze what has happened and seek resources in the future to be able to handle the situation better. But in a "relapse" attitude, one throws in the towel, considering there is nothing more to be done.

When you stumble, just think that you have had a slip or a fall and take the measures needed to apply the strategies you already know yet again. If on the other hand, you think you have relapsed and give it all up, things will get worse.

Like everyone else, you will have good and bad days. It is important to know how to recognize the signals warning about possible falls. Let us look at some of these:

Discussion area 2: discovering signs of alarm

Think of what these are telling you and that you could once more be heading into a negative body dialogue.

Some of the commonest alarms you find are likely to be:

- Talking to yourself in derogatory terms
- Being too concerned about food and weight
- Thinking that you will be happy when you are thin
- Thinking you are too fat, even when others say the opposite
- Weighing yourself frequently
- Looking at the mirror often
- Not wanting to look at yourself in the mirror
- Going on a diet, skipping meals
- Doing too much exercise
- Avoiding situations
- “Camouflaging yourself”
- Harboring perfectionist attitudes
- Wanting to isolate yourself from everything
- Not being sincere with your symptoms

If some of these signals should appear, get down to work: don’t leave it for later on. Immediately apply the strategies that you have learned on this program once more, starting with the ones that have helped you most. You are your own and best therapist.

But remember: even so falls are still possible. Then remember the following:

- You will very likely be showered with negative messages and memories of the past. You may well wish to isolate yourself from everyone. Don’t do it. It is precisely at these times that you need to ask people you can trust in for help
- If you have had a lapse, think of this as an opportunity to learn. Remember and reconstruct what has happened and design a plan to prevent this in the future.
- Reserve time for yourself. Do things that you like and pamper yourself.

Recovery takes time. Instead of blaming yourself for slips, learn from them, because they will

make you a stronger person. The road to recovery is long. You might sometimes be tempted to give up, to try to solve problems with your "good old methods", but it is important for you not to give up fighting. You are the best reward!

Work methodology for the therapist: In-session exercise:

- Objective: To get ready for the end of the therapy. Underline feelings of effectiveness about the achievements attained and identify the areas in which work should still be done. Jointly, therapist and patient can identify the areas in which they should go on working and set new targets, such as feeling better with certain body parts or gaining greater control over anxiety thoughts, feelings or situations. Identify risk situations and make a work plan for each of these. Differentiate between lapses and relapses. Reinforce the achievements made. Underline the need to go on practicing what has been learned.
- Development and instructions. At sessions talk about the signs of alarm for falls with all the patients together, draw up a common list of risk situations, which each patient should then personalize. In the session some of the risk situations should be planned, preferably those which are nearest in time, encouraging patients to practice these.

VIII. MATERIAL FOR THE PATIENT

VIII. 1

***Summary*: WHAT IS BODY IMAGE?**

∗ Body Image is the idea or image that each individual has of him or herself and also the way one thinks one is seen by others.
∗ Physical characteristics and above all the value that we attribute to these also determine how we feel in respect of ourselves.

∗ One important characteristic of eating disorders is the *distortion of Body Image*.

∗ We are mistaken about:
-. Our body dimensions: we see our figure as being bigger than it actually is; we are unable of acknowledging our own thinness
-. The interpretation of the signals sent by our body: disturbance of the feeling of hunger, of fullness, etc.

∗ Consequently:
-. We react negatively towards our body.
-. We subject our body to impossible comparisons from which we always come out losing.
-. We love ourselves less and make our self-esteem depend only on our weight and our body.

∗ How does having a negative Body Image affect us?

∗ Repercussions as to what we think and how we feel; we focus all our attention on our body, and this makes us feel nervous.
-. We think that any flaw will reveal some negative characteristic, not only about our body, but about ourselves as people. It affects our self-esteem.
∗ Repercussions on what we do:
-. We avoid social situations.
-. We conceal our bodies with clothes or particular postures, which avoids showing the part not liked.
-. We compare and check our own appearance against that of others, and ask others' opinion about how we look at all times.
-. We avoid looking at ourselves in the mirror.
-. We are constantly looking at ourselves in the mirror.

✓ Our body image is what makes us feel unhappy and bad with ourselves, not our body itself. However much we manage to alter our body, if we do not change our way of thinking and feeling about it and do not accept ourselves, we will go on feeling bad and having a negative body image. Body image and body are two different things.

VIII. 2

Summary: **HOW IS BODY IMAGE FORMED?**

There are two types of influences in the way it is formed:

1-. *Influences from the past*: these are the experiences that condition how we see ourselves:

- -. Our body forms part of our consciousness as individuals. Our body is what individualizes us.
- -. Our body is the medium through which we relate with the rest of the world.
- -. Since childhood, we have been comparing ourselves with the ideal models and the messages that reach us through the mass media, and even then, we valued our appearance according to the way we resembled those ideals.
- -. In the last few decades, the mass media in western societies have told us that being slim, having a body with no curves, is the model of beauty desirable for women.
- -. These cultural values affect us all: our families, our friends, etc. The physical appearance is the commonest subject of children's "jokes".

When reaching puberty, our body undergoes great changes, the body is in transit; it is no longer that of a child and neither has it become that of an adult, and it will go on changing as we grew old. Think of yourself in 5 years time. How will you look? What will you be doing? And in 15 years? And in 30? The way we perceive and live our new appearance is vital in forming the body image.

- -. Another factor of influence in the formation of body image is our personality or the way we are. Whilst there are people who attach hardly any importance to their appearance, for others the way they look is of vital importance: they consider that their value as persons depends on their physical characteristics.

All these factors form part of a "breeding ground", a predisposition to have a positive or negative body image.

2-. *Close influences*:

- -. After creating beliefs as regards what a perfect body is and if we are in possession of that ideal or not, it is these beliefs which guide our behavior, above all in situations in which we feel threatened.
- -. These are risk situations (being at the gym, eating, looking at oneself in the mirror...). In these situations, we compare our body image with the "ideal".
- -. If these images move too far apart, an "internal dialogue with our body" comes about, full of negative thoughts and emotions.
- -. After this has been set up, it works like a vicious circle.
-

Some people have no problem with having a physical appearance different from that of others, whilst for other people this physical difference means constant suffering.

The external appearance of a person is not a factor determining how one feels inside.

We cannot change the past or our culture, but we are aware of these factors, and their power will help us to behave differently from now on and in the future: by changing the conversations that we have with our body.

The aim of this program is to help people to develop a happier relationship with their body.

VIII.3

Summary: WHAT IS WEIGHT?

- - When we stand on the scales, we do not only weigh the amount we have put on or lost or just the fat in us, since the value of the weight also reflects our bones, tissues, muscles, vital organs, etc.
- - One of the tissues that make up our organism is the fatty tissue, which, apart from protecting us from the cold, provides energy to our vital organs.
- - When there is an excess of fatty tissue in our body we can indeed use the term obesity. Obesity is not excess weight, but surplus fatty tissue.
- - A person's weight can vary several grams during the day, and quite a lot more according to which day of the menstrual cycle it happens to be.
- - Why have a bad day just because we have weighed ourselves at the wrong time?
- - This is why it is no use becoming obsessed with a weight value. Our body weight varies in a range from 4 to 5 kg, depending on circumstances, conditions, stress, etc.

- There is no sense in weighing oneself all the time. Instead, the most sensible thing is to weigh once a week, on the same scales and more or less at the same time.

- Can I have the weight (range) that I want?

- Our height, the color of our eyes and hair are all individual qualities determined by our genetic inheritance.
- Another individual characteristic determined by our inheritance is our body weight.
- Just as we cannot modify our height, neither can we modify our weight beyond a genetically determined weight range.
- One of the characteristics of our weight (which always moves in that range) is that this is stable in the long term, which is why it is called the natural weight range.
- Our organism will thus prevent any change of weight beyond this range, as brought about either by overfeeding or ceasing to eat.
- The bodily defense to preserve this energy acts like a thermostat, and if it is short of energy it will cut everything down to the minimum levels to avoid consuming energy. If it has a surplus, it will burn this up on other activities. This is the function of the metabolic rate (the amount of energy that a body consumes to keep alive).
- When kilos are lost through fast unbalanced diets the amount of fat lost is very low indeed. What is actually lost is water and part of the tissue of muscles and vital organs.

- How can be fatness or thinness measured?

∗ Being fat is not simply weighing more, anyway, more than whom? Alternatively, in what circumstances?

∗ Ideal weight tables are not reliable.

∗ The best way to know if we have a healthy weight is an index that establishes a ratio between weight and height: the Body Mass Index:

$$BMI = \frac{\text{Weight (kg)}}{\text{Height}^{2}\ (\text{m})^{2}}$$

BMI Values	
<16	Extremely low weight
16-18	Significantly low
20-25	Healthy weight
27-30	Overweight
30-40	Obesity
>40	Morbid obesity

⇒ So far we have seen that:

∗ Our weight is an individual characteristic.
∗ It is genetically determined.
∗ It is stable in the long term.
∗ The diets that we are proposed do not work and clearly fail.
∗ Remember that the slimming and nutrition business moves vast sums of money.

If everybody has a body and their own natural weight range, why should the fact of not attaining the canon of beauty currently in vogue produce sadness, impotence, and serious physical problems in us?

∗ It is more dangerous for our health to strive to get closer to unattainable ideals than to learn to live with our body and love it as it is, unique and different to all the others.
∗ To enhance our body image there is no need to irrationally "transform" our body, but to change the way we treat and value us.
∗ If someone has a negative body image, even though her weight changes, she will continue to feel bad with herself.
∗ The healthiest thing we can do for ourselves is to learn to accept, love, and respect ourselves.

VIII.4

***Summary*: WHAT IS BEAUTY?**

- The value of the appearance

- - A person's physical appearance informs us about their sex, age, race etc., but not about the way they are, their intelligence or pleasantness.
- - On many occasions we allow ourselves to be guided only by the appearance.
- - If we can see that it is a mistake to judge people only by their physical appearance, can we judge ourselves only by our appearance?
- - Another of the mistakes that we make is to believe that "what is pretty is good", when we think that an attractive person is happy and successful.
- - Attractive people are not always happier, and are sometimes seen negatively by others, as being selfish, superficial, haughty, etc.
- - Remember: being attractive or handsome is no guarantee of feeling oneself to be attractive or at ease with one's own body, or happy in life. It is better to be at ease with oneself, with one's own physical appearance.

- What is beauty?

- - Fashions dictate what is desirable and attractive, and we live in a culture whose ideal of beauty is to have a thin body.
- - This pressure is reflected in fashion, where increasingly thin models are required with such unfeminine forms that these go against nature.
- The continuous bombardment of messages of this kind has an influence on the acceptance of our bodies and makes us compare ourselves and wonder – where on earth am I going looking like this?
- - Advertising gives us the message that changing is easy, that nature can be altered, so we should all make an effort to change.

If it were so easy to change our body against nature we would find top-models everywhere we look, and yet we only see them on television.

- The great number of people (above all women) suffering from eating disorders in Western societies and their non-existence in the third world makes us think that it is culture and not geography that have to be taken into account in the development of these disorders.

But have women always tried to be thin?

- Is beauty universal?

The ideals of beauty are not determined by biological factors, but cultural ones.

- - The ideal of beauty is different between cultures and countries, but within one society this ideal is constantly changing.
- - Throughout the 20th century models of beauty have been changing, from the marked feminine characteristics of Marilyn Monroe to the tubular anorexic shape of the 60s.
- - When we all attain that ideal of beauty the fashion will probably change since it will be considered out of date and beauty will mean something else.
-

- The search for beauty at a painful price.

- - In all cultures in all ages the current ideal of beauty has been pursued, even though this meant almost a mutilation of one's own body (binding the feet of Chinese children so that they would become so very "beautiful" resulted in converting the foot into a stump and undergoing awful pain).
- - Eating disorders are a good example of this search to imitate what is considered beautiful, even at the expense of our own health.

- One starts by wishing to cut down those extra kilos and this leads to an unending escalation, ending up by thinking about food and the body all day without living for anything else.
- One stops enjoying things that one used previously to like, becoming nervy, not wishing to see friends, having arguments with one's parents, etc.
- There are also serious physical consequences:
  ◊ The menstrual period disappears and growth is held up.
  ◊ Changes in the skin, dryness and cracking.
  ◊ Hair loss.
  ◊ Deterioration of the teeth and sores in the digestive apparatus through vomiting.
  ◊ Constipation and abdominal pains.
  ◊ Heart arrhythmia and lower blood pressure.
  ◊ Kidney malfunction.
  ◊ Reduction in the weight of the brain and heart.

- Remember:

- Only 16% of women are clinically obese but 90% nevertheless wish to slim.
- 95% of slimming diets are not effective.
- The research done by Nazis in concentration camps established that the minimum diet for human survival was 900 calories per day: the same rate applied today at the most luxurious slimming clinics.
- - Professional models weight 23% less than other women.

VIII.5

***Summary*: THE IMPORTANCE OF (ABC) THOUGHT**

- The events that take place in life may well affect us, but these are not the direct cause of the emotional and behavioral consequences that we experience, it being instead the beliefs, the interpretations that we made of these situations that give rise to such consequences.

(Antecedents; Situation) (Beliefs) (Consequences)
A B C

Properties of negative thoughts:
- These are automatic
- They often start with "should", "have to"...
- They include absolute terms such as: all, nothing, never, always, never, everybody, nobody...
- They tend to predict catastrophes

Instructions for filling in the record:
-Think of the situations in which you felt sad, bad, angry
-Describe the situation as objectively as possible
-Identify the emotion that you are feeling
-Identify its intensity (0-10)
-Identify the negative thought that lies behind it
-State how much you believe that thought (degree of belief from 0 to 100)
-State what happened afterwards

VIII.6

WEEKLY RECORD OF NEGATIVE THOUGHTS (ABC)

Name: Date:

Situation	- *Emotions (0-10)*	Negative thought - *(Degree of belief 0-100)*	What happens

VIII. 7

Summary: HOW TO OVERCOME NEGATIVE THOUGHTS (ABC-D)

To change negative thoughts it is useful to question them to generate more realistic interpretations or thoughts that do not give rise to trouble or distress with our body image. Remember the steps involved:

-Think of the situations in which you felt bad
-Describe the situation as objectively as possible
-Identify the emotion you are feeling
-Identify its intensity (0-10)
-Identify the negative thought that lies behind this
-State how much you believe this thought (from 0 to 100)
-Find a more adaptive thought and how much you believe this:
  -Evidence in favor and against
  -Real probability that what the negative thought says is actually true
  -Take the drama out of it
  -Ask about its utility
-Value the emotion again (0-10)
-Value your belief in the negative thought again
-State what happened afterwards

VIII.8

WEEKLY RECORD OF CHALLENGING THOUGHTS (ABC-D)

Name: Date:

Situation	
- *Emotion (0-10)*	
Thought (-) - *(belief 0-100)*	
Alternative thought - *(belief 0-100)*	
What happens	

VIII.9

Cognitive errors about the body image (Adapted from Cash, 1991; Cash y Grant, 1996)

Name: Date:

State how often these errors occur to you in your conversation with your body (from 0 – never, to 4 – very often)

Beauty or Beast: Either pretty or ugly, thin or fat, short or tall; there is nothing in between.	
The Unreal Ideal: Comparing your own appearance with the current ideal of beauty: top-models...	
Unfair comparison: Comparing ourselves with people who we know to have physical attributes that we desire	
The magnifying glass: Excessive attention to the flaws that one perceives in oneself.	
Blind Mind: Minimizing one's own physical aspects that are all right.	
Expanding ugliness: Extending the discontent from some aspect that one does not like.	
Blame game: Inferring that one's appearance has been the cause of something that one did not wish to happen.	
(Mis)reading the mind: If I think this, everybody else will also be thinking it.	
Predicting unhappiness: Believing that one's own appearance will entail negative consequences in the future.	
The bond of appearance: Thinking that one's own appearance prohibits or prevents certain activities.	
Feeling ugly: Feeling ugly is the proof that one must actually *be* ugly.	
The bad-tempered mirror: Generalizing negative thoughts and states of mind stemming from events that have nothing to do with the appearance to body experiences.	

VIII.10

Summary: **EXPOSURE**

- "Exposure" is a psychological treatment technique whose aim is to learn to face up to situations which one is afraid of.
- To carry this out:

- Select the situation from the exposure hierarchy. Remember that you should start by situations that produce moderate anxiety/unease levels, i.e. 4 or 5.
- Start to practice with situations of lower difficulty.
- Repeat each situation a few times: if you succeed, go on.
- If progress is halted, attempt to find some intermediate points.
- Try to establish the habit of practicing daily.
- Using techniques for handling anxiety and challenging thoughts is useful.
- In order to be able to think clearly during exposure and concentrate on the task in hand you can apply the following strategies

Do not add negative thoughts.
Describe what is happening.
Wait until the fear/unease has gone.
Do not abandon the situation
Observe when this disappears.
This is an opportunity to move forward.
Think of what you have done.
Plan what you are going to do afterwards.
Then start slowly.

VIII. 11 Hierarchies for exposure to body parts

Body parts / clothed body	**SAU (0-10)**
1.-	
2.-	
3.-	
4.-	
5.-	
6.-	
7.-	
8.-	
9.-	
10.-	

Body parts / naked body	**SAU (0-10)**
1.-	
2.-	
3.-	
4.-	
5.-	
6.-	
7.-	
8.-	
9.-	
10.-	

Hierarchy of social situations connected with the body	**SAU (0-10)**
1.-	
2.-	
3.-	
4.-	
5.-	
6.-	
7.-	
8.-	
9.-	
10.-	

VIII.12

EXPOSURE RECORD

Name: Date:

Exposure Task (Item from hierarchy)	SAU (0-10)			Thought (-) - *(belief 0-100)*	Alternative thought - *(belief 0-100)*	- *Duration*
	Before	Maximum	Final			

VIII.13

***Summary:* WHAT ARE SAFETY AND CHECKING BEHAVIOUR PATTERNS?**

These are manoeuvres that "camouflage" our bodies, or ones in which we are constantly checking our appearance. They give us temporary relief, but foster our negative body image.

First of all, review what security patterns you normally use. Make a note of these in the record.

Take all these behavior patterns into account when you make your exposures at home.

Carry out the following experiment:

1. Have a confrontation with a particular situation using the safety patterns that you normally use.

Take note:
Anxiety level from 0 to 10 --------
Negative thoughts:----------
Degree of belief in negative thoughts from 0 to 100:-----

2. Then have the same confrontation, but removing the safety patterns.

Take note:
Anxiety level from 0 to 10 --------
Negative thoughts:----------
Degree of belief in negative thoughts from 0 to 100:-----

3. Compare the two confrontations and talk it over with your therapists.

VIII.14

IDENTIFY YOUR SAFETY BEHAVIOR PATTERNS

Name: Date:

Situation	Safety behavior	What do I use it for? What am I avoiding?

VIII.15

LIST OF BODILY ACTIVITIES

(Adapted from Cash, 1991)

Name: Date:

Activities	(0 – 4) Regularity	(0 – 4) Mastery	(0 – 4) Pleasant ness
Gently brushing one's hair			
Having a bubble bath			
Putting makeup on			
Wearing new clothes or ones with lively colours			
Dancing			
Having a massage			
.....			
....			

VIII.16

RECORD OF BODILY ACTIVITIES

(Adapted from Cash, 1991)

Name:

(*) A: Physical appearance, E: exercise, S: sensations

Activity/date	A/ E/ S (*)	Mastery (0-4)	Pleasantness (0-4)

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