

COPING STRATEGIES IN PSYCHOTICS: CONCEPTUALIZATION AND RESEARCH RESULTS

Salvador Perona Garcelán and Antonio Galán Rodríguez
Health Service of Andalusia

This paper reviews research carried out on spontaneous coping behaviour in psychotic patients. It describes the use of the concept of coping in these studies and the major categories of coping used in the literature and presents relevant results. Finally, we include some practical contributions for the development and planning of intervention in this field.

En el presente trabajo se revisan las investigaciones llevadas a cabo para estudiar las conductas espontáneas de afrontamiento en pacientes psicóticos. Se hace un análisis del uso que se ha hecho en dichos trabajos del concepto de afrontamiento y se describen las principales categorías de afrontamiento utilizadas en la literatura, así como de los resultados más relevantes de estos estudios. Asimismo se concluye con aportaciones prácticas para el desarrollo y planificación de estrategias de intervención en este ámbito.

The active nature of the individual in the face of difficulties resulting from illness is a reality that has been confirmed at both a popular and scientific level. Scientists have looked into the phenomenon with the aim of studying the different behaviours used by patients to deal with their disorders and the limitations deriving from them. But the great difficulty we encounter in this field is the multitude of approaches made, so that it is difficult to arrive at a global and comprehensive view of research on how the individual acts in these situations.

The behaviours in question are often labelled as "coping" behaviours, a concept with a long history that is currently associated with the work of Lazarus & Folkman (1986) within the framework of their Transactional Theory of Stress. These authors defined a concept that at an intuitive level was highly accessible, and which they endowed with a strict theoretical formulation that facilitated its use at a scientific level. However, despite the heuristic value of this model and its consequent popularization, the concept of coping continues to be quite loose, so that the same label is used to refer to quite diverse processes, ranging from patterns of neuroendocrinal activity to specific types of cognitive processing (Crespo & Cruzado, 1997; López-Roig, 1991).

In our own field of work, that of psychosis, there is clearly a reproduction of the situation that we describe elsewhere in relation to the concept of illness in general

(Galán Rodríguez, 2000). Thus, in the studies published to date on coping in people diagnosed with psychosis, it is found that a high percentage of subjects report not remaining passive in the face of everyday difficulties and problems, and that they put into practice a series of strategies with the aim of feeling better. More specifically, it was found that the percentage of subjects claiming to use coping strategies ranged from 72% (e.g., Tarrier, 1978; Dittmann & Schüttler, 1990) to 100% (e.g., Böker, Brenner, Gerstner, Keller, Müller & Spichtig, 1984; Brazo, Dollfus & Petit, 1995), with the exception of the work of Carr (1988) and of Carter, Mackinnon & Copolov (1996), in which lower figures appear: 50.2% and 68% of patients, respectively.

If we review research on coping skills in individuals diagnosed as psychotic, we can see that this concept has been given a variety of names since the publication of the first empirical work by Falloon & Talbot (1981) and Lange (1981). Thus, after Falloon & Talbot's (1981) *coping strategies* and Lange's (1981) *coping reactions*, we find *self-control behaviour* (Breier & Strauss, 1983), *self-healing strategies* (Böker, Brenner, Gerstner, Keller, Müller & Spichtig, 1984), *autoprotective efforts* (Brenner, Böker, Müller, Spichtig & Würzler, 1987), *self-help techniques for auditory hallucinations* (Frederick & Cotanch, 1994) and *anti-hallucinatory strategies* (Brazo, Dollfus & Petit, 1995).

We are faced, then, with a wealth of concepts restricted to specific areas of functioning (such as hallucinations) or to particular behaviours (such as those of self-control). The objective of this work is to undertake a review of these varied partial approaches, in an attempt to achieve an overview of that which can be grouped under the label "coping in psychosis".

The original Spanish version of this paper has been previously published in *Clínica y Salud*, 2002, Vol. 12 No 2, 145-178

.....
Correspondence concerning this article should be addressed to Salvador Perona Garcelán. Unidad de Rehabilitación de Area Virgen del Rocío, Avda. Kansas City, 32E bajo, 41007 Sevilla. Spain.

E-mail: sperona@correo.cop.es

THE CONCEPT OF COPING IN THE FIELD OF PSYCHOSIS

Conceptions of coping in the study of psychoses

Despite the diversity of denominations, such as those listed above, in this work we shall employ that which is most commonly accepted and most frequently used, which is that of coping. Nevertheless, they all refer to the personal resources used by people diagnosed as psychotic to deal with the demands resulting from their disorder and those arising from their environment. Even so, we have found some differences in the conceptualization of coping among the different authors that have studied the matter.

There is one group, perhaps the most numerous, that approaches the study of coping from an empirical point of view, and on the basis of the vulnerability-stress model of Zubin & Spring (1977) and Nuechterlein & Dawson (1984). This model defends the hypothesis that all individuals with a psychotic disorder are predisposed, or vulnerable to experiencing a crisis when they come into contact with stressful situations that overwhelm them and cause the psychotic symptoms to emerge. However, this model also states that the vulnerable individual is not helpless in the face of aggression from the environment, postulating the existence of a series of protective variables that can avoid the subject having a relapse. Among these variables are biological protectors, such as anti-psychotic drugs, social ones, such as social support networks, and personal ones, such as general skills used by the subject to adapt to his/her medium (social skills, labour skills, assertive skills, instrumental skills, etc.).

Over the last twenty years, this model has stimulated a great deal of research, leading to the development of strategies for helping such people to improve their quality of life. Among these strategies are all of those described as "coping strategies", such as training in social skills, communication skills for the families of schizophrenics, and so on. However, these strategies have emerged from the experience and research of clinical psychologists and psychiatrists that work in this field, and might therefore be considered "artificial", in the sense that they are designed by mental health professionals and are in many cases strange for subjects, especially when they fall outside of their ideological or cultural framework, or, more specifically, are at odds with the basic set of beliefs that allow an individual to make sense of his or her reality. For this reason, many researchers, on conceptualizing psychoses from the vulnerability-stress model, have considered the importance of studying "natural" or "spontaneous" coping skills.

This was the framework of the first studies on coping in relation to psychotic symptoms (Falloon & Talbot,

1981; Tarrier, 1987; Carr, 1988), a framework that has had a great deal of influence in the field. Nevertheless, except in the case of Yusupoff & Tarrier (1996), we have found no clear definition of what researchers understand by coping. These authors define it as "the active self-generation of cognitive and behavioural procedures for directly influencing symptoms or reducing the resulting anxiety" (Yusupoff & Tarrier, 1996, p. 86). However, according to this use of the term, coping refers to all the cognitive and behavioural resources patients employ to defend themselves against the symptoms and against other intrusive experiences.

In this regard, it is highly important to take into account several elements that are implicit in these studies. In first place, we should stress the importance of detecting the antecedents of symptoms, which allows the subject to employ these behaviours "consciously" (Falloon & Talbot, 1981; Breier & Strauss, 1983; Tarrier, 1987; Carr, 1988). Secondly, and in contrast to Lazarus & Folkman's (1986) Transactional Theory of Stress, the concept of coping is closely linked to the effectiveness of the strategies. These should be useful and should achieve, for example, the objective of reducing or eliminating the interference of the voices (Falloon & Talbot, 1981). Thirdly, of priority importance is a conceptualization of coping from a defensive perspective, that is, the subject performs such behaviours to defend him/herself from the symptoms, understanding these phenomena from a medical perspective, as intrinsically negative and the expression of an underlying psychiatric pathology. Lastly, another basic idea that emerges from these studies is the consideration of coping as a molecular behaviour, contingent upon the problem behaviour and limited in time, and whose objective is the temporary elimination of the symptom.

There are two other approaches in the literature on the field which, from a different perspective, conceptualize coping strategies as complex processes, not limited in time as in the approach described above.

The first of these is that of Romme & Escher (1989, 1996) and Romme, Honig, Noorthoorn & Escher (1992). These authors developed their research with the specific aim of studying coping strategies in situations of auditory hallucinations. Their approach is quite different from that of the authors mentioned so far, since they understand coping as a process that facilitates the integration of the hallucinatory experience in the patient's everyday life. On not considering the voices as a pathognomonic symptom of schizophrenia or as something necessarily negative, they argue that coping does not have to be defensive, but that it can rather be associated with the search for some kind of peaceful accommoda-

tion and acceptance of the voices as "part of oneself".

In order to understand this approach it is highly important to consider the patient's beliefs or frames of reference in relation to the voices. Romme & Escher (1989) have found that the coping process is complex and may vary according to these frames of reference. Their function consists in providing the voices with a meaning within the individual's life, thus making them a potentially decisive factor in the degree of adaptation to the voices.

The other approach is found in a group of authors that study coping strategies in psychotic patients, employing concepts from theories developed especially for the study of coping in other disorders and populations. Specifically, we are referring to the application of the psychotic disorder to Lazarus & Folkman's theory (1986) (e.g., Böker, Brenner, Gerstner, Keller, Müller & Spichtig, 1984; Brenner, Böker, Müller, Spichtig & Würigler, 1987; Thurm & Haefner, 1987; Wiedl & Schötter, 1991; Wiedl, 1992).

From this perspective coping is defined as "those constantly changing cognitive and behavioural efforts developed for managing specific external and/or internal demands that are evaluated as excessive or overwhelming for the individual's resources" (Lazarus & Folkman, 1986, p. 164). These authors formulated a transactional model of coping, which stresses the bidirectional relationship between the person and his/her environment. The main assumption of this model is that an event is not in itself stressful, but that its importance is determined by the meaning the individual attributes to it on the basis of cognitive judgement processes. Two types of judgement are distinguished: the primary judgement relates to the subject's evaluation of the event, and the secondary one relates to the subject's evaluation of his or her resources for coping with the event, in the case of its being considered threatening or dangerous.

A characteristic of this conception is that coping is considered as a process closely related to the contexts in which the problem appears. From this perspective, coping is not a trait, but rather a constantly changing state that evolves according to the current demands of the individual's relationship with his/her environment or him/herself, especially when the objective of the efforts is the psychotic symptoms themselves or the basic cognitive disorders caused by the illness.

Finally, we should also highlight the fact that Lazarus & Folkman's definition of coping takes into account the effort necessary to manage stressful demands, regardless of the result. The quality of a strategy (its effectiveness or suitability) is determined solely by its effects in a given situation and in the long term (Lazarus & Folkman, 1986).

Taxonomies of coping strategies

Attempts to classify the various behaviours an individual would use in coping processes have resulted in some interesting categorizations. Before presenting them, it is appropriate to make some observations about the way the authors have developed these taxonomies.

Thus, first of all we should draw attention to some terminological aspects of these classifications. In this regard it is important to underline the distinction that can be established between, on the one hand, *coping behaviours* and, on the other, *coping strategies*. The former term is employed for referring to those molecular, observable and quantifiable behaviours that subjects employ, consciously or otherwise, in order to protect themselves from the demands of the environment or of their own illness; that of coping strategies is used to refer to those behaviours subjects employ (consciously or not) in a planned and organized way to protect themselves from the demands of the environment or of their own illness. However, this distinction is quite difficult to make in practice, since the term strategy assumes a degree of abstraction, introspection and verbal fluency that many patients diagnosed as psychotic lack when they are required to report to researchers. Therefore, this second concept is an abstraction of the researcher him/herself, who simply categorizes the behaviours described using a verbal term of a higher order. For example, if a patient says that on hearing voices he sometimes goes to sleep and other times relaxes, the researcher concludes that the patient utilizes coping strategies aimed at the reduction of arousal.

Secondly, we should mention the methodological aspects present in the development of these taxonomies. In the review we have made, nearly all the studies use semi-structured interviews, organized in two phases: the first is normally designed to explore the problems presented by the patient (psychotic symptoms, prodromes, stressful life events, etc.), and on the basis of the information obtained there are two alternatives: a) to formulate open questions in which the patient is asked directly what s/he does when faced with each of the problems described in the first phase; the researcher records the frequency of the specific coping behaviours and classifies them according to general coping strategies groups (e.g., Falloon & Talbot, 1981; Cohen & Berk, 1985; Tarrier, 1987); and b) to provide the patient with a predetermined list of coping behaviours, generally based on previous studies, for them to identify those they normally use (e.g., Carr, 1988; O'Sullivan, 1994; Carter et al. 1996); a few studies have used standardized questionnaires developed from the study of coping in other populations (e.g., Farhall & Gehrke, 1997; Van Den

Bosch & Rombouts, 1997; MacDonald, Pica, McDonald, Hayes & Baglioni, 1998).

The taxonomies of coping described in the literature are quite varied, and there is no consensus between authors with respect to the matter. The most suitable way of describing them, with a view to their understanding, is to classify them in two groups: structural and functional.

The commonest approaches are those of a structural nature. They consist in descriptions of what the subject is doing at a given moment *vis-à-vis* certain situations judged as problematic. These descriptions are made on the basis of behaviour, and are grouped according to arbitrary and pragmatic criteria, without recourse to a specific theory on coping. Although these taxonomies are quite varied, the most frequently used are those made according to the classical topographical analysis traditionally employed in the cognitive-behavioural evaluation of any behavioural problem. In these cases coping strategies are categorized as behavioural, physiological and cognitive (Falloon & Talbot, 1981; Frederick & Contanch, 1994; Brazo, Dollfus & Petit, 1995). A number of authors include, together with the above categories, some others, such as sensorial strategies (Tarrier, 1987), social coping (Carr, 1988, Mueser, Valentine & Agresta, 1997), or coping based on medical strategies and on the symptoms themselves (Carr, 1988). Other studies use more general classifications, obtained on the basis of observation and clinical practice, and which could be included in any of the groupings previously described. For example, Breier & Strauss (1983) made a classification in three groups: self-instructions, reduction of activity and increase of activity, while McNally & Goldberg's (1997) classification covers only the context of cognitive strategies (logic and reason, objectivization, substitution, distraction, etc.) (see Figure 1).

A problem presented by these taxonomies is the arbitrary nature of the classification criteria, such that we may find the same coping tactic or behaviour included in different strategies. A clear example is provided by distraction: for Falloon & Talbot (1981) it is a cognitive strategy, but for Carr (1988) it is a behavioural strategy.

Within the strategies we have labelled structural, an important body of research has been contributed by a group of authors that have applied the mathematical technique of factorial analysis (O'Sullivan, 1994; Carter et al. 1996; Farhall & Gehrke, 1997). Specifically, they have done so in relation to auditory hallucinations, where there is also great disparity between different classifications (see Figure 2).

Carter et al. (1996) identified, in the factorial analysis of the 26 coping strategies used by the subjects in their study, three factors that explained 81% of the variance of

their data. As Figure 2 shows, the three factors ("strategies based on subvocal speech", "search for competing auditory stimulation", and "well-integrated or intellectual responses to an intrusive stimulus") are similar to other groupings of an arbitrary nature made by authors already mentioned. For example, these three factors remind us of Tarrier's (1987) taxonomy, and at the same time coincide with the results of the Slade & Bentall's (1989) research on the key factors (distraction, reduction of anxiety and focalization) that describe the positive results of cognitive-behavioural interventions with auditory hallucinations (for an extensive review of this matter, see Perona Garcelán & Cuevas Yust, 1996).

However, the results of the factorial analysis by O'Sullivan (1994) and Farhall & Gehrke (1997) are quite different from those of the above study. The factors that include the different coping strategies in these studies have in common the fact of being based on the final result of such strategies (e.g., "hopeful and optimistic engagement", "despairing rejection", "ambivalent acceptance" and "hopeful rejection" – O'Sullivan, 1994).

The second group of strategies is that which we have called functional. Studies that have used strategies of a functional type are those coming from the research tradition of Lazarus & Folkman (1986). An important characteristic of this approach is that coping is conceived according to its role in the process of adaptation to the environment, avoiding the confusion between objectives and results. While the function of coping is related to the objective of each strategy, the result refers to the effect of the strategy.

From this perspective there are two basic functions of coping that allow us to make a classification of strategies in two groups: a) problem-oriented coping, which refers to behaviours oriented to manipulating or altering the problem; and b) emotion-oriented coping, which includes those behaviours whose function is that of regulating the emotional response elicited by the problem (Folkman & Lazarus, 1980).

In the study of subjects diagnosed as psychotic, this taxonomy has also been employed in several studies in relation to coping in basic cognitive disorders (Böker, Brenner et al. 1984; Brenner, Böker et al. 1987; Böker, Brenner et al. 1989; Takai et al. 1990; Wiedl & Schötter, 1991; Wiedl, 1992), as well as to positive and negative psychotic symptoms (Mueser, Valentine & Agresta, 1997; Middelboe & Mortensen, 1997; MacDonald et al. 1998).

In this research context, the terminology has varied slightly, with the use of the expressions "compensatory efforts oriented to problem-solving" and "compensatory efforts not oriented to problem-solving" to refer to the

categories proposed by Folkman & Lazarus (1980) – *problem-oriented coping* and *emotion-oriented coping*, respectively. The former concept has been defined by Brenner, Böker et al.(1987) as conscious autoprotective efforts directly oriented to confronting the source of the disorder; the latter as conscious efforts to deny, isolate oneself or distance oneself from – in general, to avoid – the emotional consequences of the disorder (see Figure 3).

The level of conceptual development in these studies has been clearly higher, due perhaps to the legacy of work in the study of coping on other areas, such as that of physical health, and in other populations within the field of mental health. An example is provided by the combination of structural and functional criteria in authors such as Wiedl & Schötter (1991), Wiedl (1992), Mueser, Valentine & Agresta (1997) & Middelboe & Mortensen (1997), in whose work two axes are establis-

hed for the classification of coping strategies. The first of these, which they call *coping level*, includes the structural categories of Carr (1988) or Falloon & Talbot (1981); the second axis, which they refer to as *coping direction*, includes the functional taxonomies of Folkman & Lazarus (1980 – see Figure 3). Thus, in these studies we have a taxonomy of coping strategies made up of a double-entry matrix that allows us to study them from a multidimensional perspective, and to contribute data that are highly relevant to the field.

AREAS OF INTEREST

Coping strategies most commonly used by people diagnosed as psychotic

Since the earliest work, the major concern of the different authors was to demonstrate that patients diagnosed as psychotic were capable of coping with their own pro-

Figure 1
Structural coping strategies

FALLOON & TALBOT, 1981 FREDERICK & CONTANCH, 1994 BRAZO, DOLLFUS & PETIT, 1995	BREIER & STRAUSS, 1983	COHEN & BERK, 1985	TARRIER, 1987
Change in behaviour Change in physiological arousal Cognitive methods	Self-instructions Reduction of activity Increase of activity	Fight back Time out Individual diversion Social diversion Praying Medical strategies Drugs/alcohol Helplessness Acceptance	Cognitive strategies Behavioural strategies Sensorial strategies Physiological strategies
THURM & HAEFNER, 1987	CARR, 1988	ROMME & ESCHER, 1989	KUMAR, THARA & RAJKUMAR, 1989
Asking for help Intrapsychic coping Taking extra medication Behavioural change	Behavioural control Cognitive control Socialization Medical control Symptomatic behaviour	Distraction Ignoring the voices Selective listening Putting limits on the voices	Internal dialogue Speaking to a close relative or friend Seeking psychiatric help Adjusting the medication Occupational activity
DITTMANN & SCHÜTTLER, 1990	CHADWICK BIRCHWOOD, 1994	McNALLY GOLDBERG, 1997	WAHASS & KENT, 1997
Distancing Increase in interpersonal contact Cognitive control Symptomatic behaviour Adjustment of medication Helplessness	Resistance to the voices Commitment to the voices Indifference to the voices	Logic and reason Objectivity Replacement Distraction Change of attitude Confirmation of reality Volition Self-affirmation Humour	Religious strategies Distraction Physiological strategies Social change Individualist strategies Strategies to stop voices

blems, but they were also keen to identify which strategies were most frequently used. In the previous section we showed that these individuals report not being passive in the face of their difficulties, and we described the taxonomies found in the different studies. As the reader will recall, we classified these coping strategies as structural or functional. In accordance with this classification, we shall continue by presenting the results of research on this topic.

From a structural point of view, we have found that strategies of a behavioural type are the most frequently used (e.g., Breier & Strauss, 1983; Kanas & Barr, 1984; Carr, 1988; Takai, Uematsu, Kaiya, Inoue & Ueki, 1990; Wiedl & Schötter, 1991; Kinoshita, Yagi, Inomata & Kanba, 1991; Yagi, Kinoshita & Kanba, 1992; Middelboe & Mortensen, 1997; Pallanti, Quercioli & Pazzagli, 1997), examples being the carrying out or reduction of occupational-type activities, watching television, going for walks, doing sport, playing a musical instrument, etc. Other authors report that behavioural strategies are the most commonly used, along with cog-

nitive or social strategies (TARRIER, 1987; Kumar, Thara & Rajkumar, 1989; Mueser, Valentine & Agresta, 1997), such as the use of self-instructions, listening attentively to the voices, stop thinking, talking to a friend, going out with someone, etc. Finally, there is a small group of studies in which it is difficult to decide which type of strategy is most frequently used, given the great variety in subjects' responses to the different stressors (Falloon & Talbot 1981; O'Sullivan, 1994; Wahass & Kent, 1997). For example, Falloon & Talbot (1981) found that the subjects in their study used, as strategies for coping with the voices, mainly the following: relaxation (a strategy aimed at the reduction of arousal), increase in leisure activities (behavioural-type strategy) and reduction of attention (cognitive-type strategy).

The studies in which functional-type strategies have been used present a somewhat confusing picture. In some of them it is concluded that patients diagnosed as psychotic basically use strategies aimed at problem-solving when coping with difficulties resulting from basic cognitive disorders and psychotic symptoms (Böker,

Figure 2
Structural coping strategies based on factoria analysis

O'SULLIVAN, 1994	CARTER, MACKINNON & COPOLOV, 1996	FARHALL & GEHRKE, 1997
Hopeful and optimistic engagement	Strategies based on subvocal speech	Active acceptance
Despairing rejection	Search for competing auditory stimulation	Passive coping
Ambivalent acceptance	Well-integrated or intellectual responses to an intrusive stimulus	Resistance coping
Hopeful rejection		

Figure 3
Functional coping strategies

BÖKER, BRENNER ET AL. 1984 BRENNER, BÖKER ET AL. 1987 BÖKER, BRENNER ET AL. 1989	TAKAI, UEMATSU, KAIYA, INOUE & UEKI, 1990	WIEDL & SCHÖTTER, 1991 WIEDL, 1992	MUESER, VALENTINE & AGRESTA, 1997	MIDDELBOE & MORTENSEN, 1997
Compensatory efforts aimed at problem-solving	Distancing/avoidance	Coping level:	Cognitive coping	Coping level
Compensatory efforts not aimed at problem-solving	Behavioural change	Behavioural	Behavioural coping	Cognitive control
	Strategic intervention	Cognitive	Social coping	Behavioural control
	Medical strategy	Emotional	Non-social coping	Social change
	Resistance	Direction of coping:	Problem-focused coping	Physiological change
		- Problem-centred efforts	Emotion-focused coping	Symptomatic behaviour
		- Non-problem-centred efforts		Coping direction
				- Strategy aimed at problem-solving
				- Strategy not aimed at problem-solving

Brenner, Gerstner, Keller, Müller, & Spichtig, 1984; Brenner, Böker, Müller, Spichtig & Würzler, 1987; Takai, Uematsu, Kaiya, Inoue & Ueki, 1990; Middelboe & Mortensen, 1997); in others, it is demonstrated that they use emotion-oriented or non-problem-solving strategies (Van Den Bosch, Van Asma, Rombouts & Louwerens, 1992; Van Den Bosch & Rombouts, 1997; MacDonald et al., 1998); and there are also others in which none of these strategies predominates in such patients (Wiedl & Schötter, 1991; Wiedl, 1992; Mueser, Valentine & Agresta, 1997).

Given these difficulties, some authors have proposed the hypothesis that these differences can be explained by the mediation of other variables. Specifically, Wiedl & Schötter (1991), in an initial analysis of their research results, found no differences between frequency of use of emotion-oriented coping strategies and those aimed at problem-solving. However, in a second analysis, in which they grouped subjects according to their degree of subjective tension (high versus low), they found a clear response pattern that differed in accordance with this variable. Patients with high tension levels used mainly emotion-oriented coping strategies, whilst subjects with low tension used strategies aimed at problem-solving.

In this regard, Van Den Bosch & Rombouts (1997) found a relationship between cognitive variables and coping style. Their study distinguished three models of coping that correlate with certain patterns of cognitive functioning:

The first consists in the correlation between coping models based on problem-solving, distraction and cognitive acceptance (which they called "healthy coping", and which corresponds in part to the coping strategies based on problem-solving) and self-reports of greater cognitive control (specifically the subjective report by these patients of greater processing capacity and greater attentional control).

The second model, called by these authors "demoralized coping" (which, as it can be seen, is similar to the construct of coping strategy based on emotion), consists in the correlation between coping strategies based on avoidance and worry, and dysfunctional cognitive functioning (overload and distractibility), the subjective experience of unease and a high level of mental effort while carrying out the cognitive performance tasks.

The third model is based on the correlation between coping strategies of the search for emotional support and expression and poor cognitive performance in objective attentional tasks (specifically in the Continuous Performance Test); that is, this dependent coping style is linked to poor objective processing skills without their being accompanied by subjective unease.

Finally, results from other studies provide similar data; for example, Pallanti, Quercioli & Pazzagli (1997) also demonstrated that level of subjective unease explains the differential use of coping strategies, while McDonald et al. (1998) showed that the different ratings of control of stressful situations on the part of schizophrenic patients determine the use of coping strategies based on problem-solving or on emotion, and this finding coincides with those of Wiedl & Schötter (1991) and Van Den Bosch & Rombouts (1997).

In sum, it appears that the use of a specific coping strategy may be determined by the individual's own appreciation of his or her cognitive difficulties, and by the emotional burden experienced when faced with a given stressor. This means that strategies based on problem-solving are used by the most cognitively competent subjects, who therefore have less subjective tension, while those based on emotion are used by subjects with greater difficulties. This probably explains, on the one hand, the apparently contradictory results found in the literature with respect to functional strategies, and on the other, the massive use of strategies of a behavioural type, due to the lower cognitive cost to the subject involved in putting them into practice. Nevertheless, the correlational methodology employed in these studies does not permit us to determine whether these cognitive and emotional difficulties are the cause of certain coping styles or whether, on the other hand, certain coping styles or the nature and intensity of the stressors are the cause of these cognitive and emotional difficulties. This is a matter yet to be resolved empirically.

Relationship between coping strategies and symptoms presented by people diagnosed as psychotic

One group of studies has attempted to identify the relationship between psychotic and non-psychotic symptoms in schizophrenic patients and the use of coping strategies (Breier & Srauss, 1983; Cohen & Berk, 1985; Tarrier, 1987; Carr, 1988; Takai et al., 1990; Wiedl, 1992; Brazo, Dollfus & Petit, 1995; Carter et al., 1996; Middelboe & Mortensen, 1997; Mueser, Valentine & Agresta, 1997; McDonald et al., 1998).

Breier & Strauss (1983) and Tarrier (1987) found that psychotic patients do not use coping strategies aimed specifically at defending themselves against the undesirable effects of certain symptoms. Rather, they concluded that the subjects in their research use in an indiscriminate way those strategies that have proved most useful for them in the past.

While it is true that, in general, research shows that these patients use a wide variety of strategies for coping with the same symptom, in some works that use structu-

ral taxonomies it is found that cognitive strategies are preferentially used for coping with delusional ideas and hallucinations (Cohen & Berk, 1985; Carr, 1988; Wiedl, 1992; Boschi, Adams; Bromet, Lavelle, Everett & Galambos, 2000), and strategies of behavioural change for coping with anxiety, depression (Cohen & Berk, 1985; Carr, 1988), motor retardation and inhibition, thinking disorders (Carr, 1988) and some negative psychotic symptoms such as apathy (Mueser, Valentine & Agresta, 1997).

In studies that have used correlational-type methodology, negative associations have been found between coping strategies and general symptomatology. Takai et al. (1990), for example, found with regard to indices of general psychopathology that high scores in the total BPRS (Brief Psychiatric Rating Scale, by Overall & Gorham, 1962), and more specifically in the subscales of hostility, suspicion, thinking disorder and arousal, coincide with the use of few coping strategies based on behavioural change, distancing and avoidance, and with low total scores in general use of coping strategies.

With regard to the relationship between coping and positive and negative psychotic symptomatology, Middelboe & Mortensen, (1997) and McDonald et al. (1998) also found a negative correlation between the sum of coping strategies and strategies based on problem-solving, and negative symptoms measured by means of the SANS scale (Scale for the Assessment of Negative Symptoms, Andreasen, 1983); that is, the presence of high scores for negative psychotic symptoms coincides with the use of few coping strategies based on problem-solving, and with low scores in the total coping indices. These results are compatible with those of Wiedl (1992), who showed that emotion-oriented coping occurs much more frequently in those patients that present a higher quantity of negative symptoms. With regard to positive symptoms, Middelboe & Mortensen (1997), found a positive correlation between this type of symptom, measured with the SAPS scale (Scale for the Assessment of Positive Symptoms, Andreasen, 1984), and coping strategies based on emotion; that is, the presence of many positive symptoms also coincides with greater use of strategies based on emotion.

On considering the results of these studies, we once again come up against the problem of not knowing whether the different levels of symptomatology determine the greater or lesser use of coping strategies or whether, on the contrary, the greater use of coping strategies means that patients experience fewer symptoms of their disorder. In this regard, in an attempt to arrive at a somewhat more satisfactory approach to the solution of this problem, Middelboe & Mortensen (1997) applied a

linear regression analysis to their data, and found that the total number of coping strategies used and strategies based on problem-solving are preceded by higher scores in general symptomatology according to the BPRS, low scores in negative psychotic symptoms according to the SANS and greater awareness of suffering from a mental disorder. Nevertheless, strategies based on emotion do not reveal such a model. Only if the BPRS was eliminated from the equation was it found that an increase in positive psychotic symptoms significantly predicted the use of coping strategies based on emotion.

Effectiveness of coping strategies in people diagnosed as psychotic

Although Lazarus & Folkman (1986) did not include in their definition of coping the component of the effectiveness of strategies for relieving, reducing, adapting or resolving patients' difficulties, the great majority of authors working in the field of psychosis have considered this factor to be highly relevant, since it has fundamental implications at both the theoretical and technical level.

However, it is not an easy task to embark on the study of the effectiveness of coping, since, on analyzing the literature on the topic, we encounter two problems: one refers to the conceptualization of coping (already discussed at the beginning of this work), and therefore, what is understood by effectiveness from each of the perspectives; the second problem has to do with the methodology followed in its study. Below we shall describe each one of the different forms of understanding the effectiveness of coping and the methodology used for its assessment.

One approach considers that a coping strategy is effective for the simple fact that it is used by the patient, that is, *the most effective strategies are those that are most frequently used* (Cohen & Berk, 1985; Carr, 1988; O'Sullivan, 1994). From a quite similar point of view, other authors, such as Brazo, Dollfus & Petit (1995), state that when there is a significant relationship between a type of symptom and a strategy, we can conclude that it is significantly effective, and therefore more frequently used. In our view, while it is possible that in some cases strategies are used because they are effective, the mere fact of use is no guarantee of effectiveness. People may put into practice certain behaviours simply because they have not learned others in the course of their life, and not because these are more effective for coping with their difficulties. In fact, Carter et al. (1996) found that the coping strategies most frequently used by the subjects in their research were not the most effective, and that, indeed, the most effective ones were used only by quite a small proportion of patients.

A second approach deals with the problem of effectiveness by obtaining indirect measures from subjects, making inferences from other indicators. An example of such an approach is that of Falloon & Talbot (1981), who tried to relate coping mechanisms with patients' level of adaptation to the voices. They did so by means of a global clinical evaluation of each patient's adaptation to the hallucinatory experience using a three-point scale (good, normal and poor adaptation). In their study, effectiveness is assessed indirectly, with subjects grouped in these three categories in order to subsequently identify which coping mechanisms are most commonly used according to the adaptation levels. Thus, from this perspective, it is deduced that the most well-adapted patients (that is, those least affected or least incapacitated by their voices) are those that use the most effective coping strategies.

A comparable approach, though somewhat more complex, is that used by Lee, Lieh-Mak, Yu & Spinks (1993). Using a correlational-type methodology, they tried to discover the relationships between coping strategies and a series of result indicators, such as social or everyday life adjustment, quality of life and symptomatology.

Although these approaches may be considered as interesting attempts to deal with the problem in hand, they raise several unresolved issues. The first consists in that the concept of adaptation, or quality of life, is a wide and ambiguous one, and we cannot tell whether the subjects achieve better adaptation or quality of life because of certain coping strategies, or rather because of the intervention of other factors that also affect these variables (intensity of the hallucinatory experience, level of social support received, degree of chronicity of the disorder, subject's skills, treatment received, etc.). The other issue concerns the fact that we do not know the effectiveness of the strategy according to the patient's own, subject evaluation.

In a third type of approach, some authors have considered the problem of *effectiveness based on the patient's assessment* (e.g., Tarrier, 1987; Dittman & Schüttler, 1990; Carter et al., 1996; Middelboe & Mortensen, 1997; Mueser, Valentine & Agresta, 1997; MacDonald et al., 1998). In doing so, they have generally used ordinal, Likert-type measures, in which the subject must evaluate effectiveness on scales of three or more points. For example, Tarrier (1987) and Middelboe & Mortensen (1997) asked their patients to rate each strategy as "highly successful" (total disappearance of the symptoms), "moderately successful" (moderate reduction of the symptoms or temporary disappearance) or "scarcely or not at all successful". Another type of scale

used are five-point analogical-digital ones, in which patients are asked about the success of or degree of satisfaction with the result of their coping strategies (Wiedl & Schötter, 1991; Mueser, Valentine & Agresta, 1997). It is important to note that all of these methodological approaches are characterized by defining effectiveness as a unidimensional construct, that is, *effectiveness is assessed solely in relation to success in the elimination of the problem*.

However, other works use a more complex conceptualization of the effectiveness of coping, though always within an orientation based on the elimination of the problem. It consists in considering it as a multidimensional construct. Farhall & Gehrke (1997), for example, asked the subjects of their study to rate coping strategies for auditory hallucinations according to the degree of control they could exercise over the voices, the reduction in anxiety levels and a global measure of coping effectiveness. In this regard, we found of great interest the multidimensional approach used in another work by Wahass and Kent (1997), also in relation to coping with auditory hallucinations. The dimensions assessed were as follows:

- Subject's capacity for eliminating the voices.
- Capacity for reducing anxiety caused by the voices.
- Capacity for ignoring them.
- Capacity for making the voices quieter or silent.
- Capacity for doubting their content and making them less credible.

Patients rated each dimension on a five-point scale, according to the strength of each of these capacities.

A final approach, though quite undeveloped, is that proposed by Romme & Escher (1989, 1996) and Romme, Honig, Noorthoorn & Escher (1992). As we pointed out at the beginning of the present work, the objective of coping from this perspective consists not in the elimination of the problem, as in the previous studies, but in the subject's adjustment to it. Thus, *effectiveness consists in evaluating subjects' capacity for integrating the hallucinatory experience, for example, into their daily life*, that is, achieving the acceptance of the voices as "part of themselves", not considering the experience as necessarily negative. To this end, the subjects of the study were grouped, according to the adjustment criterion described above, into good copers (those with or without psychiatric pathology for whom the voices were not a problem and who lived a normal life) and poor copers (those who had not achieved such integration of the symptoms in their daily life). On the basis of this classification, and employing the subjects' own reports, the authors studied the differences in the coping strategies.

Up to now we have discussed different ways of unders-

tanding the effectiveness of coping, and have given a quite general outline of the procedures for its assessment. At this point we should ask ourselves whether coping strategies are useful in patients diagnosed as psychotic. As the reader will understand, this is not an easy undertaking, given the polysemic nature of the concept and the fact that few studies have tried to *cope* in a direct way with the topic. We shall base our search for an answer to our question on all the studies carried out to date, except those that have employed the first approach we described, that which identifies effectiveness with the use of coping mechanisms. As we pointed out above, this a quite deficient way of understanding this concept.

In general, according to the results of these studies, it can be stated that the coping strategies used by psychotic patients yield effectiveness values ranging from moderate to low. Whilst only in the works of TARRIER (1987) and MacDonald et al. (1998) did subjects present a moderate capacity for eliminating or controlling their symptoms, in a larger group of studies (Wiedl & Schötter, 1991; Wiedl, 1992; Lee, Lieh-Mak, Yu & Spinks, 1993; Carter et al., 1996; Farhall & Gehrke, 1997; Middelboe & Mortensen, 1997) it was concluded that this capacity was low. And in another study (Takai et al., 1990) it was stated that the effectiveness of spontaneous coping strategies is not demonstrated. We found just two works that show that coping in psychotics is effective (Dittman & Schüttler, 1990; Mueser, Valentine & Agresta, 1997).

More specifically, where the negative results can be seen most clearly is in coping with auditory hallucinations: all the works reviewed showed that the majority of patients with a psychosis diagnosis use fairly ineffective resources for coping with the voices. If we consider psychotic symptomatology in general and negative symptoms in particular, the picture changes slightly, though the improvement is not a notable one. Dittman & Schüttler (1990) found that 86% of patients described specific changes in their behaviour due to the use of coping strategies, and Mueser, Valentine & Agresta (1997) found that they were effective for coping with negative symptoms such as apathy.

Detailed analysis of these studies does not provide us with sufficient data to conclude that coping strategies in themselves are ineffective; rather, and in line with the suggestion of Carter et al. (1996), all we can state is that patients use coping strategies that are of little use or ineffective. As can be seen from our review, there is in all the studies a percentage of subjects (albeit low) that are capable of resolving in an appropriate way the difficulties and problems related to their disorder. Thus, our next task is to decide which are the coping strategies that

are successful in these subjects, and to identify the conditions of their application.

Although it may seem paradoxical, in the case of hallucinations, strategies of direct confrontation with the voices, based mainly on carrying out actions for their elimination (distraction, relaxation, humming, conversing with others, etc.), increase anxiety and the frequency of the voices. However, strategies based on acceptance of the symptom (e.g., listening attentively to the voices and accepting what they say) and on passive coping (doing nothing and depending rather on external sources of support, for example "putting my trust in God") – that is, those that involve exposing oneself directly to the voices without resisting them, produce a reduction in anxiety, but not necessarily a reduction in the frequency of the voices (Farhall & Gehrke, 1997).

Romme & Escher (1989, 1996) and Romme, Honig, Noorthoorn & Escher (1992) found that subjects who cope well with the voices are those who have more capacity for ignoring them when they wish to, who use more selective listening and who put limits on them in a selective way – in sum, those who do not reject the voices, accepting them as just one more type of event in their lives; meanwhile, those who have difficulties for coping with them make more use of strategies based on distraction (doing sport, having a shower, watching television, meditation, yoga, etc.). Similar results are those obtained by Nayani & David (1996), who showed that attempts at control by their patients did not succeed in modifying the frequencies of the hallucinations, but that positive interaction with the voices (e.g., conversing with them or talking to others about them) reduced anxiety. On the other hand, these authors detected behaviours that increased the frequency of voices, such as watching television or listening to the radio, which are clearly distraction strategies.

In this regard, Brazo, Dollfus & Petit (1995), despite considering that the effectiveness of coping is related to its use, expressed their surprise on finding in their study that "there is not always a logical relationship between the existence of a coping strategy, its effectiveness, and its frequency of use: for example, acceptance of the voices is a little-used strategy, but it is highly effective" (p. 458).

With regard to the basic cognitive disorders of people diagnosed as schizophrenic and negative symptoms, there are data to show that coping strategies based on emotion are the most commonly used when the levels of subjective tension are very high, subjects showing a low level of satisfaction with the effectiveness of such strategies. However, in cases where the level of tension is lower, the coping strategies most frequently used are those based on problem-solving, and are rated by sub-

jects as effective (Wiedl & Schötter, 1991; Wiedl, 1992 & MacDonald et al., 1998).

Thus, what we can deduce from these results is that people diagnosed as psychotic tend to use ineffective coping strategies when they are subject to very high levels of stress and tension. In these situations, which are probably the most usual in this type of patient, the only adaptive strategies are those based on acceptance of the disorder and non-confrontation. However, when stress levels are low, problem-solving strategies are the most commonly used, and also the most effective. This is probably due to the fact that application of the latter type of strategy requires conditions and cognitive effort that are impossible in high-stress situations.

An interesting result that we have found in many of the studies reviewed is that the effectiveness of the coping improves if subjects use several strategies at the same time, while, on the other hand, the ones who have difficulties in coping are those that use only a single strategy (Falloon & Talbot, 1981; Tarrier, 1987; Romme & Escher, 1989; Dittman & Schüttler, 1990; Wiedl & Schötter, 1991; Lee, Lieh-Mak, Yu & Spinks, 1993; Carter et al., 1996; Nayani & David, 1996; Middelboe & Mortensen, 1997; Mueser, Valentine & Agresta, 1997). Despite this consensus, there are some variations in the results obtained in these studies. While for some authors, such as Middelboe & Mortensen (1997), using several strategies constitutes a highly effective way of organizing coping, for Tarrier (1987) its effect is only moderate, and others, such as Nayani & David (1996), argue that the multi-strategy approach only has an influence in the reduction of anxiety associated with the symptoms. In any case, what emerges from these results is that perhaps what is relevant here is not the use of a specific strategy, but rather subjects' attitudes and their efforts to cope with the stressful events that arise in their everyday lives (Mueser, Valentine & Agresta, 1997).

Wiedl & Schötter (1991) & Wiedl (1992) found that the effectiveness of coping depends on subjects' *assessment* of the stressful event. The majority of patients consider the psychotic symptoms and basic cognitive disorders to be permanent, and not modifiable by themselves (primary assessment, according to Lazarus & Folkman's theory). On the other hand, the large percentage of high perceived controllability (that is, the subject thinks s/he can modify, and therefore, control, the occurrence and intensity of the symptoms and basic disorders) shows that they believe they can influence the amount of stress on their own initiative (secondary assessment).

However, this last result appears to contradict somewhat their assessment of non-modifiability with regard to

the stressful event and of their low satisfaction with the attempts at coping: how is it possible to assess an event as controllable if it is perceived as non-modifiable and one has low satisfaction with the results of coping? Wiedl & Schötter (1991) and Wiedl (1992) explain this contradiction by stating that either this assessment of controllability is unrealistic, or the criteria patients use for assessing the attempts at coping are inappropriate. Taking into account the results of the work of Nayani & David (1996) and Farhall & Gehrke (1997), Wiedl's findings of subjects that present a pattern of low perceived modifiability, high perceived controllability and low satisfaction with coping for symptoms and basic disorders are not contradictory; quite the opposite, in fact, since we have seen that attempts to control symptoms (especially of hallucinations) seem not to eliminate the problem, but rather to exacerbate it.

Finally, an aspect worth discussing is the greater effectiveness of coping when the patient is capable of detecting the antecedents or situations that elicit the symptoms (Talbot & Falloon, 1981; Breier & Strauss, 1983; Tarrier, 1987; Thurm & Haefner, 1987; Brazo, Dollfus & Petit, 1995; MacDonald et al., 1998). Notable among these antecedents are, for example, internal tension, insomnia or nightfall in the case of hallucinations (Brazo, Dollfus & Petit, 1995). In the case of psychotic symptoms in general, Thurm & Haefner (1987) distinguished two groups of antecedents, which they called socio-emotional (e.g., conflicts with friends or relatives, or intense emotions in close social relationships) and socio-cognitive (e.g., psychological and physical tension, disorders of life rhythms, or complex social interactions).

Interest in this topic stems from theoretical models of self-control, such as that developed by Breier & Strauss (1983) in individuals diagnosed as psychotic, and in which it is postulated that the coping process comprises three phases: detection of antecedents, assessment of them as dangerous or threatening, and finally, the use of self-control behaviour.

Talbot & Falloon (1981) were the first to point out the importance of this variable. They discovered that one of the most important differences between good and poor copers was that the former tended to have a clear understanding of the antecedents associated with the onset of symptoms, so that they were able to easily avoid those situations that elicited them. Nevertheless, Tarrier (1987) did not fully support these conclusions: while he considered it relevant that subjects detected such antecedents, he also argued that this condition was not in itself sufficient if subjects had not previously learned coping skills. In any case, it seems clear to some authors that the success of self-control and coping mechanisms depends

on subjects being aware that they are suffering from a disorder and, therefore, of the circumstances that improve it or worsen it (Dittmann and Schüttler, 1990; Takai and cols., 1990; Nayani and David, 1996; Middelboe and Mortensen, 1997).

CONCLUSIONS

The review of relevant studies we have presented here highlights the fact that there is no single and consensus-based concept of the term coping in the field of psychotic disorders, but rather different conceptions and uses of it. These differences are related to two basic positions: one of these is the approach that understands coping as behaviour whose objective is purely defensive (e.g., Tarrier, 1987), whilst in the other approach, the objective is adaptation and integration (e.g., Romme & Escher, 1989). The second idea has to do with the assessment of its effectiveness. As we have seen, for many of the authors mentioned here it is important to understand coping according to its effects on the patient's problems, whilst for other authors, patients' efforts for managing stressful demands are more important than the results themselves (Lazarus & Folkman, 1986).

People diagnosed as psychotic are not passive in the face of difficulties related to their illness. They *claim* to put into practice a series of behaviours with the objective, in accordance with the different forms of understanding coping, of eliminating these problems or adapting themselves to them. Nevertheless, it should be stressed that in the studies reviewed this information has always been obtained from the patient's retrospective report in an interview situation with the researcher, and never from the reports of others, such as family, carers or trained observers.

Although the coping strategies used by psychotic patients are multiple and varied, we have seen in this work that they can be grouped in two large categories: structural and functional. The combined use of these two categories for the description and study of coping can provide more information and enrich our understanding of the different forms in which people with this disorder relate to their illness. In this regard, various authors have used definitions based on two dimensions: *coping level*, which refers to the strategies we have called structural, and *coping direction*, which would include the functional taxonomies (e.g., Wiedl and Schötter, 1991; Wiedl, 1992).

The strategies most commonly used from a structural point of view are behavioural ones. However, from a functional point of view the results are not clear. It would appear that coping styles are mediated by other variables, such as subjective tension and cognitive variables (e.g., Wiedl and Schötter, 1991; Van Den Bosch and Rombouts, 1997). When subjects have high levels of

tension and difficulties related to attentional level and information processing, we find that they more frequently use strategies of a behavioural type and oriented towards emotion. When tension is low and cognitive competence high, it is more common to find efforts aimed at problem-solving.

These behaviours may be used to cope with both general and specifically psychotic symptomatology. In this regard, the results of research reveal that psychotic individuals tend to use spontaneously strategies of a cognitive nature to cope with florid psychotic symptoms, such as hallucinations and delusions, and behavioural-type strategies for negative symptoms and others that are not specifically psychotic. Also, it seems that high levels of positive and negative psychotic symptomatology are related to less use of coping strategies aimed at problem-solving and greater use of emotion-oriented strategies.

In general, the coping strategies spontaneously used by psychotic patients are ineffective in a large percentage of subjects. In any case, there is a minority that do present higher levels of satisfaction in coping with the disorders caused by their illness. These subjects use different mechanisms according to the type of problems they face. When they have high levels of stress or helplessness, as may occur with hallucinations or positive symptoms in general, the most effective strategies are those based on acceptance of the disorder

As we saw previously, attempting to cope directly with the symptom by means of self-control or problem-solving techniques (as in the case of strategies aimed at problem-solving), or through negation or avoidance (as in emotion-oriented strategies), leads not to its elimination, but rather quite the contrary, its consolidation, and an increase in the associated anxiety. Clearly, when the conditions of subjective stress or tension are high, or the cognitive deficits serious, the subject can only use those strategies that involve low cognitive cost, such as those based on emotion. However, subjects that do not fight the symptoms, and do not attempt to avoid them either, but rather to accept them, succeed in reducing the anxiety associated with the symptoms and living more comfortably, even without managing to make them disappear. In this context, and based on the analysis of studies on coping, we understand as *acceptance* the direct experience of the problems associated with psychotic symptoms without defending oneself from them – that is, entering into contact with the thoughts, emotions and situations related to the symptoms without attempting to reduce or eliminate them, but on the contrary, adapting oneself to them and incorporating them as just another event in one's life.

Nevertheless, the situation changes completely when

people are subject to low levels of stress, or when the type of symptomatology does not cause feelings of helplessness. In such situations it is easier to put into practice self-control and problem-solving strategies, with higher levels of satisfaction being found for the results obtained. This tends to occur, for example, in the case of coping with non-psychotic symptomatology (anxiety and depression), low-intensity social relationships, inactivity and feelings of apathy.

The variables we have found in the literature that can increase the effectiveness of coping and one's satisfaction with it are basically: the use of multiple strategies for coping with the same problem, assessments of modifiability of a stressful event (primary assessment) and controllability of that event with one's own resources (secondary assessment), and subject's level of awareness of the problem's antecedents and of suffering from a disorder.

As the reader might suppose, the above conclusions are merely provisional, since many of these results need to be replicated in order to confirm the validity of the interpretations we have made of the data provided by the studies. Moreover, it is quite lamentable to observe that, although we came across a considerable number of articles that dealt with this topic, the majority of them were carried out with poor methodology (basically descriptive, and in few cases of a correlational type), and described even by their own authors as no more than exploratory. This demonstrates the scarce tradition and continuity of research on coping in psychotics, despite its high theoretical relevance. It would appear that the interest may be in simply demonstrating that people diagnosed as psychotic are capable of coping with their disorders, in order to justify the subsequent development of intervention programs based on the enhancement of spontaneous coping strategies (e.g., Tarrier, Beckett, Harwood, Baker, Yusupoff, Ugarteburu, 1993).

This assumption is supported, on the one hand, in the fact that we have found no stable research lines on the topic (except in some researchers of German origin, such as Wiedl, Böker or Brenner), but rather isolated works with scant continuity among them, and on the other, in the fact that the research problems considered are almost always the same ones, with no serious conceptual and theoretical reflection on the topics and variables studied, and with no connection to research on coping in other populations and disorders.

Furthermore, and continuing with the argument that there is a lack of coherence and continuity in research on coping, we find that the application of the knowledge obtained is being carried out directly, with no review of the totality of results yielded in the field. Let us take as

an example the case of the strategies developed by Tarrier et al. for training psychotic patients to use their own coping skills effectively (referred to in the literature as Coping Strategy Enhancement, CSE). Tarrier states that through CSE techniques it is attempted to identify the coping strategies patients use naturally, and then to teach them to use in a systematic way these strategies and other new ones, so that they have access to a wide repertoire of ways of coping with their symptoms (Tarrier et al., 1993).

However, we have demonstrated in this work that many of the strategies trained in these programmes are fairly ineffective, an example being the use of distraction techniques or direct confrontation by means of self-instructions; and moreover, they do not take into account factors such as subjects' tension level or cognitive deficits, which, as we saw above, condition the type of strategies to be used (acceptance versus problem-solving). A test of all this, as we concluded in a previous work (Perona Garcelán & Cuevas Yust, 1999), is that these strategies are not effective in the control or elimination of auditory hallucinations, have failed to demonstrate their superiority over other psychological treatments and do not have lasting effects.

Even so, and despite what has been said up to now, we consider that the training of psychotic patients in coping strategies could be included in any treatment package, as long as, in order to enhance its effectiveness, the following aspects are taken into account:

1. To evaluate how the patient's subjective tension and cognitive abilities influence the use of coping behaviours.
2. To bear in mind the primary and secondary assessments with respect to each of the symptoms considered.
3. When the subjective tension level is quite high, to be sure to use strategies based on acceptance, and when it is moderate or low, strategies based on problem-solving.
4. To avoid teaching patients to use strategies based on emotion, except when their level of deterioration is very high and they present a marked state of helplessness.
5. To consider the use of multiple strategies to deal with a single problem.
6. To teach the subject to identify the antecedents related to the problem in question.
7. To teach and assess the results of the strategies in a multidimensional way that is not centred on elimination of the disorder.

By way of conclusion, it can be stated that, on the basis of data provided by research to date, coping strategies in psychotics constitute a highly relevant variable for the understanding of the psychological factors involved in psychotic symptomatology. In fact, we have seen how

certain coping styles can cause a patient's anxiety or hallucinations to increase or, on the contrary, to decrease. This leads us to suggest that theoretical models on the etiology of psychotic symptoms should take into account that the way of reacting to or coping with symptoms and daily life problems will influence the mechanisms that contribute to the onset, maintenance and possible disappearance of these symptoms. For these reasons, we consider it necessary to foment the study of coping in psychotics, and not to undervalue it, as do some authors of a cognitive orientation (Chadwick & Birchwood, 1994). In the near future, work in this field will probably permit us to widen our knowledge of psychosis and the means of effectively "coping" with it.

REFERENCES

- Andreasen, N.C. (1983). *The Scale for the Assessment of Negative Symptoms* (SANS). Iowa City: University of Iowa.
- Andreasen, N.C. (1984). *The Scale for the Assessment of Positive Symptoms* (SAPS). Iowa City: University of Iowa.
- Böker, W.; Brenner, H.D.; Gerstner, G.; Keller, F.; Müller, J. & Spichtig, L. (1984). Self-healing strategies among schizophrenics: attempts at compensation for basic disorders. *Acta Psychiatrica Scandinavica*, 69, 373-378.
- Böker, W.; Brenner, H.D. & Würzler, S. (1989). Vulnerability-linked deficiencies, psychopathology and coping behaviour of schizophrenics and their relatives. *British Journal of Psychiatry*, 155, (supplement 5), 128-135.
- Boschi, S.; Adams, R.E.; Bromet, E.J.; Lavelle, J.E.; Everett, E. & Galambos, N. (2000). Coping with psychotic symptoms in the early phases of schizophrenia. *American Journal of Orthopsychiatry*, 70(2), 242-252.
- Brazo, P.; Dollfus, S. & Petit, M. (1995). Stratégies anti-hallucinatoires expérimentées par les schizophrènes. *Annales Medico Psychologiques*, 153(7), 456-459.
- Breier, A. & Strauss, J.S. (1983). Self-control in psychotic disorders. *Archives of General Psychiatry*, 40, 1141-1145.
- Brenner, H.D.; Böker, W.; Müller, J.; Spichtig, L. & Würzler, S. (1987). On autoprotective efforts of schizophrenics, neurotics and controls. *Acta Psychiatrica Scandinavica*, 75, 405-414.
- Carr, V. (1988). Patients' techniques for coping with schizophrenia: an exploratory study. *British Journal of Medical Psychology*, 61, 339-352.
- Carter, D.M.; Mackinnon, A. & Copolov, D.L. (1996). Patients' strategies for coping with auditory hallucinations. *The Journal of Nervous and Mental Disease*, 184 (3), 159-164.
- Chadwick, P. & Birchwood, M. (1984). The omnipotence of voices. A cognitive approach to auditory hallucinations. *British Journal of Psychiatry*, 164, 190-201.
- Cohen, C.I. & Berk, L.A. (1985). Personal coping style of schizophrenic outpatients. *Hospital and Community Psychiatry*, 36(4), 407-410.
- Crespo, M. & Cruzado, J.A. (1997). La evaluación del afrontamiento: Adaptación española del cuestionario COPE con una muestra de pacientes universitarios. *Análisis y Modificación de Conducta*, 23(92), 797-830.
- Dittman, J. & Schüttler, R. (1990). Disease consciousness and coping strategies of patients with schizophrenic psychosis. *Acta Psychiatrica Scandinavica*, 82, 318-322.
- Falloon, I.R.H. & Talbot, R.E. (1981). Persistent auditory hallucinations: coping mechanisms and applications for management. *Psychological Medicine*, 11, 329-339.
- Farhall, J. & Gehrke, M. (1997). Coping with hallucinations: exploring stress and coping framework. *British Journal of Clinical Psychology*, 36, 259-261.
- Folkman, S. & Lazarus, R.S. (1980). An analysis of coping in a middleaged community sample. *Journal of Health and Social Behavior*, 21, 219-239.
- Frederick, J. & Cotanch, P. (1995). Self-help techniques for auditory hallucinations in schizophrenia. *Issues in Mental Health Nursing*, 16, 213-224.
- Galán Rodríguez, A. (2000). *Conducta de enfermedad, estrategias de afrontamiento y calidad de vida*. Unpublished doctoral thesis. Universidad de Sevilla.
- Kanas, N. & Barr, M.A. (1984). Self-control of psychotic productions in schizophrenics. *Archives of General Psychiatry*, 41, 919-920.
- Kinoshita, F.; Yagi, G.; Inomata, T. & Kanba, S. (1991). Coping style of schizophrenic patients in the recovery from acute psychotic state: a preliminary study. *Keio Journal of Medicine*, 40(3), 129-131.
- Kumar, S.; Thara, R. & Rajkumar, S. (1989). Coping with symptoms of relapse in schizophrenia. *European Archives of Psychiatry and Neurological Sciences*, 239, 213-215.
- Lange, H.U. (1981). Anpassungsstrategien, bewältigungsreaktionen und selbstheilungsversuche bei schizophrenen. *Fortschr Neurol Psychiatr*, 49, 275-285.
- Lazarus, R. S. & Folkman, S. (1986). *Estrés y procesos cognitivos*. Barcelona: Martínez Roca (original edition, 1984).
- Lee, P.W.H.; Lieh-Mak, F.; Yu, K.K. & Spinks, J.A.

- (1993). Coping strategies of schizophrenic patients and their relationship to outcome. *British Journal of Psychiatry*, 163, 177-182.
- López-Roig, S. (1991). *Determinantes psicosociales del estrés y su afrontamiento en pacientes quirúrgicos*. Unpublished doctoral thesis. Universidad de Alicante.
- MacDonald, E.M.; Pica, S.; McDonald, S.; Hayes, R.L. & Baglioni, A.J. (1998). Stress and coping in early psychosis. *British Journal of Psychiatry*, 172, (supplement 33), 122-127.
- McNally, S.E. & Goldberg, J.O. (1997). Natural cognitive coping strategies in schizophrenia. *British Journal of Medical Psychology*, 70, 159-167.
- Middelboe, T. & Mortensen, E.L. (1997). Coping strategies among the long-term mentally ill: categorization and clinical determinants. *Acta Psychiatrica Scandinavica*, 96, 188-194.
- Mueser, K.T.; Valentine, D.P. & Agresta, J. (1997). Coping with negative symptoms of schizophrenia: patient and family perspectives. *Schizophrenia Bulletin*, 23(2), 329-339.
- Nayani, T.H. & David, A.S. (1996). The auditory hallucination: a phenomenological survey. *Psychological Medicine*, 26, 177-189.
- Nuechterlein, K.H. & Dawson, M.E. (1984). A heuristic vulnerability/stress model of schizophrenic episodes. *Schizophrenia Bulletin*, 10, 300-312.
- O'Sullivan, K. (1994). Dimensions of coping with auditory hallucinations. *Journal of Mental Health*, 3, 351-361.
- Overall, J.E. & Gorham, D.R. (1962). The brief psychiatric rating scale. *Psychological Report*, 10, 799-812.
- Pallanti, S.; Quercioli, L. & Pazzagli, A. (1997). Relapse in young paranoid schizophrenic patients: a prospective study of stressful life events, P300 measures, and coping. *American Journal of Psychiatry*, 154(6), 792-798.
- Perona Garcelán, S. & Cuevas Yust, C. (1996). Intervenciones cognitivo conductuales sobre las alucinaciones auditivas en sujetos psicóticos. Una revisión. *Psicologemas* 10(20), 225-256.
- Perona Garcelán, S. & Cuevas Yust, C. (1999). Efectividad de la terapia cognitivo-conductual individual aplicada a los síntomas psicóticos. 2. Estudios aleatorizados con grupos control. *Apuntes de Psicología*, 17(3), 249-274.
- Romme, M.A.J. & Escher, A.D.M.A.C. (1989). Hearing voices. *Schizophrenia Bulletin*, 15(2), 209-216.
- Romme, M.A.J. & Escher, A.D.M.A.C. (1996). Empowering people who hear voices. In G. Haddock & P.D. Slade: *Cognitive-behavioural interventions with psychotic disorders*. London: Routledge.
- Romme, M.A.J.; Honig, A.; Noorthoorn, E.O. & Escher, A.D.M.A.C. (1992). Coping with hearing voices: an emancipatory approach. *British Journal of Psychiatry*, 161, 99-103.
- Takai, A.; Uematsu, M.; Kaiya, H.; Inoue, M. & Ueki, H. (1990). Coping styles to basic disorders among schizophrenics. *Acta Psychiatrica Scandinavica*, 82, 289-294.
- Tarrier, N. (1987). An investigation of residual psychotic symptoms in discharged schizophrenic patients. *British Journal of Clinical Psychology*, 26, 141-143.
- Tarrier, N.; Beckett, R.; Harwood, S.; Baker, A.; Yusupoff, L.; Ugarteburu, I. (1993). A trial of two cognitive-behavioural methods of treating drug-resistant residual psychotic symptoms in schizophrenic patients: I. Outcome. *British Journal of Psychiatry*, 162, 524-532.
- Thurm, I. & Haefner, H. (1987). Perceived vulnerability, relapse risk and coping in schizophrenia. An exploratory study. *European Archives of Psychiatry and Neurological Sciences*, 237, 46-53.
- Van Den Bosch, R.J. & Rombouts, R.P. (1997). Coping and cognition in schizophrenia and depression. *Comprehensive Psychiatry*, 38(6), 341-344.
- Van Den Bosch, R.J.; Van Asma, M.J.O.; Rombouts, R.P. & Louwerens, J.W. (1992). Coping style and cognitive dysfunction in schizophrenic patients. *British Journal of Psychiatry*, 161, (supplement 18), 123-128.
- Wahass S. & Kent, G. (1997). Coping with auditory hallucinations: a cross-cultural comparison between Western (British) and Non-Western (Saudi Arabian) patients. *The Journal of Nervous and Mental Disease*, 185(11), 664-668.
- Wiedl, K.H. (1992). Assessment of coping with schizophrenia. Stressors, appraisals, and coping behaviour. *British Journal of Psychiatry*, 161, (supplement 18), 114-122.
- Wiedl, K.H. & Schötter, B. (1991). Coping with symptoms related of schizophrenia. *Schizophrenia Bulletin*, 17(3), 525-538.
- Yagi, G.; Kinoshita, F. & Kanba, S. (1992). Coping style of schizophrenic patients in the recovery from acute psychotic state. *Schizophrenia Research*, 6, 87-88.
- Yusupoff, L. & Tarrier, N. (1996). Coping strategy enhancement for persistent hallucinations and delusions. In G. Haddock & P.D. Slade: *Cognitive-behavioural interventions with psychotic disorders*. London: Routledge.
- Zubin, J. & Spring, B. (1977). Vulnerability – a new view of schizophrenia. *Journal of Abnormal Psychology*, 86, 103-126.