OPTIMISM AS A PROTECTIVE FACTOR IN CHILD AND ADOLESCENT DEPRESSION

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This paper shows that an optimistic explanatory style consisting in explaining positive situations through permanent and global attributions and negative situations through temporary and specific attributions is significantly related to lower depressive symptoms. The implications of these results are discussed in the light of the reformulated model of learned helplessness (Abramson, Seligman, & Teasdale, 1978) and the hopelessness theory (Abramson, Metalsky, & Alloy, 1989). The paper also suggests taking into account new constructs that can be influential, such as explanatory flexibility, self-perceived control over stressful situations and the importance given to them. Girls show a more optimistic explanatory style than boys in preadolescence, and children aged over 10 score higher in depression.

Key words: Optimism, Explanatory style, Depression, Hopelessness, Gender.

El estudio muestra que un estilo explicativo optimista consistente en explicar los acontecimientos positivos mediante atribuciones permanentes y globales y los negativos mediante atribuciones temporales y específicas se relaciona significativamente con menor sintomatología depresiva. Se discuten las implicaciones de estos resultados a la luz del modelo reformulado de indefensión aprendida (Abramson, Seligman y Teasdale, 1978) y la teoría de la desesperanza (Abramson, Metalsky y Alloy, 1989). También se sugiere tener en cuenta nuevos conceptos como el de flexibilidad explicativa y otros factores que pueden influir, como la autoestima, la percepción de controlabilidad sobre las situaciones estresantes o el grado de importancia otorgado a las mismas. Las chicas presentan un estilo explicativo más optimista en la preadolescencia y los niños mayores presentan puntuaciones en depresión más elevadas.

Palabras clave: Optimismo, Estilo explicativo, Depresión, Desesperanza, Género.

Dositive Psychology proposes extending the scope of **I** research to include not only pathological personality conditions, but also those positive emotions, strengths, competences, capacities and virtues that contribute to increasing personal satisfaction and leading a fuller life. Likewise, it sets out to foster such qualities so that they act as protective factors against psychological disorders and health disorders in general, improving the efficacy of traditional psychological techniques. Seligman and Csikszentmihalyi (2000) maintain that the greatest progress in prevention comes from a perspective which revolves around the systematic development of competences. Within this new field, optimism is one of the most widely studied variables. According to Avia and Vázquez (1998), apart from being a requirement for survival, it is an essential condition for a fully human life, one of the best resources for adapting to one's environment and transforming it, and a mechanism that enables people

The original Spanish version of this paper has been previously published in *Clínica y Salud*, 2009, Vol. 20, No 3, 273-280

Correspondence concerning this article should be addressed to Óscar Sánchez Hernández. Departamento de Personalidad, Evaluación y Tratamiento Psicológicos. Universidad de Murcia. 30100 Murcia. Spain. E-mail: oscarsh@um.es to overcome adversity, to build the future and have dreams. In Vera's (2008) view there are two theoretical perspectives which are different but not opposite:

- 1. Dispositional optimism (Scheier, & Carver, 1985). Optimism is directly related to expectations. Optimistic people have a general predisposition to generate expectations of positive results, so that they expect things to turn out well even if they are going through difficult moments. Pessimists, on the other hand, tend to expect negative results.
- 2. Explanatory style (Abramson, Seligman, & Teasdale, 1978). The Learned Helplessness model is based on attribution theory, and maintains that expectations about future events are closely related to the explanation of past events. Explanatory style is the person's characteristic way of interpreting his or her experiences. It comprises three dimensions: a) personalization distinguishes whether the cause of the event has its roots in the person or in an external factor (internal or external attribution); b) duration refers to the extent to which the cause is stable in time and with a propensity to repeat itself (permanent or temporary attribution); and c) scope refers to whether or not the cause affects other areas of life

(global or specific attribution). Optimists tend to explain negative events through external, temporary and specific attributions, whilst pessimists make internal, permanent and global attributions. Positive events are explained the other way around. The reformulation of the model gave rise to the Theory of Hopelessness (Abramson, Metalsky, & Alloy, 1989), which proposes the existence of cognitive vulnerability characterized by:

- a) Tendency to attribute negative events to permanent and global causes.
- b) Negative inferences about the consequences of negative events.
- c) Negative inferences about the person him/herself ("there is something wrong with me") because of the occurrence of negative events.

The benefits of optimism are numerous. It is associated with lower rates of illness, depression and suicide, and with higher levels of academic and sporting achievement, professional adjustment and quality of family life (Gillham, 2000; Seligman, 1998; Seligman, Reivich, Jaycox, & Gillham, 2005); it is also considered a protective factor against substance use in stressful situations (Torres Jiménez, Robert, Tejero, Boget, & Pérez de los Cobos, 2006). Research carried out over five years with more than 500 children who participated Pennsylvania-Princeton ioint "Longitudinal Study on Child Depression" shows that optimistic explanation cushions the prejudicial impact of adversity and protects against depression, whilst the pessimistic style increases the risk (Nolen-Hoeksema, Girgus, & Seligman, 1992; Seligman et al., 1984).

Gladstone and Kaslow (1995) carried out a metaanalysis with 28 original studies that included 7500 participants. Inclusion criteria were: a) published studies, b) the studies assessed attributional style (CASQ, CASQ-R), c) the research used a depression self-report (CDI, BDI, CDRS, CES-D), and d) the studies recruited samples, both clinical and non-clinical, made up of children and adolescents. The results confirmed the hypotheses of the reformulated theory of learned helplessness. The highest levels of depressive symptoms were significantly associated with internal, permanent and global attributions for the negative results, and external, temporary and specific attributions for the positive results.

A study carried out in six European countries revealed that Spain had the highest incidence of people with anxiety and depression (King et al., 2008). At the same time, child and adolescent depression is attracting more

and more interest from research (Méndez, Olivares, & Ros, 2001). The prevalence of mood disorders in the child population is estimated at 2% for major depression and between 4 and 7% for dysthymia (Domènech, & Polaino-Lorente, 1990). The rate of depression increases with age (Domènech, Subirá, & Cuxart, 1996; Hankin, Abramson, Moffit, Silva, & McGee, 1998; Meltzer, Gatward, Goodman, & Ford, 2000), rising to 5% after puberty. This suggests that adolescence is a developmental stage of particular vulnerability to depression. Comorbidity of child-juvenile depression is high, the most common associated diagnoses being anxiety disorders, exteriorized disorders (oppositional defiant, dissocial) and substance abuse (Méndez, 1999).

Objectives and hypotheses

The objective of the study is to analyze the function of the optimistic explanatory style as a protective factor against child and adolescent depression. We also explore gender and age differences in optimism and depression. The general hypotheses are:

- 1. The optimistic explanatory style is negatively related to depressive symptomatology.
- 2. Hopelessness in the face of negative events is positively related to depressive symptomatology.
- 3. There are gender differences in optimistic explanatory style.
- 4. The older children present higher levels of depressive symptomatology.

METHOD

Sample

Participants were 172 schoolchildren from years 5 and 6 of primary education, with a mean age of 10.7 years. Girls accounted for 63% and boys 37%. Socio-economic level was medium-high and high, and participants were recruited at a grant-aided private school in the city of Murcia (Spain).

Study variables

The operationalization of the variables was:

1. Explanatory style

General explanatory style includes the dimensions of personalization, duration and scope in the context of positive and negative events. The higher the score, the greater the degree of optimistic explanatory style. We explored explanatory style in positive and negative situations separately, and calculated hopelessness by summing the duration and scope dimensions.

2. Depressive symptomatology

The higher the score on the depression self-report, the greater the depressive symptomatology.

Instruments.

Children's Attributional Style Questionnaire (CASQ; Seligman, Reivich, Jaycox, & Gillham, 2005).

The 48 items describe hypothetical situations with two opposite causal explanations between which the respondent must choose. The dimensions personalization, duration and scope are represented by 16 questions each, half of which refer to favourable situations, the other half referring to adverse situations. Internal, permanent or global responses are scored with 1 point and external, temporary or specific responses with zero. Scores are obtained for explanatory style of positive situations (ESPS) and negative situations (ESNS), so that by subtracting ESNS from ESPS we obtain the score for general explanatory style, the greater the difference, the higher being the level of optimism. The reliability coefficients are moderate (Schwartz, Kaslow, Seeley, & Lewinsohn, 2000; Seligman, Peterson, Kaslow, Tanenbaum, Alloy, & Abramson, 1984), though test-retest reliability improves with increasing age (Nolen-Hoeksema et al, 1992).

Center for Epidemiological Studies Depression Scale for Children (CES-DC; Weissman, Orvaschel, & Padian, 1980).

We used the slightly modified version by Seligman, Reivich, Jaycox and Gillham (2005). It comprises 20 items and a four-point response scale (Not at all-A little-Some-A lot). A score of 0 to 9 indicates that the child is probably not depressed. If the score is between 10 and 15 there may be slight depression. Scores over 15 indicate a significant degree of depression: 16 to 24 points corresponds to moderate depression, and over 24 points indicates a probability of severe depression. The psychometric properties of the instrument are satisfactory.

Procedure

The objectives of the study were explained to those in the highest authority at the school (head teacher, director of studies and child psychologist) and the board of the parents' association. Once it had been approved, informed consent was requested from parents. The depression instrument was applied on two occasions separated by a week and the mean score of the two taken, with a view to reducing measurement error and controlling variations in mood. Both self-reports were administered in group format in the classroom.

RESULTS

The relationship between optimistic general explanatory style and depressive symptomatology was negative ($r_{xy} = -0.37$; p = 0.000). As expected, the relationships between the explanatory styles of favourable situations (ESPS) or adverse situations (ESNS) and depressive symptomatology were negative ($r_{xy} = -0.21$; p = 0.007) and positive ($r_{xy} = 0.30$; p = 0.000), respectively, indicating that the greater the optimism, the lower the depression, and vice versa.

In accordance with the theory, hopelessness was positively related to depressive symptomatology ($r_{xy} = 0.34$; p = 0.000). Also statistically significant were the correlations of the ESNS dimensions duration ($r_{xy} = 0.26$; p = 0.000) and scope ($r_{xy} = 0.25$; p = 0.000), but not personalization, with depressive symptomatology. The same pattern of results, but in the opposite direction, were obtained for ESPS, that is, a significant relationship of duration ($r_{xy} = -0.18$; p = 0.017) and scope ($r_{xy} = -0.15$; p = 0.046), but not personalization, with depressive symptomatology.

As regards gender, we found a statistically significant difference in ESPS (t = 2.52; p = 0.013), in the duration dimension (t = 3.76; p = 0.000), revealing that girls are more optimistic because they attribute positive events to stable causes. At these ages no differences emerged in depressive symptomatology. On comparing those aged 10 (43%) with the older ones (57%) it was found that depressive symptomatology increases with age (t = -2.04; p = 0.043). Nevertheless, the older children showed themselves to be more optimistic in the duration dimension of ESPS (t = -2.49; p = 0.014).

DISCUSSION

The results confirm the hypotheses proposed. The children with an optimistic explanatory style present less depressive symptomatology. This finding coincides with others from research in this field (Gillham, 2000; Gladstone, & Kaslow, 1995; Nolen-Hoeksema, Girgus, & Seligman, 1992; Seligman et al., 1984; Seligman, 1998; Seligman, Reivich, Jaycox, & Gillham, 2005). However, our study is not confined to the general explanatory style, but also includes detailed analysis of the variables in Abramson, Seligman and Teasdale's (1978) reformulated learned helplessness model. First of all, we highlight the importance of the optimistic explanatory style of positive events (ESPS), which is associated with lower depressive symptomatology. Sanjuán and Magallares (2006) are critical of the lack of attention paid to this factor, and found that the only explanatory style related to dispositional optimism is the ESPS. These authors argue in support of the relevant role of the ESPS in depression and its beneficial nature for health and psychological wellbeing. They also found that people with a tendency to explain positive events by means of internal, permanent and global attributions, using an explanatory style referred to as self-affirming, employ coping strategies aimed at problem-solving, which are negatively related to the development of depressive symptoms, rather than emotion-centred strategies, which are positively associated with depressive symptomatology. The self-affirming explanatory style could be a protective or attenuating factor against lack of well-being in people with a pessimistic explanatory style of negative events (ESNS). Therefore, they suggest promoting coping based on problem-solving and fostering the self-affirming explanatory style instead of simply modifying the ESNS.

In accordance with the reformulated learned helplessness model, the ESNS and hopelessness are related to depressive symptomatology. The results confirm that the duration and scope dimensions which make up hopelessness are more relevant than the personalization dimension (Abela, & Seligman, 2000; Peterson, & Vaidya, 2001; Prinstein, & Aikins, 2004). This finding is in line with those of other research in this field. Thus, Calvete, Villardón and Estévez (2008), with a sample of 856 adolescents, found that duration and scope moderate the impact of negative events on the increase of depressive symptomatology. Maldonado, Luque and Herrera (1999), with a sample of 195 university students, also found duration and scope to be better predictors of depression than personalization. These authors recommend reattribution as a treatment and prevention method for depression; for example, the internal, permanent and global attribution of academic failure "I'm no good at studying" generates helplessness, undermines self-esteem and increases depressive symptomatology. The external, temporary and specific attribution "the teacher has set a very difficult maths exam" protects self-esteem but does not take into account personal responsibility. In contrast, the internal, temporary and specific attribution, "I didn't study enough to pass this maths exam", helps one to plan a strategy for solving the problem. Seligman, Reivich, Jaycox and Gillham, (2005) employ the very useful cake game for children who tend to see their contribution to problems in terms of all or nothing, and have difficulty assuming part of the responsibility. The task consists in proposing the largest number of causes of the adversity, both internal and external, assessing the problem as objectively as possible, without apportioning all the blame to oneself or to others, and distinguishing the causes that depend on oneself and permit the solution of the problem from those that depend on external factors such as others or chance, protecting one's self-esteem.

This matter highlights the lack of an assessment measure that reflects the flexibility and variety of the personalization dimension. Fresco, Rytwinski and Craighead (2006) conceptualize cognitive vulnerability for depression in a new way, referring to it as explanatory flexibility, which is operationalized as the standard deviation of the responses to the items of the duration and scope dimensions for negative events of the Attributional Style Questionnaire (ASQ, Peterson et al., 1982). They found that explanatory style and explanatory flexibility are related to depressive symptomatology, but only the interaction of explanatory flexibility with the occurrence of negative events predicts a change in depressive symptomatology; a more rigid pattern is associated with an increase in depressive symptomatology in the face of negative events. The concept of flexibility is conceptually methodologically related to the explanatory style of the reformulated learned helplessness model (Abramson, Seligman, & Teasdale, 1978) and the Theory of Hopelessness (Abramson, Metalsky, & Alloy, 1989). People who take into account each situation separately and contextually are considered flexible in their evaluations of the causes of events (Beck, Rush, Shaw, & Emery, 1979).

The case of the ESPS dimensions is similar, but research has given more importance to the attributions of negative events, proposing the diathesis-stress hypothesis, according to which explanatory style acts as a vulnerability factor on interacting with stressful events of a negative nature, increasing the risk of developing depression due to hopelessness (Hankin, Abramson, Miller, & Haeffel, 2004). In order to compare the diathesis-stress hypothesis with the role potentially played by cognitive vulnerability in relation to the risk of depression due to hopelessness, it would be interesting to study the effect of factors such as self-esteem, perceived possibility of control of stressful situations, or their degree of importance (Sanjuán, & Magallares, 2006).

The higher optimism found for girls at this age in ESPS, more specifically in the duration dimension, coincides with the results of other studies (Docampo,

2002; Martínez, & Sewell, 2000; Nolen-Hoeksema et al., 1992; Seligman et al, 2005). It is generally accepted that explanatory style tends to be stable over time, though recent findings suggest that it may vary in young people (Schwartz et al., 2000). It would be relevant to carry out longitudinal studies to confirm whether explanatory style does indeed change, becoming more pessimistic, as suggested by Nolen-Hoeksema and Girgus (1995) for the case of girls. The absence of gender differences in depressive symptomatology is not a strange phenomenon in the pre-pubertal stage. Likewise, it is common to find more depressive symptomatology in older groups.

In sum, it is interesting to consider the optimistic or self-affirming explanatory style for positive situations as a protective factor against depression, and to study the difference from the hopelessness attributional style. It may also be fruitful to introduce concepts such as explanatory flexibility applied to the personalization dimension and to positive events. Other factors to take into account in the theory of hopelessness are selfesteem, perceived controllability of stressful situations, or the degree of importance attributed to them. The findings obtained raise the question of whether the explanatory style of positive events is a protective evolutionary factor, closer to dispositional optimism, and distinct from the explanatory style of negative events, related to cognitive vulnerability for hopelessness.

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