# Perceived emotional intelligence, alexithymia, coping and emotional regulation

Carmen Velasco, Itziar Fernández\*, Darío Páez and Miryam Campos University of Basque Country and \* UNED Open University (Madrid)

This study examined the different facets of perceived emotional intelligence (EI), alexithymia and how these facets were related to coping and affect regulation, using as indexes social support, perceived stress, depression and affect balance. Participants were 593 introductory psychology students. The results clarified and confirmed that emotional intelligence and alexithymia scales (TMMS-48 and TAS-20) converged in a clarity and regulation of emotion factor, that showed criterion validity with self-reports of mental health, affect balance and social adjustment and simultaneously to an adaptative profile of coping with stress, that mediated and explained how emotional clarity, capacity to identify feelings, ability to express and repair mood and feelings, help to emotional regulation. Attention to emotion and low external oriented thinking did not show criterion validity with mental health or with adaptive coping.

Inteligencia Emocional Percibida, alexitimia, afrontamiento y regulación emocional. Este estudio analizó cómo las diferentes dimensiones de la Inteligencia Emocional percibida (IE) y la alexitimia estaban relacionadas con el afrontamiento y la regulación del ánimo, utilizando como índices el apoyo social, el estrés percibido, la depresión y el balance afectivo. Participaron 593 estudiantes de un curso de introducción a la psicología. Los resultados clarificaron y confirmaron que las escalas de IE y alexitimia (TMMS-48 y TAS-20) convergieron en un factor de claridad y regulación de la emoción, que mostró validez de criterio con autoinformes de salud mental, balance afectivo y ajuste social, y simultáneamente con un perfil adaptativo de afrontamiento del estrés que medió y explicó cómo la claridad emocional, la capacidad para identificar los sentimientos, la habilidad para expresar y reparar el ánimo y los sentimientos ayudan a la regulación emocional. La atención a las emociones y niveles bajos de pensamiento orientado a lo externo no mostraron validez de criterio con la salud mental o con el afrontamiento adaptativo.

Emotional competencies are thought to be important for social interaction because emotions serve communicative and social functions, conveying information about people's thoughts and intentions and coordinating social encounters (Keltner & Haidt, 2001). The idea that emotional competencies are crucial for adaptation in various realms of life has fuelled interest in the construct of emotional intelligence, which as operationalized by the Trait Meta-Mood Scale (TMMS: Salovey, Mayer, Goldman, Turvey, & Palfay, 1995), encompasses: 1) the tendency to attend to one's emotions, 2) clarity concerning one's emotional state, and 3) the ability to repair, or regulate, one's emotions. Similarly, alexithymia construct encompasses the following characteristics: 1) difficulty distinguishing between feelings and the bodily sensations of emotional arousal, 2) difficulty identifying and describing feelings, 3) an externally oriented cognitive style and 4)

constricted imaginary processes as evidenced by a paucity of fantasies (Nemiah & Sifneos, 1970; Nemiah, Fryberger, & Sifneos, 1976). It has been hypothesized that these features reflect deficits in the mental representation of emotions and in the ability to regulate emotions through cognitive processes (Páez, Velasco, & González, 1999; Lane & Schwartz, 1987; Sifneos, 1994; Parker, Taylor, & Bagby, 1998, 2001). Congruently, alexithymia was related with high neuroticism, low extraversion, and low openness to experience (Taylor, Ryan, & Bagby, 1994a, 1994b). Clarity and Repair TMMS sub-scales were associated to low neuroticism, low vulnerability to stress (Salovey et al., 1995) and to low depression in USA, Spain and Chile (Fernández-Berrocal, Salovey, Vera, Extremera, & Ramos, 2005).

Descriptions of the constructs of emotional intelligence and alexithymia, along with the previous results, suggest that Alexithymia –considered as a dispositional deficit in the intra and interpersonal processing of emotions– constituted a negative mirror image of the concept of emotional intelligence (Páez & Velasco, 2001). Empirically, three factor analysis on TMMS and TAS-20 sub-scales, found that the TMMS clarity scale and the TAS-20 difficulty identifying feelings and difficulty describing feelings scales all clustered together, as did the TMMS attention scale and the TAS-20 externally oriented thinking scale (Davies,

Correspondence: Darío Páez University of the Basque Country 20080 San Sebastián (Spain) E-mail: pspparod@ss.ehu.es Stankov, & Roberts, 1988; Gohm & Clore, 2000; Coffey, Barenbaum, & Kerns, 2003). Moreover, one study found that the clarity, low difficulty to identify and express feelings was associated with the Repair scale of TMMS, with well-being measures, but attention and low external oriented thinking were not associated with reparation and well-being (Gohm & Clore, 2002).

## Perceived emotional intelligence, alexithymia and coping

Three meta-analytic studies with young and adults in USA and Spain confirm that avoiding coping (try to forget by means of drinking, wishful thinking negation or refusing to believe), social isolation or behavioral avoidance (avoid to be with people, leaving the situation), mental and behavioral disengagement (acceptance and helplessness), self-criticism or self-blame, rumination, emotional inhibition (trying to keep my feelings to myself) are associated to high depression and anxiety, low positive affect and high negative affect (Penley, Thomaka, & Wiebe, 2002; Compass, Connor-Smith, Saltzman, Harding, & Wadsworth, 2001; Campos, Páez, Iraurgui, & Velasco, 2005). Two meta-analytic review found that planful problem solving and positive reappraisal were associated with good affect balance (Compass et al., 2001; Campos et al., 2005). Coping by means of seeking for social support, venting and discharging emotion show no clear relationship with affect balance.

Previous studies also had found that subjects high in alexithymia use more inadaptive coping, like avoidant coping, social isolation, behavioral disengagement and emotional inhibition (Velasco, Fernández, & Páez, 2001) or less active and planful coping (Zeidner & Matthews, 2000). Gohm and Clore (2002) study found that the clarity, low difficulty to identify and express feelings was associated with the Repair scale of TMMS, with well-being measures, but also with high levels of adaptive coping, like positive revaluation and active and planful coping, low levels of inadaptive coping, like behavioral disengagement and denial. Attention and low external thinking dimension show weak association with well-being and was related to «neutral» or negative forms of coping like venting and discharge or searching for social support (Gohm & Clore, 2002).

Emotional regulation can be conceived of as aimed to decrease negative affect intensity and unpleasantness, to increase positive affect, and to reinforce pleasantness and control of emotional experience, by means of effective coping. Emotional intelligent persons, particularly subjects with high clarity, skills to identify and express feelings, cope more successfully with stress and emotional experience because they perceive and elaborate accurately their emotions, are able to express their feelings and can regulate effectively their mood (Zeidner & Matthews, 2000). On the other hand, attention and internal oriented thinking appear as a different dimension not associated necessarily to satisfactory emotional regulation —high emotional attention is associated to high intensity and difficulties to regulate mood.

The present study had two major goals: 1) to explore, using factor analysis, whether the constructs of emotional intelligence and alexithymia might all be better described by a small number of relatively independent underlying dimensions; clarity, attention, and reparation, and 2) to explore whether the dimensions that comprise these constructs are differentially associated with well-being measures and adaptive coping styles.

## Method

Sample

Participants were 593 introductory psychology students. The final sample comprised students (59.8 % female) with a mean age of 23.54 (*SD*= 7.62 years).

## Procedure

The participants were recruited from local universities where collaborators administered the questionnaire during lectures. Other scales were also included in the questionnaire, but will not be discussed in this paper. Filling out the questionnaire took approximately one hour.

### Materials

Emotional Intelligence. Emotional Intelligence was measured using a 48 items, Spaniard version of the TMMS (Fernández-Berrocal, Alcaide, Domínguez, Fernández-McNally, Ramos, & Ravira, 1998; Fernández-Berrocal, Extremera, & Ramos, 2004). The TMMS consists of three subscales: clarity, attention, and repair. The 15 item Clarity subscale assesses the ability to discriminate among feelings. Representative items are «I am rarely confused about how I feel» and «Sometimes I can't tell what my feelings are». The 21 item Attention subscale measures the extent to which one attends to one's feelings with items such as «I pay a lot of attention to how I feel». However, some of the items also include a valuing dimension; for example, «People would be better off it they felt less and thought more» and «I believe in acting from the heart». The 12 item Repair subscale assesses the belief that one can repair a bad mood. Sample items are «I try to think good thoughts no matter how badly I feel» and «Although I am sometimes sad, I have a mostly optimistic outlook». Response options range from 1 (strongly disagree) to 5 (strongly agree). See Cronbach's alpha in table 1.

Alexithymia. Alexithymia was assessed using the TAS-20 Spaniard version (Velasco & Páez, 1996). The TAS-20 consists of three subscales –Difficulty identifying feelings (ID), Difficulty describing feelings (DES) and externally oriented thinking (EOT)–. The identification subscale contents 7 items and assesses the participant's abilities to recognize their emotions (e.g., «I am often confused about what emotion I am feeling»). Five items comprise the description subscale, which measures how well the participants convey or describe their emotions to others (e.g., «I find it hard to describe how I feel to people»). The remaining 8 items assess externally oriented thinking, or a cognitive style that is reality-based and concrete (e.g., «Looking for hidden meanings in movies or plays distracts from their enjoyment»). Items are answered using a 5-point scale –«strongly disagree» to «strongly agree»– (see Cronbach's alpha in table 1).

Coping. Coping was assessed with a 17 item short version of the Lazarus and Folkman Way of Coping scale, that includes some items of the Scheier, Carver & Weintraub COPE (Gabaldón, Ortiz, Romo, Eguiluz, & Totorika, 1993). Table 4 lists all Coping items (e.g., Active or direct problem solving: «Concentration of efforts, I Try hard to fight with the problem», Emotional Inhibition: «I Try to keep my feeling to myself», Concentration: «Suppressing involvement in competing activities and concentration in the

problem», *Escape-avoidance*: «I tried to feel better by drinking, eating, dancing, etc, with friends», *Confrontative coping*: «I express anger to the person(s) who caused the problem»). Response options range from 1 (nothing) to 4 (much). The Cronbach's alpha was .74.

Life Events Questionnaire. This scale contents 27 relevant events for people (e.g. exams, abortion, sexual problems). Subjects select the event most relevant last year and answer the coping scale retrospectively reporting how they cope with it. This scale is a general inventory of important experiences and across various studies the Cronbach's alpha exceeds .75 (Barrios et al., 1986). In this study, the alpha was .79.

Beck's Depression Inventory (BDI). This scale is composed of 21 items and it includes the cognitive aspects as well as the behavioral and somatic aspects that are present in the depressive disorder. Each item consists of four statements describing increasing intensities of symptoms of depression. Items are rated on a scale from 0-3, reflecting how participants have felt over the past month. A review of research studies focusing on the psychometric properties of the BDI revealed a mean coefficient alpha of .86 (Beck, Steer, & Garbin, 1988). In the present study, the Cronbach's alpha was .83.

Bradburn's positive and negative affect scale. This scale was derived from Bradburn's theoretical approach to subjective well-being, based on the concept of «happiness» defined as a preponderances of positive affect over negative affect. Nine items measured positive affect (e.g., «Have you felt that things happened as you wanted?»), and another nine items negative affect (e.g., «Have you felt very worried?»). Response options range from 1(never) to 4 (all the time). The affect balance can be computed as positive affect minus negative affect. The instrument has satisfactory convergent validity, as well as a good test-retest correlation (Bradburn, 1969). Lewis, McCollam and Joseph (2000) reported alpha coefficients of .67 for the positive affect subscale and .50 for the negative affect subscale. In the present study of .70 and .64 were obtained for the positive and negative affect subscales, respectively.

PANAS or Watson's affect balance. This scale contains 20 mood descriptors (e.g., active, excited, hostile) that are relatively pure markers of either high NA or high PA. The 10 PANAS items assessing positive mood and 10 items assessing negative mood were summed to yield separate PA and NA scale scores for each participant. A general score on affect balance can be computed as positive mood minus negative mood. Items are answered using a 5-point scale (Watson, Clark, & Tellegen, 1988). In the Spanish version Cronbach's alpha was .80 for NA and .68 for PA (Velasco & Páez, 1996). In the present study, the internally consistent was .76 for NA, and .67 for PA.

Vaux's Social Support. Of Vaux's three constructs of social support –support network resources, supportive behavior, and the subjective appraisal of support– we chose to focus on the subjective definition (e.g., My friends respect me) and objective social support. Nine items scale measure subjective social support (SSS) and another 9 items evaluate objective social support (OSS). Response options range from 1(strongly agree) to 4 (strongly disagree). In the English version Cronbach's alpha was. 80 for SSS, and .81 for OSS (Vaux et al., 1986). In this study, the alpha of .89 for SSS and the alpha of .67 for OSS were obtained.

Pennebaker's LSE. This questionnaire is a modification of the Pennebaker Physical Symptoms Scale and asks respondents to rate, along unipolar 3-point scales ranging from 1 (nothing) to 3 (much) the degree to which they are currently experiencing each of a series of 14 physical symptoms (e.g., racing heart, headache, stomachache). Average internal consistencies across several studies have been approximately .75. (Pennebaker, 1982). Previous studies with this version present satisfactory reliability (Cronbach's alpha= .74, Velasco & Páez, 1996). In the present study, the coefficient alpha= .69.

#### Results

Correlations and factor analysis of the perceived emotional intelligence and alexithymia subscales.

As can be seen in table 1, correlations between TAS-20 and TMMS subscales ranged from .13 to .50 . A principal components factor analysis with varimax rotation was performed and a clear two factor solutions emerge (see table 2).

Clarity and repair TMMS sub-scales load negatively in the first factor and difficulty identifying and describing emotions load positively in this factor. This factor tap the dimension of ability to clearly identify, express and repair feeling, found in previous studies. Attention positively and external oriented thinking negatively load in the second factor and this dimensions represent low internal focus on feelings. Factors scores were saved and high scores means low attention and low clarity and reparation of feelings.

Concurrent and criterion validity of the perceived emotional intelligence dimensions. A series of correlations was performed between the standardized scores of the two dimensions of Emotional Intelligence and well-being (Depression as assessed by BDI, and affect balance as assessed by Bradburn's measure and by PANAS). Scores of Clarity, identification, expression and reparation of emotions correlate significantly, and as expected (see table 3), with measures of positive versus negative affect and low depression, but also with high objective and subjective social support, low stress and low physical symptoms. These results confirm the concurrent and criterion validity of this dimension of emotional intelligence with affect balance and social adjustment measures.

Table 1  Alpha and correlations among perceived emotional intelligence and alexithymia subscales						
Measures	Alpha	1	2	3	4	5
1. TMMS- CLA	.85					
2. TMMS- ATT	.64	.23**				
3. TMMS- REP	.73	.45**	.17**			
4. TAS-20 ID	.79	51**	09	27**		
5. TAS-20 DES	.68	40**	25**	26**	.50**	
6. TAS-20 EOT	.59	11	28**	13*	.26**	.28**

Note: Pearson product-moment coefficients.

\*p<.05; \*\* p<.01 (two-tailed).

## Measures

- 1. TMMS-CLA: Clarity subscale of TMMS
- 2. TMMS- ATT: Attention subscale of TMMS.
- 3. TMMS-REP: Repair subscale of TMMS.
- 4. TAS-20 ID: Difficulty identifying feelings subscale of TAS-20.
- 5. TAS-20 DES: Difficulty describing feelings subscale of TAS-20.
- 6. TAS-20 EOT: Externally oriented thinking subscale of TAS-20.

Alpha= internally consistent Cronbach's alpha.

Concurrent validity of coping items with well-being and dimensions of perceived emotional intelligence. A series of Pearson correlations were performed in order to assess relationships between coping, affect balance and depression (see table 4). Results confirm that planful problem coping, and positive reevaluation are positively associated with psychological health and that denial and emotional inhibition (hiding emotions) are associated with depression and negatively with affect balance. These forms of coping were also related to the first factor of emotional intelligence.

Table 2
Factor loadings: factor analysis of perceived emotional intelligence and
alexithymia subscales

	Fact	tors
	1	2
TMMS- CLA	76	.36
TMMS- ATT	36	62
TMMS- REP	57	.39
TAS-20 ID	.79	
TAS-20 DES	.75	
TAS-20 EOT	.41	.67
Eigenvalue	2.38	1.12
% explained variance	39.74%	18.74%

TMMS-CLA: Clarity subscale of TMMS.

TMMS- ATT: Attention subscale of TMMS.

TMMS-REP: Repair subscale of TMMS.

TAS-20 ID: Difficulty identifying feelings subscale of TAS-20.

TAS-20 DES: Difficulty describing feelings subscale of TAS-20.

TAS-20 EOT: Externally oriented thinking subscale of TAS-20.

Factor 1: Low clarity, repair and high difficulty identifying and describing emotions.

Factor 2: Low attention and high external oriented thinking.

Note: High scores means low emotional intelligence: low clarity, attention and repair.

Table 3

Correlations of depression, well-being, physical symptoms, stress and social support measures with perceived emotional intelligence

	Factor 1	Factor 2
BDI	.39**	09
PANAS	45**	.09
BRADBURN	29**	.07
LSE	.25**	10
LIFE EVENTS	.21*	11
OSS	32**	06
SSS	21*	16

Note: Pearson product-moment coefficients.

\*p<.05; \*\* p<.01 (two-tailed).

BDI: Depression

PANAS: Affect Balance.

BRADBURN: Affect Balance.

LSE: Physical Symptoms.

LIFE EVENTS: Stress perceived. Number of relevant life events.

OSS: Objective Social Support.

SSS: Subjective Social Support.

Factor 1: Low clarity, repair and high difficulty identifying and describing emotions.

Factor 2: Low attention and high external oriented thinking.

Wishful thinking, avoidance, self-blame, behavioral disengagement, distancing and escape-avoidance were related to depression but not to affect balance.

The low attention and external thinking factor was unrelated to well-being and show an inconsistent pattern with adaptive coping.

## Discussion and conclusions

In spite of some conceptual differences, perceived emotional intelligence and Alexithymia can be conceived off as the positive and negative facets of skilled emotional regulation. In this vein, our results confirm that emotional intelligence and alexithymia scales converge in two different and relatively independent dimensions: a) attention to one's emotion, composed of the TMMS attention to emotions sub-scale and the TAS-20 externally oriented thinking scale (negatively loaded in this factor or dimension). b) clarity and regulation of one's emotion, composed of the clarity of emotion and reparation sub scales of the TMMS and with reversed loading the TAS-20 difficulty identifying and difficulty describing feelings. These results are congruent with at least four other studies (Coffey, Berenbaum, & Kerns, 2003).

Self-report scales, like TMMS, are criticized because they tap on perceived processes, not in actual emotion-related competencies. This is the main reason why performance based test were developed to measure emotional intelligence (Brackett & Salovey, 2006; Lopes, Brackett, Nezlek, Schütz, Sellin, & Salovey, 2004).

 $Table \ 4$  Correlations of coping with perceived emotional intelligence dimensions, depression and well-being

	Factor 1	Factor 2	BDI	PANAS	Bradburn
Direct problem solving	28**	08	.00	.04	.05
2. Acceptance	.04	13*	01	03	01
3. Emotional Inhibition	.28**	04	.10*	14**	12**
4. Denial	.26**	.04	.19**	10*	13**
5. Wishful thinking	.07	.02	.16*	01	05
6. Restraint	12	.03	02	.06	.07
7. Informational social support	09	10	.05	.00	.10*
8. Emotional social support	16*	06	.00	01	.06
Planful problem solving	16*	.10	12*	.13**	.15**
10. Concentration	05	07	.00	04	.00
11. Self-blame	02	.04	.15*	06	06
12. Positive reevaluation	23**	.02	14*	.17**	.15**
13. Venting emotions	21**	16*	03	.06	.14**
14. Behavioral disengagement	.14	13*	.17*	06	05
15. Distancing	.21**	03	.10*	09	06
16. Escape-avoidance	.04	08	.13*	01	03
17. Confrontative	17*	12	.00	.05	.14**

Note: Pearson product-moment coefficients.

\* p<.05; \*\* p<.01 (two-tailed).

Factor 1: Low clarity, repair and high difficulty identifying and describing emotions.

Factor 2: Low attention and high external oriented thinking.

BDI: Depression.

PANAS: Affect Balance.

BRADBURN: Affect Balance.

Note: High scores means low emotional intelligence: low clarity and repair and low attention

Criticism to self-report measures are respectful and reasonable, however it is also an empirical affair to contrast the validity of these scales (Petrides, Niven, & Mouskounti, 2006). In this study, the second dimension of TMMS and TAS-20 sub-scale was related not only to lower depression, but also to high positive affect and low negative affect, confirming that is related to positive emotional regulation. Similarly it was associated to high social integration, low stress and low reported physical symptoms, confirming that this facet of emotional intelligence is related to better perceived health and social adjustment. Previous studies also found that alexithymia was associated to inadaptive coping (avoiding coping, acceptance and helplessness and emotional inhibition), high perceived stress, low social support, lower levels of positive affect and high levels of negative affect in different cultural context like the American (Salovey et al., 1995) or Latin European (Velasco, Fernández, & Páez, 2001). Our finding support that these association occurs also with the positive aspects of low difficulty of identifying emotions or clarity and with high perceived reparatory emotional capacity, in part related to low difficulties to express and verbalize emotions. Moreover, clarity and reparatory capacity were associated with adaptive forms of coping with stress, related to low depression and positive affect balance, as planning or positive reevaluation (perceiving personal growth). Simultaneously, this clarity of emotions and reparatory dimensions was negatively associated to inadaptive forms of coping, related with depression and low affect balance, as avoidance (trying to forget problems by working), negation, self-criticism and emotional inhibition (hiding emotions). The second dimensions shows weak negative and non significant association with mental health and marginal negative significant with affect balance and was negatively associated with coping by means of searching social support, emotional discharge and confrontation – forms of coping unrelated in this study to depression and positive affect. However in two meta-analysis discharge and confrontation are negatively related to affect balance and this suggest that emotional attention could play a positive role in regulation. On the other hand, results also suggest that high attention to emotions is related to low levels of self-disclosure and emotional expression, being similar to high self-consciousness –a process of self-absorption that is associated to negative affect (Salovey et al., 1995).

Concluding, TMMS and TAS converge in a clarity and regulation of emotion factor, that show criterion validity with self-reports of mental health, affect balance and social adjustment and simultaneously associated to an adaptive profile of coping with stress, that mediates and explain how emotional clarity, capacity to identify feelings, ability to express and repair mood and feelings, helps to emotional regulation. Attention to emotion and low external oriented thinking did not show criterion validity with mental health nor with adaptive coping.

## Author note

This study was supported by the following Basque Country University Research Grants (UPV 001109.231-13645-2001).

## References

- Barrios, P., Echebarría, A., Martínez, B., & Txurimendi, A. (1986). Instrumentos para medir factores psicosociales y síntomas ansiosos y depresivos. En D. Páez (ed.): Salud mental y factores psicosociales. Madrid: Fundamentos.
- Beck, A.T., Steer, R.A., & Garbin, M.G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychological Review, 8, 77-100.*
- Brackett, M.A. & Salovey, P. (2006). Measuring emotional intelligence with the Mayer-Salovey-Caruso Emotional Intelligence Test (MS-CEIT). *Psicothema*, 18, supl., 34-41.
- Bradburn, N.M. (1969). The structure of psychological well-being. Chicago: Aldine.
- Campos, M., Paez, D., Iraurgui, J., & Velasco, C. (2005). Afrontamiento y regulación emocional de hechos estresantes y traumáticos: metaanálisis de 14 estudios y un estudio longitudinal sobre el 11-M. Ansiedad y Estrés, 10, 277-286.
- Coffey, E., Berenbaum, H., & Kerns, J.G. (2003). The dimensions of emotional intelligence, alexithymia and mood awareness: associations with personality and performance on an emotional strop task. *Cognition and Emotion*, 17, 671-679.
- Compass, B.E., Connor-Smith, J.K., Saltzman, H., Harding, A., & Wadsworth, M.E. (2001). Coping with stress during childhood and adolescence: problems, progress and potential in theory and research. *Psychological Bulletin*, 1, 87-127.
- Davies, M., Stankov, L., & Roberts, R.D. (1988). Emotional intelligence: in search of an elusive construct. *Journal of Personality and Social Psychology*, 75, 989-1015.
- Fernández-Berrocal, P., Alcaide, R., Domínguez, E., Fernández-McNally, C., Ramos, N.S., & Ravira, M. (1998). Adaptación al castellano de la escala rasgo de metaconocimiento sobre estados emocionales de Salovey et al.: datos preliminares. Libro de Actas del V Congreso de Evaluación Psicológica. Málaga.

- Fernández-Berrocal, P., Extremera, N., & Ramos, N. (2004). Validity and reliability of the Spanish modified version of the Trait Meta-Mood Scale. *Psychological Reports*, 94, 751-755.
- Fernández-Berrocal, P., Salovey, P., Vera, A., Extremera, N., & Ramos, N. (2005). Cultural influences on the relation between perceived emotional intelligence and depression. *International Review of Social Psychology, 18*, 91-107.
- Gabaldón, O., Ortiz, A., Romo, I., Eguiluz, I., & Totorika, K. (1993). Enfermedad crónica grave, afrontamiento, soporte social y afectividad. In D. Páez (ed.): Salud, expresión y represión social de las emociones. Valencia: Promolibro.
- Gohm, C.L. & Clore, G.L. (2000). Individual differences in emotional experience: mapping available scales to processes. *Personality and Social Psychology Bulletin*, 26, 679-697.
- Gohm, C.L. & Clore, G.L. (2002). Four latent traits of emotional experience and their involvement in attributional style, coping and well-being. *Cognition and Emotion*, 16, 495-518.
- Keltner, D. & Haidt, J. (2001). Social functions of emotions. In T.J. Mayne and G.A. Bonanno (eds.): Emotions: current issues and future directions. New York: Guilford.
- Lane, R.D. & Schwartz, G.E. (1987). Levels of emotional awareness: a cognitive-developmental theory and its application to psychopathology. *American Journal of Psychiatry*, 144, 133-143.
- Lewis, C.A., McCollam, P., & Joseph, S. (2000). Convergent validity of the depression-happiness scales with the Bradburn Affect Scale. Social Behavior and Personality, 28, 579-584.
- Lopes, P.N., Brackett, M.A., Nezlek, J.B., Schütz, A., Sellin, I., & Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin*, 8, 1018-1034.
- Nemiah, J.C. & Sifneos, P.E. (1970). Affect and fantasy in patients with psychosomatic disorders. In O.W. Hill (ed.): Modern trends in psychosomatic medicine, vol. 2. London: Butterworth.

- Nemiah, J.C., Freyberger, H., & Sifneos, P.E. (1976). Alexithymia: a view of the psychosomatic process. In O.W. Hill (ed.): *Modern trends in psychosomatic medicine*, vol. 3. London: Butterworth.
- Páez, D. & Velasco, C. (2001). De la alexitimia a la inteligencia emocional. Boletín de Psicología, 70, 7-9.
- Páez, D., Velasco, C., & González, J.L. (1999). Expressive writing and the role of alexithymia as a dispositional deficit in self-disclosure and psychological health. *Journal of Personality and Social Psychology*, 3, 630-642.
- Parker, J.D.A., Taylor, G.J., & Bagby, R.M. (1998). Alexithymia: relationship with ego defense and coping styles. Comprehensive Psychiatry, 2, 91-98.
- Parker, J.D.A., Taylor, G.J., & Bagby, R.M. (2001). The relationship between emotional intelligence and alexithymia. *Personality and Individual Differences*, 30, 107-115.
- Penley, J.A., Tomaka, J., & Wiebe, J.S. (2002). The association of coping to physical and psychological health outcomes: a meta-analytic review. *Journal of Behavioral Medicine*, 6, 551-603.
- Pennebaker, J.W. (1982). The psychology of physical symptoms. New York: Springer-Verlag.
- Petrides, K.V., Niven, L., & Mouskounti, T. (2006). The trait emotional intelligence of ballet dancers and musicians. *Psicothema*, 18, supl., 101-107.
- Salovey, P., Mayer, J.D., Goldman, S.L., Turvey, C., & Palfai, T.P. (1995).Emotional attention, clarity and repair: exploring emotional intelligen-

- ce using the trait meta-mood scale. In J. Pennebaker (ed.): *Emotion, disclousure and health*. Washington, D.C.: American Psychological Association.
- Sifneos, P.E. (1994). Affect deficit and alexithymia. New Trends in Experimental and Clinical Psychiatry, 10, 193-195.
- Taylor, G.J., Ryan, D.P., & Bagby, R.M. (1994a) . The twenty -item Toronto Alexithymia Scale-I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research*, 1, 23-32.
- Taylor, G.J., Ryan, D.P., & Bagby, R.M. (1994b) .The twenty -item Toronto Alexithymia Scale-II.Convergent, discriminant and concurrent validity. *Journal of Psychosomatic Research*, 38, 33-40.
- Vaux, A., Phillips, J., Holly, C., Thompson, B., Williams, D., & Stewart, D. (1986). The social support appraisals (SAS) scale: studies of reliability and validity. *American Journal of Community Psychology*, 14, 195-219.
- Velasco, C. & Páez, D. (1996). Alexitimia, comunicación emocional y problemas psicosomáticos. Boletín de Psicología, 52, 25-46.
- Velasco, C., Fernández, I., & Páez. D. (2001). Alexitimia, afrontamiento, compartir social y salud. Boletín de Psicología, 70, 47-65.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Zeidner, M. & Matthews, G. (2000). Personality and intelligence. In R.J. Sternberg (ed.): *Handbook of intelligence*. New York: Cambridge University Press.