



ORIGINAL ARTICLE

Alexithymia in Eating Disorders: a transcultural perspective

STEFANIA ROMA, DANIELA ALLIANI

Department of Psychiatric Sciences and Psychological Medicine
Policlinico Umberto I, Sapienza University, Rome (Italy)

The role of alexithymia in eating disorders has been extensively studied in Western cultures. On the contrary, studies on alexithymia in the Far East are rare, and its possible role in eating disorders is yet unstudied. After discussing the history and the meaning of the concept of alexithymia in Western cultures, the present paper poses the anthropological question whether alexithymia has a different meaning in Western and Eastern cultures. The sinologist literature on the topic of emotions in China is firstly addressed, followed by a review of empirical studies on eating disorders in China. Finally, the results of a preliminary study that compared the role of alexithymia in Italian and Chinese eating disorders are discussed, stressing that the significantly lower alexithymia scores in Chinese eating disorders might be interpreted as strictly connected with the native culture, that is the tendency of Chinese girls to give socially desirable answers. Accordingly, a relevant pathoplastic role of the native culture not only on symptoms, but even on basic traits like alexithymia is suggested.

Keywords: Anorexia, Alexithymia, Culture, Ethnicity

DIAL PHIL MENT NEURO SCI 2010; 3(1): 8-16

INTRODUCTION

The word alexithymia (from Greek *a lexis thymos*) was coined by Peter Sifneos (1973) to describe an emotional-cognitive problem characterized by a peculiar difficulty in living, understanding and processing emotions. This construct was originally elaborated during the author's observation of patients suffering from psychosomatic problems and about them were highlighted:

- the strong difficulty to describe emotions and to be aware of them;
- the reduction of mental activities linked with the fantasy;
- the strong concern for concrete and realistic aspects of the external environment and, at the same time, of his own body;
- a kind of thoughts fixed on the stimuli and not able to go on with the elaboration.

Nowadays the construct of alexithymia finds its centre in five main clinical features:

1. Difficulty in identifying and describing emotions: alexithymic individuals express a strong difficulty in describing with words their own

feelings and analysing the whole situation they seem to be unaware of this difficulty. It can happen that these individuals feel intense and unexpected emotions (like anger, fear or tears) but they are not able to link this emotional arousal with memories, fantasies or specific situations.

2. Difficulties in distinguishing between subjective emotional states and somatic components of the emotional activation: alexithymic individuals express mainly their feelings through the physiological component, because of their incapability in elaborating the perceived subjective aspect. The psychoanalysis considers this feature as a massive defence against a psychotic anxiety: the distance between affect and representation of it denotes the destruction of the link between the meaning of words and their symbolism (Bucci, 1997a, 1997b). From a cognitive point of view, this difficulty has been considered as a selective attention and an amplification of the somatic components of emotions, as well as a predisposition to acting physically in order to let off an unpleasant inner strain. This could be

the reason why the alexithymic individuals develop hypochondria, somatization disorders and compulsive behaviours like bingeing, abuse of psychoactive substances and anorexia nervosa (Lane and Schwartz, 1987).

3. Poor imagination processes (Marty and de M'Uzan, 1963): poor imagination and related functions are easily observable in the oneiric activity of alexithymic subjects. These individuals rarely remember their dreams which are anyway a reproduction of the real life like (for example what happened during the day and events of the working day). At the same time, the daydreams are in a scanty quantity and have a poor quality because they concern once again on events happened or worries about the future. Speaking with alexithymic individuals is difficult, boring, fragmentary, strongly limited to symptoms, medical analysis or events happened. Physically they look like being rigid in their body posture and in their facial expressions (Taylor, 1984).

4. Cognitive style oriented towards the external reality: alexithymic individuals are focused almost exclusively on events external to the psychic life. At the cognitive level this appears as a predominance of rational thought, aiming at describing actions and experiences without emotional investments, as if the individual is spectator rather than actor of his own life. Attention is concentrated on factual reality, of which it is possible to describe meticulously the details without any emotional involvement (Bucci, 1997a).

5. Social conformity: alexithymic individuals appear to be strictly coherent to the social rules of adaptation so that they seem to be externally defined in their role identity. On the opposite, they lack individual subjective qualities in interpreting their own identity and highlight their scarce ability to share other people's emotions; doing so they show their strong difficulties to create and maintain along the time intimate and interpersonal relationships (Taylor, 1984).

During the 30 years of its history, the construct of alexithymia (Todarello and Porcelli, 2002) underwent to important and substantial changes at least in three sections:

1. From communication to elaboration of the emotions: at the beginning the structural concept of the construct seemed to be the difficulty in the

communication of emotions, while nowadays the main theoretical aspect is considered to be a deficit in the cognitive processing of emotions due to impaired development of the functions allowing mentalization. Therefore the actual theoretical frame has its reference in the modern theories of emotions (Porcelli, 2004).

2. From the psychosomatic specificity to non-specific vulnerability: at the beginning alexithymia was thought to prevail mainly in psychosomatic pathologies, so that scientists wrongly believed that it was a specific aspect of them. Nowadays on the opposite alexithymia is considered a non specific proneness towards different disorders both physical and psychiatric, characterized by a common affect dysregulation: this is considered to be a sign of a personality expressed with different intensity in the population (Moriguchi et al., 2006).

3. From weak to strong measuring instruments: at the beginning the construct was measured with instruments with a high face validity but, on the opposite, with a low attention to validity and reliability. The introduction of the Toronto Scale (Taylor et al., 1985) allowed a substantial improvement in measuring the construct, because it was empirically validated.

The change in the three aspects of the construct described above did not influence its main features, so that alexithymia remained unaltered with the characteristics Sifneos described 30 years ago.

In order to understand the main nucleus of the alexithymia construct it is crucial to make a distinction between emotions and feelings.

Emotions are biological innate phenomena, genetically planned, connected with the subcortical and limbic systems, suitable for the surviving of the species and based on non verbal signs like facial expressions, gestures, body posture and vocal tone. These are the biological components of affect.

On the opposite feelings are individual psychological phenomena very complex to be analysed because they imply the mixture of the cognitive elaboration together with the subjective way of life, both connected by the neocortical functions. The psychological component of affect allows to evaluate the emotional answer to external and

interpersonal stimuli and, at the same time, to intentionally communicate emotions through the function of symbolizing, both verbal and non-verbal. It can be stated that feelings strictly depend on the native culture, the representation of himself and of other people, memories, fantasies and dreams.

Alexithymia does not describe individuals without emotions (which is an impossible event), rather it describes people with a deficit in the psychological component of affection (feeling) (Porcelli, 2004). In other words, alexithymics feel emotions expressed through the biological components of affect but they have few or no chances to represent them with psychological instruments like images, thoughts or fantasies.

The construct of alexithymia includes more DSM-IV categorial syndromes. These syndromes own different kind of symptoms, but they have a common basis that is an individual deficit in the ability of self-regulation of affect (from somatoform to anxious-depressive disorders, to eating disorders, to the abuse of specific substances, to functional pathologies with medically unexplained symptoms) (Taylor et al., 1997), in a continuum model having alexithymia as a basic personality trait expressed with variable intensity in the population.

ALEXITHYMIA AND EMOTIONS IN EATING DISORDERS IN ITALY AND WESTERN COUNTRIES

The topic of emotions in the Western culture has been widely studied and discussed in the last century. In particular in the last three decades a scientific interest grew towards the development and regulation of affect and the impact of affect dysregulation on physical and mental health.

The idea that eating disorders are essentially disorders of self-regulation and regulation of affect appeared gradually when clinicians and researchers recognized the need to review the old conceptual models having limited capacity to explain the clinical features of these disorders and to delineate effective therapies.

In the seventeenth century Richard Morton (1694) studied a condition of nervous consumption, redefined in 1874 as anorexia nervosa by Sir William Gull (1874), leading lots of doctors to

understand the role of emotional factors in its pathogenesis.

The first psychoanalytical theories (Taylor et al., 1997) gave a primary symbolic meaning to the abnormal eating behaviour: conflicts having to do with unconscious fantasies of oral fecundation were expressed avoiding food or, on the opposite, through a gratification of the fantasy through bingeing, giving origin to guilt feelings and anxiety (Schwartz, 1989).

One of the main critics of this theoretical idea and of the psychotherapeutic approach based on the motivational interpretations of the eating symptoms was Bruch (Bruch 1962, 1971); she thought that the main problem was a defective perception of himself involving a wide range of deficit in the conceptual development, in the body image and awareness, and in the individuation process. Bruch (1973) observed that anorexics have difficulties in either accurately perceiving and cognitively interpreting the stimuli having their origin in the body, particularly sensations of hunger and satiation as well as fatigue and weakness which are physiological consequences of malnutrition. When the lack of body and emotional awareness is serious, patients can lack of the perception of their own body as something that belongs to themselves and so they lack of the awareness to live their own lives. Therefore Bruch stated the validity of a therapeutic approach leading to increase the patients' awareness of the existence of feelings and impulses having origin in themselves and helping patients in recognizing them (Bruch, 1985).

In the same way Mara Selvini Palazzoli (1971, 1974) identifies at the basis of nervous anorexia ego-despair, lack of identity and of the sense of personal effectiveness together with the incapacity to recognize and distinguish different kinds of emotional states, impulses and wishes. From her point of view the anorectic feels her own body as not belonging to herself because she identifies it with the maternal object which is bad. The logic consequence of this is "an attitude of mistrust towards the body, its stimulus and its needs".

In his studies about disorders of the self regulation Grotstein (1986) identifies a primary regulatory disorder as a disablement of the capacity of cognitively elaborating and regulating emo-

tions. This condition can reflect either a constitutional hereditary deficit or an acquired condition gained through the experience of a defective relationship in an environment inadequate for the growth. In order to compensate the disorder of affective regulation the patients develop as a secondary condition the pathological eating behaviours leading to a bad regulation of the weight and to other physiological problems: hence eating symptoms offer a provisional floor standing below a fragmented ego, or a container around it, protecting the ego from catastrophic disintegration.

Casper (1983) points out that food and physiological processes are used in a perverted way in order to rule emotions". He presupposes that while anorexics (Casper, 1990), being subject either to tension or emotional discomfort because of their worries about their physical condition, go directly to a cognitive formality in which the overvalued idea "I do not have to be fat" and other strengthening thoughts directed towards themselves take a key role and are apt to rule the emotional states; in this context a slim body is used as a proof of a perfect self control and equilibrium". On the contrary, in bulimic patients (Casper et al., 1980) this cognitive mechanism partially fails and it becomes subordinated to a bingeing-vomiting sequence. Even if at the beginning this sequence is used to keep under control the weight and so it is controlled by the patient, it evolves in time up to become a sort of defence compulsive mechanism aiming at regulating and lightening affects and tension states otherwise intolerable. In synthesis while anorexics consolidate their experience of themselves abstaining from eating, bulimics (Casper et al., 1980) experience a brief sense of comfort and of reduction of tension during the bingeing, which is soon followed by a sense of shame pushing them to vomit; in this case vomiting should be intended as a last attempt to recuperate a good sense of oneself, as a way to overcome the addiction to food through its expulsion and refuse. Schupack-Neuberg and Nemeroff (1993) showed that bulimics state to have a higher sense of confusion about identity, a higher enmeshment and a general instability of the concept of themselves compared to normal controls and to

subjects with binge eating disorder. In bulimics the bingeing represents a way of escape from the self-awareness and the vomit is used to regulate negative affect. Because of their lacking in an adequate psychic self-regulating structure individuals with eating disorders are excessively influenced by external factors like the cultural ideals; their physical image as well as their experience of themselves are consolidated on the base of these external influences. Quite typically eating disorder patients aspire to an ideal weight, which is under their optimal or "healthy" weight, basing on the contemporary image of the Western culture which links femininity, popularity and success to an ectomorph body.

In his book about disorders of the affective regulation G. J. Taylor (1997) reports numerous empirical studies sustaining and demonstrating the interconnection between alexithymia and eating disorders.

THE TOPIC OF "EMOTIONS" IN CHINA AND ASIAN COUNTRIES

Talking about emotions has always been really embarrassing for Chinese thinkers, for ancient Confucian scholars as well as for modern Chinese intellectuals. The traditional reserve and modesty create a strong discomfort to openly reveal the most intimate and secret sides of one's own personality. It is not a casualty that the Chinese aesthetic tradition banished the evident expression of feelings, considering it almost vulgar and considering, on the opposite, extremely refined the predilection for allusion, metaphor, symbolic suggestion (Santangelo, 1991) up to the moral control of emotions.

The sinologist Paolo Santangelo (1991, 1992, 1997, 2000) acknowledges the difficulty to define the concept of "emotion" considering that the meaning itself is matter of strong debate between psychologists and contemporary philosophers and that it does not exist an identity between the Western notion of emotion and its analogous concept in the Far East. In fact theoretically the Chinese philosophies are in contrast with the emotions and passions of the individual and this mistrust towards emotions has antique origins.

The brothers Chen and Zhu Xi (Santangelo,

1991) formulated rigorist doctrines founded on a negative judgement of feelings. They theorized a contrast between the absolute principle “li” present in all the beings (their true “nature”) and the cosmic energy “qi” which shapes the physical and moral features of each single individual and which express itself in the temperament. In this severe perspective the “nature” was clear and objective, while emotions were muddy and subjective; the principle was universal, feelings were partial and “selfish”. Anyway they existed in all the individuals.

From this scheme a deep contradiction was originated and Orthodox Neoconfucians will never be really able to heal it from a theoretical point of view. If the human nature was considered bad, it would be equally coherent to judge the secret movements of the soul as equally perverse. But it has to be said that in Neoconfucianism human nature was considered good: for this reason the evaluation of emotions and wishes became very complex.

These philosophers thought it was of fundamental importance to establish an equilibrium between the research of inner perfection and the demands of the political and social acting. The ethic ambivalence of emotions derives from the interpretation the Chinese thought gave them, that is a process of mind, an answer to external requests. When the mind is calm, detached, lacking of any emotional involvement its nature is “clear as a mirror”, is in harmony with the universal principle contained in it. And this is good. On the opposite, if it is dominated by wishes it can be distressed by external elements, it can be totally dominated and activate violent, immoderate and untimely emotions.

Man is morally responsible for this excess: following the Chinese ideology the problem of good and bad in man is ultimately that of “training” passions. Considering that emotions and wishes cannot be sentenced as ontologically wicked in moralists’ opinion, in fact they can be cancelled through the maximum control of them and the submission to the logic of social duties. Feelings were so defined good as far as they were moderated and conformed to the demands of social harmony while wishes were admitted insofar as they had been caused by essential physical

needs. In so doing the ethic recovered the antique conception by Mencio (Santangelo, 1997) about the necessity to cultivate the mind and educate senses through the cathartic function of rites in order to develop only those “good” inner states funding the “right” social relations.

From the middle of Qing dynasty (Santangelo, 1991) onwards innovative positions saw the origin; they expressed, even if in a contradictory way and through statements sometimes provocative, the tendency to accept wishes and to increase the value of feelings. This is under numerous points of view a system of values alternative to the Western models, characterized by a sort of collective representation of senses and feelings the Chinese society created in different ages and giving new contributions in the debate about the universality or not of the inner states and about the problem of symbolic classifications.

Comparing Western and Eastern traditions, it must be noted that although at one hand in the antique and Medieval Western tradition the tendency to consider passions as “disease of soul” darkening the mind and limiting freedom is very strong, on the other hand and at the same time a strand of thought gave a high value to passions, and specifically to love. Accordingly, in Western tradition the positive function of the emotional impetus was recognized in a way without equal in the Chinese civilization.

In the thought of East Asia there is no metaphysical despise for the senses, but not even the sublimation for the religious ideal, as well as body and soul cannot be considered the terms of an incurable dichotomy. If in the European culture “passion” finds its antithesis in the “reason”, in the Chinese culture the opposition is between the “harmony” of equilibrium and the “disorder” of excess.

According to Buddhist theories (Santangelo, 2000) passions, called as well “demons” or “bandits” of the mind, were disorders infecting the soul, destroying the treasures of virtue and imprisoning man in the chain of rebirth. The Taoist answer defined feelings as legitimate if not excessive. The ideal was to overcome the emotional stage through the “liberation from ties”, the clear impartial understanding of reality in its unceasing change, fully controlling the

self, without any emotional involvement, without personal interests, without effort. This is the condition of the “genuine man”, of that person who acts in harmony with himself, free from prejudices, flexible and calm. The imperturbable soul does not mean either hypocrisy or indifference but moral determination.

It goes without saying that Neoconfucianism, in spite of its deep rationalism and its attention to psychological processes, was not able to solve the fundamental conflict between the demands for stability and for social harmony and the individual impulses, between freedom and sociability and maybe not even the contradictions having to do with the individual himself, between the wish for serenity and the impetus for passions. These contradictions seem to be in the late Ming Chinese society too (Santangelo, 2000) and in the same philosophical field numerous scholars start to doubt the rigorous point of view of the official ideology.

A more strong cultural sensibility manifests towards the hidden world of passions and the demands for a plain development of the individual personality become known, giving a higher value to feelings. The innovative turning was not successful: the new tendencies stayed limited to clubs of intellectuals. The education went on discouraging the cultivation of feelings. In this way the first thoughts of individualism by certain heterodox thinkers did not manage to endanger the ideology created by the Qing conformity and successively by the Marxist rigorism. These original and independent philosophers were strongly attacked by Orthodoxes with the accusation to be amoral while the reevaluation of wishes and emotions was the research for a new morality legitimating the birth of different social relationships.

Paolo Santangelo underlines the different interpretation of the concept of Individuality in China compared to that of the Western culture. From an ethnocentric point of view, in the Chinese culture the social morality intervenes to dominate the subjectivity. However, from an anthropological point of view a more proper question focuses about the meaning of Subjectivity. The meaning of this term depends on the native culture: in the Western culture it could be defined

as the individual capacity to behave, act independently from external orders (not only having a feeling or thought of his own but express it). This definition is in contrast with the dogmas of the Chinese society where it is the society which gives to the individual methods to give shape and substance to his own emotions; ethnographic studies underline for example how different traditional rites have regulatory value of the individual emotions which are in this way socialized and codified. Following some theories the Subjectivity in the Chinese culture is interpreted and lived as the feeling, the interior imagining and it does not need any visible empirical effects (Frijda, 1986; Lanternari, 2006).

Clearly the historical changes and the globalization created a discrepancy between the tradition and the new physical and cultural models; this discrepancy intervenes even on the psychological sphere.

ALEXITHYMIA AND EMOTIONS IN EATING DISORDERS IN CHINA AND ASIAN COUNTRIES

In the last two decades eating disorders transformed in a global phenomenon rapidly growing in Asian countries and above all in China (Chiu et al., 2006), where the body typology is rangy regarding the female people between 13 and 25 years old. The actual prevalence is about 3% with a peak between 14 and 18 years old, while the incidence of women is 5% above 25 years old.

The economical development, the urbanization, the modernization and the opening to the Western world increased the attention of teenagers and young Chinese adults about the body image and the ideal of thinness (Luo et al., 2005). The international recent literature identifies as risk factors for the development of an eating disorder: pressure coming from the family, from people of the same age and from mass media to be thin, being unsatisfied of their own body, the ideal perfection of thinness, the eating restrictions and/or irregular eating patterns, and negative emotions (Jackson and Chen, 2007; Luo et al., 2005; Lee and Lee, 2000). In this perspective being thin means improving the self-esteem, self-control, being winner and success-

ful. The control of food represents a way to deal the daily and familiar difficulties and to keep the subject's own feelings at bay (Chiu et al., 2006; Jackson and Chen, 2007).

In spite of these premises the role of emotions in individuals with eating disorders, which has been extensively studied in Western countries (Lawson et al., 2008; Speranza et al., 2007), has not yet been addressed in studies on Chinese samples (Jackson and Chen, 2007). Talking about this Jackson and Chen (2007) invite to study the psychological and/or sociocultural features of Chinese patients with eating disorders. They underline how food restriction or binging together with elimination behaviours represent a catalyst of the affective dysregulation in these patients, helping them to distract themselves from the adverse emotions, reducing the anxiety of gaining weight through the overfeeding and favouring the emotional relax (McCarthy, 1990). Dion (1996) states that, on the opposite compared to the Western cultures, Chinese people tend to be less oriented to identify and to express emotions with words, being encouraged by their culture to use a somatic language to interpret and express their emotional states. In the same way Marsella et al. (1985) noted that Asian people use mainly somatic metaphors to communicate stress compared to European and American people; Lin (1980) describes how Chinese people force themselves to escape from excesses of emotions and adapt their emotional states to their natural and social origins. The same traditional Chinese medicine refuses the difference between psychological and physiological functions. On the basis of these results Taylor et al. (2003) hypothesize that it is possible alexithymia has a different meaning between different cultures. The tendency to give, for example, socially desirable answers can reflect a particular culture as well as the meanings which can be given to any single item of different translations of the TAS-20 scale. Finally in Wierzbicka's (1997) opinion universal and cultural differences exist in the way individuals think and describe their feelings. The same feelings can be influenced by the culture and it should be said that some cultures encourage the communication of feelings while others advise against it.

ALEXITHYMIA IN EATING DISORDERS: A COMPARISON BETWEEN CHINESE AND ITALIAN INPATIENTS

A first transcultural preliminary study focused on the relation between alexithymia and eating disorders in Italian and Chinese patients has been recently presented (Roma and Alliani, 2009). The sample was composed of 24 female inpatients (17-30 years old), 12 Italians and 12 Chinese, admitted in two Hospitals in Rome (Italy) and Beijing (China) between January and July 2008. Comparing the results obtained from the administration of the TAS-20 in the two groups, it was shown that Italian patients were alexithymic and had more difficulties to identify and express with words their own feelings than the Chinese patients. Chinese subjects, on the contrary, were generally not alexithymic and tended to have a practical thought style addressed to the external world (operative thought). But at the same time Chinese patients answered to the TAS-20 questions with a defence behaviour and showed more difficulties to express their own opinion. These elements might be interpreted as strictly connected with the native culture, that is to be related to the predisposition of Chinese girls to give socially desirable answers. This results could give origin to the hypothesis that Chinese patients are in a latent way underthreshold alexithymic and that in their culture alexithymic traits might be expressed differently. If confirmed by further studies on larger samples, these findings could spread new light on the role of alexithymia in the origin of eating disorders, also suggesting a relevant pathoplastic role of the native culture not only on symptoms, but even on basic traits like alexithymia.

Corresponding Author:

Daniela Alliani
Dipartimento di Scienze Psichiatriche e Medicina Psicologica - Policlinico Umberto I
Università "La Sapienza"
viale dell'Università 30
00185 Roma (Italy)
email: daniela.alliani@uniroma1.it

Copyright © 2010 by Ass. Crossing Dialogues, Italy

REFERENCES

- Bruch H. Perceptual and conceptual disturbances in anorexia nervosa. *Psychosom Med* 1962;24:187-194.
- Bruch H. Death in anorexia nervosa. *Psychosom Med* 1971;33:135-144.
- Bruch H. Eating disorders: obesity, anorexia nervosa and the person within. Routledge & Kegan, London, 1973.
- Bruch H. Four decades of eating disorders. In: Garner DM, Garfinkel PE (Eds) *Handbook of psychotherapy for anorexia nervosa and bulimia*. Guilford Press, New York, 1985:7-18.
- Bucci W. *Psychoanalysis and cognitive science*. Guilford Press, New York, 1997a.
- Bucci W. Symptoms and symbols: A multiple code theory of somatization. *Psychoanal Inq* 1997b;17:151-172.
- Casper RC, Eckert ED, Halmi KL, Goldberg SC, Davis JM. Bulimia: its incidence and clinical importance in patients with anorexia nervosa. *Arch Gen Psychiatry* 1980;37:1030-1035.
- Casper RC. Some provisional ideas concerning the psychologic structure in anorexia nervosa and bulimia. In: Darby PL, Garner DM, Coscina DV. (Eds) *Anorexia nervosa: recent developments in research*. Alan R. Liss, New York, 1983:387-392.
- Casper RC. Personality features of women with good outcome from restricting anorexia nervosa. *Psychosom Med* 1990;52:156-170.
- Chiu E Y-K, Chiu H F-K, Kua EH, Yu X. *Textbook in Psychiatry for Asia*. Peking University Medical Press 2006.
- Dion KL. Ethnolinguistic correlates of alexithymia: toward a cultural perspective. *J Psychosom Res* 1996;41:531-539.
- Frijda NH. *The Emotions*. Cambridge University Press, Cambridge, 1986.
- Grotstein JS. The psychology of powerlessness: disorders of self-regulation and interactional regulation as a newer paradigm for psychopathology. *Psychoanal Inq* 1986;6:93-118.
- Gull WW. *Anorexia nervosa*. Transcripts of the Clinical Society, London, 1874;7:22-28.
- Jackson T, Chen H. Identifying the eating disorder symptomatic in China: The role of sociocultural factors and culturally defined appearance concerns. *J Psychosom Res* 2007;62:241-249.
- Lane RD, Schwartz GE. Levels of emotional awareness: a cognitive-developmental theory and its application to psychopathology. *Am J Psychiatry* 1987;144:133-143.
- Lanternari V. *Dai Primitivi al Postmoderno*. Liguori Editori, Napoli, 2006.
- Lawson R, Emanuelli F, Sines J, Waller G. Emotional awareness and core beliefs among women with eating disorders. *Eur Eat Disord Rev*. 2008;16:44-48.
- Lee S, Lee MA. Disordered Eating in Three Communities of China: A Comparative Study of Female High School Students in Hong Kong, Shenzhen, and Rural Hunan. *Int J Eat Disord* 2000;27 317-327.
- Lin K-M: Traditional Chinese medical beliefs and their relevance for mental illness and psychiatry. In: Kleinman A, Lin TY, Boston D. (Eds) *Normal and Abnormal Behavior in Chinese Culture*. Reidel Publishing Co., Dordrecht, 1980.
- Luo Y, Parish WL, Laumann EO. A population-based study of body image concerns among urban Chinese adults. *Body Image* 2005;2:333-345.
- Marsella AJ, De Vos G, Hsu FLK. *Culture and self: Asian and Western perspectives*. Tavistock, New York, 1985.
- Marty P, de M'Uzan M. La "pensée opératoire". *Rev Fr Psychanal* 1963;27 (suppl.):1345-1356.
- McCarthy M. The thin ideal, depression, and eating disorders in women. *Behav Res Ther* 1990;28:205-215.
- Moriguchi Y, Ohnishi T, Lane RD, Maeda M, Mori T, Nemoto K, Matsuda H, Komaki G. Impaired self-awareness and theory of mind: an fMRI study of mentalizing in alexithymia. *Neuroimage* 2006;32:1472-1482.
- Morton R. *Phthysiologica: or a treatise of consumptions*. Smith and Walford, London, 1694.
- Porcelli P. Updates sul costrutto di Alexithymia. Presented at the 1st International Conference "L'era dell'eccesso: clinica e psicodinamica dell'addiction", Palermo, October 28th-29th, 2004.
- Roma S. Alliani D. L'alexithymia nei disturbi del comportamento alimentare: una prospettiva transculturale. Presented at the Meeting "Affective Disorders", Sapienza University, Rome, April 3rd 2009.
- Santangelo P. Il "peccato" in Cina. Bene e male nel neoconfucianesimo dalla metà del XIV alla metà del XIX secolo. Laterza, Bari-Roma, 1991.
- Santangelo P. Emozioni e desideri in Cina. La riflessione neoconfuciana dalla metà del XIV alla metà del XIX secolo. Laterza, Roma-Bari, 1992.
- Santangelo P. Le passioni nella Cina imperiale. Marsilio, Venezia, 1997:88-317.
- Santangelo P. Emotions in history and literature. An interdisciplinary research of emotions and state of mind in Ming-Qing period. *Ming Qing Yanjiu* 2000;237-308.
- Schupak-Neuberg E., Nemeroff CJ. Disturbances in identity and self-regulation in bulimia nervosa: implications for a metaphorical perspective of "body as self". *Int J Eat Disord* 1993;13:335-347.
- Schwartz GE. Disregulation theory and disease: toward a general model for psychosomatic medicine. In: Cheren S. (Ed) *Psychosomatic medicine: theory, physiology and practice*. Vol.1 International University Press, Madison,

CT, 1989:91-117.

Selvini Palazzoli M. Anorexia nervosa. In: Arieti S. (Ed). *The world biennial of psychiatry and psychotherapy*. Vol.1 Basic Books, New York, 1971:197-218.

Selvini Palazzoli M. *Self-starvation*. Chaucer, London, 1974.

Sifneos PE. The prevalence of alexithymic characteristics in Psychosomatic patients. *Psychother Psychosom* 1973;22:255-262.

Speranza M, Loas G, Wallier J, Corcos M. Predictive value of alexithymia in patients with eating disorders: a 3-year prospective study. *J Psychosom Res*. 2007;63:365-371.

Taylor GJ. Psychotherapy with the boring patient. *Can J Psychiatry* 1984;29:217-222.

Taylor GJ, Ryan DP, Bagby RM. Toward the development of a new self-report alexithymia scale. *Psychother Psychosom* 1985; 44: 191-199.

Taylor GJ, Bagby RM, Parker JDA. *Disorders of affect regulation. Alexithymia in medical and psychiatric illness*. Cambridge University Press, Cambridge, 1997.

Taylor GJ, Bagby RM, Parker JDA. The 20-Item Toronto Alexithymia Scale: IV. Reliability and factorial validity in different languages and cultures. *J Psychosom Res* 2003; 55: 277-283.

Todarello O, Porcelli P. Il costrutto di alexithymia. In: Todarello O, Porcelli P. *Medicina Psicosomatica. Valutazione scientifica, integrazione organizzativa e costo sociale*. Milano, Franco Angeli 2002:97-149.

Wierzbicka A. *Emotions across languages and cultures*. Cambridge University Press, Cambridge, 1997.