ATTACHMENT RESEARCH AND EATING DISORDER: A MEASUREMENT PERSPECTIVE – LITERATURE REVIEW

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Summary. The main aim of the study is to describe the hitherto used measurement methods of attachment and evaluation of attachment, and the attachment style or pattern in ED patients. A critical discussion about different psychological measures used is presented. A critical review on the papers on the subject published in the years 2000-2015 in PubMed, ERIC, Psychology and Behavioral Science, PsycINFO, ScienceDirect, SCOPUS, SocINDEX, was performed focusing on self-reports vs. narrative methods to measure the attachment in ED, both in adult and adolescent samples. An increasing interest in recent years has been in matching the presence of ED with attachment issues, particularly using self-report, both in adults and adolescents groups, just some studies were conducted using Adult Attachment interview and very few were carried out using projective techniques, such as Adult Attachment Projective Picture System, which resulted to be very much informative. Our results suggest that insecure attachment in EDs might be studied more efficiently considering not just the macro category of attachment, but the microanalysis of attachment narratives (such as defense processes in interviews or projective methods), to add new and more consistent results in explaining the presence of a different kind of insecure attachment in ED patients and in promoting personalized therapeutic interventions.

Key words: attachment measures, eating disorder, literature review, adults, adolescents

Introduction

Recent reviews (Hoek, van Hoeken, 2003; Smink, van Hoeken, Hoek, 2012; Dakanalis et al., 2014) have documented a prevalence of Anorexia Nervosa (AN) particularly common among young women, and although the overall incidence rate

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remained stable over the past decades (about 0.3%), there has been an increase in the high risk-group of 15-19-year-old girls (0.7%). The occurrence of Bulimia Nervosa (BN) might have decreased since the last century, and now it counts respectively 1% and 0.1% in women and in men. Compared with the other EDs, estimated prevalence of Binge ED (BED) is equal to at least 1%, and it is more common among males and older individuals. BED differs from AN and BN in terms of age at onset, gender and racial distribution, psychiatric comorbidity and association with obesity. However, in either clinical and community samples, the most common ED diagnosis is ‘ED Not Otherwise Specified’ (ED-NOS). EDNOS is a heterogeneous, not well defined group of EDs and includes partial syndromes of AN and BN, purging disorder and binge ED (BED). In DSM-V a revised ED section was scheduled, with a main aim to reduce the size of the EDNOS-category; in this sense the decision to make BED a separate diagnosis is partly informed by epidemiological data supporting the construct validity of BED (Smink et al., 2012).

The eating disorder (ED) in Western industrialized countries represents real health emergency. ED are a culture-bound syndrome (Gordon, 1991), as evidenced by their absence in the poorest countries of Asia, Africa and Latin America, and the quick appearance of immigrants from poorer countries (e.g. Eastern European countries) in the richest nations, due to the quick process of Westernization (Nasser, 1997; Vandereycken, Noordenbos, 1998). The clinical reflection on ED has gone through different phases in which the focus was the emphasis on identification of a unique possible factor as a cause of the syndrome. Several clinicians and researchers believe that the etiology of these disorders is multifactorial and complex (Garfinkel, Garner, 1982; Garner, Bemis, 1982; Cuzzolaro, 2004; Weiss, Wertheim, 2005; Treasure, Corfield, Cardi, 2012), given the influence of several biological, psychological, family and socio-cultural variables (Garner, Garfinkel, Olmsted, 1983; Quiles Marcos et al., 2013; Dakanalis et al., 2014). With regard to the etiological factor, however, it is interesting to notice the increase in the scientific papers on attachment research and ED in the last 20 years (see for reviews: O’Kearney, 1996; Tasca, Balfour, 2014b; Gander, Sevecke, Buchheim, 2015; Ward, Ramsay, Treasure, 2000). In fact, several studies have shown that the attachment and parent-child bond can be considered as one of the most indicated factors in creating and maintaining ED symptoms. Disturbed early relationship bond played a role of absolute importance in predisposing, precipitating and maintaining ED pathogenic core, which is characterized by low self-esteem, depression, suffering caused in mismatching actual weight and ideal weight, and somatic-psychic disorders (Galeazzi, Meazzini, 2004). For this reason, attachment theory has more than ever received increasing attention from clinicians and researchers in the field of ED.

Within Bowlby’s attachment theory (1969), based on psychoanalysis ethology and evolutionary sciences, attachment means an affectional bond between the child and an attachment figure (usually a caregiver and particularly the biological mother); this bond is based on the child’s need for safety, security and protection,
paramount in infancy and childhood. The theory proposes that children attach to
caregivers instinctively, for physical survival and psychological sense of security.
Infants form attachments to any consistent caregiver who is qualitatively sensitive
and responsive in social interactions with them. A set-goal of the attachment be-
havioral system is to maintain a bond with an accessible and available attachment
figure, and the infant expresses instinctively a typical set of behaviors that involves
engaging in the lively social interaction with the mother able to respond readily to
signals and approaches. If the caregiver is unavailable or unresponsive, separation
distress, anxiety and fear occur (Prior, Glaser, 2006). In infants, physical separation
or threatening can cause anxiety and anger, followed by sadness and despair, and
many psychic deregulations in basic somatic functions such as sleeping, feeding,
crying/consoling regulation, etc. Threats to security in older children and adults arise
from a prolonged absence, breakdowns in communication, emotional unavailability,
or signs of rejection or abandonment (Kobak, Madsen, 2008).

Influenced by the former clinical literature on ED that suggested the presence of
attachment disorders in ED patients (Ainsworth, Bell, 1969; Bruch, 1973; 1974; 1978; 
Armstrong, Roth, 1989; Kent, Clopton, 1992; Mallinckrodt, McCreary, Robertson,
1995; Salzman, 1997) in the studies on ED, particular attention was given to the role
of insecure attachment, and strong association between the key aspects of ED and
these disorders have been thus underscored (O’Kearney, 1996; Tasca, Balfour, 2014a;
Ward et al., 2000).

Review of literature published until 2000 highlighted that the vast majority of
studies confirmed that attachment processes, by whatever method measured, were
abnormal in eating disordered populations; it concluded that insecure attachment
was common in these populations. Contrary to expectations, no significant asso-
ciation emerged between the kind of ED diagnosis (AN, BN, or BED) and specific
insecure attachment style or pattern (O’Kearney, 1996; Ward et al., 2000). As sug-
gested by Ward et al. (2000) the causes of these inconsistent findings could be
detached from many limitations in conceptualization and design in earlier studies.

The first limitation consists in differences in the age of populations studied:
several researchers investigated adolescent/early adult population suffering from
EDs (e.g. Armstrong, Roth, 1989; Cole-Detke, Kobak, 1996; Evans, Wertheim, 1998;
Gander, Sevecke, Buchheim, 2015) others considered middle age/chronic patients
(e.g. Chassler, 1997; Candelori, Ciocca, 1998; Tasca, Balfour, 2014b). Comparison of
these studies shows how attachment issues in adolescence are radically different.
Therefore, it is hard to compare the results obtained for the different age groups
because it is likely to obtain unreliable interpretation.

The second limitation regards the use of different ED diagnostic criteria and
labeling. Some authors refer to anorexia/bulimia category to describe an anorexia
patient with bulimic symptoms (e.g. Kenny, Hart, 1992), while other authors use the
same term talking about a bulimic patient with a history of anorexia (e.g. Calam
et al., 1990). The main problem seemed to be related to the fact that different studies
have taken into account different edition of DSM in evaluating diagnostic criteria of ED patients. Therefore, some results may have underestimated/overestimated some categories, yielding many difficulties in comparing various clinical groups included in the across studies on ED.

The third limitation regards the fact that no studies examined the association between specific personality pattern of ED and their descriptive symptoms: many studies (Westen, Harden-Fischer, 2001; Thompson-Brenner et al., 2008; Gazzillo et al., 2013) have shown how significant and consistent is this aspect in distinguishing and creating a prototypic profile.

The fourth limitation concerns the fact that authors underscored the differences present in literature related to the methods (self-report vs. interviews) used to diagnose ED. In this context, we can identify three major confounding aspects: 1) the use of different questionnaires in establishing the same diagnostic category, 2) the use of different versions of the same questionnaire, 3) the use of different sub scales within the same instrument. These issues have a dramatic impact on the results of the studies that are not only difficult to compare but also hardly useful to form a clinical point of view.

Differences in literature between self-report measures and interviews, or projective techniques, might be considered with respect to the measured construct: different authors (Bartholomew, Shaver, 1998; Meyer, 2007; Lis et al., 2011) claim that – in general – self-report measures require personal judgments about each item, and consequently, the task is highly dependent upon the quality of conscious schemata. Self-report measures are prone to response distortions (Lanyon, Goodstein, 1997), including those of acquiescence, social desirability, extreme response sets, and dissonance reduction. Taking into regard that the desire to please, together with the idealization of parents (Fonagy et al., 1996; Thompson-Brenner, 2014) are typical features of those patients, we may conclude that this contributed to creating a falsely positive picture of individuals and the measured construct, that could be ED symptom or attachment style. This bias is only partially mitigated by the presence in many self-reports of a “lie scale” or a “social desirability scale” to control voluntary or involuntary bias.

On the contrary, structured or semi-structured interviews and also projective techniques allow the assessment of patients’ implicit representations. In the attachment field, the same inference could be driven, distinguishing attachment style (behavioral description and subjective self-perception in an early or actual relationship) as measured by self-report tools, and attachment pattern (unconscious internal working model associated with the state of mind relative to attachment) as measured by interviews or projective techniques. Literature reported some significant correlations between attachment categories detached from self-report and from the interview, when they are applied together (a classical work within this field is by Bartholomew and Shaver, 1998), despite the great difference in the clinical quality and quantity of information driven by a self-report (generally description
or degree with described behaviors) vs. interview (autobiographical information) or a projective method (narrative quality and defense processes).

As suggested by O’Kearney (1996) and Ward et al. (2000) further work on the particular association between attachment style and ED subgroups are needed, taking into account the specific aspects of attachment, rather than global attachment category, in relation to ED behaviors.

Beginning from the attachment research in ED (Ward et al., 2000) and considering very recent suggestion about a psychodynamic approach to ED (Tasca, Balfour, 2014b; Thompson-Brenner, 2014; Gander, Sevecke, Buchheim, 2015), the main goals of the present paper were: a) to re-organize the vast scientific production in this research field in the last period, from 2000 to 2014, describing research trends during this period, focusing on used tools; b) to highlight the possible association that emerged in literature between ED category and attachment style or pattern, valuing differences in psychological measures and samples (adults vs. adolescents), and discussing advantages and disadvantages in different measure choice.

**Materials and methods**

A review of literature from the years 2000-2015 was carried out, using the computer search tools PubMed, ERIC (USDE), Psychology and Behavioral Science (PBSC), PsycINFO (Ovid), ScienceDirect (Elsevier), SCOPUS (Elsevier), SociINDEX (EBSCO). We considered just English language papers, edited in peer-reviewed journals, whose keywords included the terms Attachment measure, Internal Working Model (IWM), Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED); these terms were used as major descriptors and were considered if presented in the title, in the keywords or in the abstract of the papers. We took into account the studies on the samples of clinical adolescents or adults, in terms of ED.

Starting from a replication and meaningful expansion of Ward et al. paper (2000), in order to facilitate identifying themes, studies are grouped according to the attachment measure used (self-report questionnaires vs. interviews vs. projective methods), clinical ED diagnosis (AN vs. BN vs. BED), and divided by different age sample (adolescent vs. adult). We focused on validated and reliable assessment tools based immediately on Bowlbian psychological approach (e.g. self-reports as Attachment Style Questionnaire, Experience in Close Relationship Questionnaire, Relationship Questionnaire; narrative methods as Adult Attachment interview and Adult Attachment Projective Picture System). As the Parental Bonding Instrument (PBI; Parker, Tupling, Brown, 1979; Parker, 1983) does not measure attachment directly in Bowlbian terms, the studies using this instrument as the only one to detect attachment or as their main focus, were not included. Even if very relevant to eating disorder functioning, we excluded the studies that addressed the following domains, without considering a specific attachment measure: affect regulation, interpersonal
style, the coherence of mind, psychotherapy outcome, mindfulness and reflective functioning. Using these rigid criteria, 20 studies were classified as meeting criteria of the literature survey (table 1) and some review articles were included (e.g. Ward et al., 2000; Zachrisson, Skårderud, 2010; Kuipers, Bekker, 2012; Tasca, Balfour, 2014a; Gander, Sevecke, Buchheim, 2015).

Results

Studies using self-report measures on Adults

Ward et al. (2000) starting from the wide literature suggesting abnormal mother-daughter and familial attachment patterns in individuals with EDs (i.e., Fonagy et al., 1996; O’Kearney, 1996; Codispoti, Simonelli, 2006), surmised that this insecurity would extend to adult attachment relationships. Ward et al. (2000) chose the Reciprocal Attachment Questionnaire (RAQ; West, Sheldon-Keller, 1994) to operationalize the key components of mutual attachment, in a close theoretical agreement with the Adult Attachment Interview (AAI; George, Kaplan, Main, 1985). RAQ was applied to 127 in-patients with EDs (50 AN, 52 BN, 30 with anorexia binge/purging, 9 and 12 with obesity) and outpatients at a tertiary referral EDs unit, and to 80 controls. The patients scored significantly higher than controls on most scales of RAQ, such as “anger”, “perception of availability”, “use of the attachment figure”, and “fear of loss”; the most notable difference was found in Compulsive Care-Seeking and Compulsive Self-Reliance. No associations between ED diagnoses and particular attachment profiles were found. Similarly, Leiper and Casares (2000) have found no link between insecure attachment patterns and ED, in contrast with the results of most of the current literature. The cause of these results can be traced to the inadequacy of the questionnaire used by them (RAQ).

Much of the research to date on attachment and psychological interventions on eating disorders comes from the Team Research conducted by Tasca, on day treatment for BN, AN, and eating disorder not otherwise specified (EDNOS), and on group therapy for BED (for a recent review, see Tasca, Balfour, 2014a). These studies used self-reports of attachment styles. Tasca et al. (2004) examined how attachment theory can provide a framework for understanding treatment completion in an ED hospital program, among 74 anorectic women. Attachment was measured using the Attachment Styles Questionnaire (ASQ; Feeney, Noller, Hanrahan, 1994). As hypothesized, self-reports of high avoidant attachment predicted incompletion of treatment for those with AN binge-purge subtype (ANB). However, this relationship did not emerge for those with AN restricting subtype (ANR). Additionally, as hypothesized, self-reports of high anxious attachment predicted completing treatment for those with ANB but not for those with ANR. Attachment avoidance, characterized by devaluing one’s need for relationships, may be a contraindication for group-based partial hospital treatment of ANB; on the contrary,
attachment anxiety, characterized by high preoccupation with relationships, may facilitate remaining in treatment for those with ANB.

Troisi et al. (2006) suggested that an insecure style of attachment may be one of the factors implicated in the etiology of body dissatisfaction, which, in turn, is a risk factor for ED. They analyzed the association between early separation anxiety (SASI; Silove et al., 1993) insecure attachment with ASQ (Feeney, Noller, Hanrahan, 1994), and Body Shape Questionnaire (BSQ; Cooper et al., 1987) in a clinical sample of women with AN (n = 31) or bulimia BN (n = 65). No differences in insecure attachment category distribution were found comparing AN vs. BN woman. The authors’ conclusions suggested that insecure attachment appeared to be a consistent correlate of negative body image evaluations in women with either AN or BN. However, in both anorectic and bulimic women, the results obtained for the hierarchical regression model have shown the confounding effects of body mass index (BMI) and depressive symptoms, early separation anxiety – which is an attachment component-, and preoccupied attachment emerged as significant predictors of high levels of body dissatisfaction.

Eggert, Levendosky and Klump (2007) have carried out a study to explore mediating relationships between ED, attachment styles and personality traits. Participants completed the 30-item Minnesota Eating Behavior Survey (MEBS; Garner, Olmsted, Polivy, 1983) to assess eating attitudes and behaviors, the Adult Attachment Scale (AAS; Hazan, Shaver, 1987) to assess attachment style, the NEO Personality Inventory—Revised (NEO-PI-R; Costa, McCrae, 1985) to measure five dimensions of personality traits. Findings corroborated previous results and showed that the insecure-resistant attachment style was associated with ED. Results highlighted how personality traits (i.e., neuroticism and extraversion) mediate the relationship between resistant attachment and ED, suggesting that attachment influences indirectly ED through personality traits. Indeed, individuals with resistant attachment are likely to exhibit ED merely if they have more neurotic personality traits. The authors concluded it could be due to the function of ED; in resistant attached individuals, ED could reduce negative feelings associated with neurotic personality traits; by contrast, lower levels of extraversion may lead to behavior that attempts to increase positive feelings, such as engagement in enjoyable activities. Results indicate that resistant attachment influences the development of disordered eating by shaping neurotic personality traits that are associated with eating disorders.

Tasca et al. (2013) have used ASQ to qualify women with BED to group treatment based on attachment anxiety. They hypothesized that compared to therapy groups homogeneously composed of women with BED and low attachment anxiety, the groups with high attachment anxiety would have better outcomes and a greater alliance-outcome relationship. They assigned 102 women with BED to therapy groups homogeneously composed of low attachment anxiety (n = 52) or high attachment anxiety participants (n = 50) who received Group Psychodynamic Interpersonal Psychotherapy. Results showed how attachment anxiety condition did not moderate
outcomes but did moderate the alliance-outcome relationship, highlighting the presence of a group alliance growth, associated with improved binge eating only in the high attachment anxiety condition.

**Researches with Self-report measures on Adolescents**

Broberg, Hjalmers and Nevonen (2001) have used the Relationship Questionnaire (RQ; Bartholomew, Horowitz, 1991) together with EDI-2 (Eating Disorder Inventory-2; Garner, 1991) to study the link between ED symptoms, attachment and interpersonal difficulties. The sample consisted of 145 patients, aged between 18 and 24 years, 26 with a diagnosis of anorexia, 72 with bulimia, and 47 with ED not otherwise specified, compared with a group of 237 peers. Results confirmed the association between insecure attachment, interpersonal difficulties (social insecurity) and ED, but no differences in attachment style were found between women with AN and BN. According to the authors, this finding suggests that attachment experiences may influence the severity of symptoms, rather than the specific form which they assume in the diagnostic subtype.

Orzolek-Kronner (2002) have investigated the relationship between the attachment theory, proximity seeking behaviors and the development of ED, in three groups of adolescent females from various settings: 44 individuals with ED, 28 clinical controls, and 36 non-clinical controls. According to Bowlby’s attachment theory, the author assumes that closeness search behaviors are put in place in stressful and uncertain situations, in order to increase the physical and psychological proximity to the reference figure, to reduce the danger lived and to adjust the internal security. The authors investigated the hypothesis that some ED symptoms (restrictive behaviors, binge eating, forced elimination behaviors) represent the “actual behavior” of proximity and closeness search, in terms of attachment theory. The Inventory of Parent and Peer Attachment (IPPA; Armsden, Greenberg, 1987) and the Parental Attachment Questionnaire (PAQ; Kenny, 1987) were used. The results indicated that the clinical groups demonstrated a weaker sense of attachment quality, compared to their non-clinical peers. This study also expands upon John Bowlby’s concept of proximity seeking, to offer a possible explanation of the role of symptomatology in ED: such an abnormal eating conduct, usually produces or stimulates an increase in physical proximity between the teenagers and the mother.

An Italian study (Calvo, Battistella, 2003) has concerned the attachment styles of adolescents with AN, considering also their parents’ attachment styles. The aim was to test the hypothesis of an intergenerational transmission of insecure attachment from parents to children with ED, assuming a sort of continuity between attachment styles or relational modes characterized by greater insecurity from parents to children with ED (George, Kaplan, Main, 1985). The authors applied the AAQ questionnaire (Hazan, Shaver, 1987) to 30 patients with AN (16 restrictive and 14 binge/purging type) and to their parents, comparing them with an equivalent control group.
The results showed a higher incidence of insecure attachment in the patients compared to the peer control group, with a marked prevalence of avoidant style (equal to 56.7% in patients versus 3.3%). No differences in parents’ attachment styles belonging to the two groups considered were found, so the hypothesis of transmission of insecurity from the parent to ED children was not confirmed.

Delannes et al. (2006) have studied a population of young anorexic outpatient girls to examine links between attachment strategies, their mode of transmission and family functioning; authors hypothesized that attachment types in subjects with anorexia nervosa would be associated with the maternal type of attachment and specific family functioning. This paper describes a study conducted on a cohort of 10 female adolescents with a DSM-IV diagnosis of restrictive AN, and their 10 mothers and 9 fathers. Cartes pour les Modèles Individuels de Relation (Ca-MIR; Pierrehumbert et al., 1996) and Family Adaptability and Cohesion Evaluation Scale – III (FACES III; Olson, Portner, Lavee, 1985) were used. The results did not confirm a relationships between insecure attachment and AN, or attachment type and family functioning, in young subjects.

Boone’s (2013) has examined the association between attachment styles using Experiences in Close Relationships-Revised (ECR-R; Fraley, Waller, Brennan, 2000) towards father and mother, Perfectionistic Self-Promotion (PSP; Hewitt et al., 2003), Socially Prescribed Perfectionism (SPP; Hewitt, Flett, 1991) and binge eating symptoms in a sample of 328 late adolescents. The aim of the study was to examine if the adolescents showing anxiety-attachment and those showing avoidant-attachment would cope differently with their feelings of insecurity. Furthermore, the mediating role of perfectionism in the relation between attachment representations and binge eating symptoms was examined. The results showed that anxious attachment was significantly positively associated with PSP, SPP, and binge eating. Avoidant attachment towards mother was only positively associated with SPP, whereas PSP fully mediated the relation between avoidant attachment towards father and binge eating. Interestingly, the current findings showed the importance of examining attachment representations towards both parents.

Researches with Interviews on Adults

In assessing adults, attachment researchers decided to introduce structured interviews in order to bypass some of the limits of self-report measures. An Italian study (Ramacciotti et al., 2001) indicates that the insecure attachment styles can be considered as co-factor triggering ED. Using AAI on 7 females and 6 males with AN and EDNOS, the authors have shown that the level of anxiety and insecure attachment are both dismissing and entangled. Fear of abandonment and difficulties with autonomy differentiated young women with ED from their normal peers.

Ringer and Crittenden (2007) have studied the relationship between self-protective strategy and diagnosis of ED, examining the attachment patterns in
a sample of 62 young women (19 with anorexia nervosa, 26 with bulimia nervosa and 17 with bulimic anorexia). The attachment was assessed using the Adult Attachment Interview (AAI), classified using Crittenden’s Dynamic-Maturational Method. According to the results, all the participants were anxiously attached. The content of the AAIs suggested the lack of resolution of trauma or loss among the mothers, and also the presence of hidden family conflict between the parents.

Barone and Guiducci (2009) have assessed mental representations of attachment in a sample of adults with ED using the AAI. Sixty subjects participated in the study: 30 non-clinical and 30 clinical. The results showed a specific distribution of attachment patterns in the clinical sample: 10% Free/Autonomous (F), 47% Insecure-Dismissing (Ds), 17% Insecure-Entangled/Preoccupied (E) and about 26% disorganized (CC/U). Analyzing differences between the three ED subtypes considered (i.e., AN, BN and BED) the authors noticed the absence of Unresolved and Cannot Classify classifications in the AN group, while both BN and BED groups showed a marked presence of disorganized attachments and particular difficulties in resolving the mourning. The authors paid attention to the main classifications in AAI, but also found great benefit in analyzing AAI coding system scales in order to understand better the developmental issues involved in ED.

Another recent review by Zachrisson and Skårderud (2010) has been based on the peruse of major databases such as PsycInfo and Science Direct for empirical and hypothetical studies on attachment and ED, considering either retrospective, general risk or attachment theoretical statements. They found a greater prevalence of insecure attachment in the ED population than in non-clinical samples. However, the authors affirmed there was no sufficient evidence to conclude about specific mechanisms of this connection.

Kuipers and Bekker (2012) have carried out a review of literature in the Medline, PsychINFO, Embase and Cochrane databases on the role of attachment and mentalization in ED, using the AAI. Only ten empirical research articles were found, and their outcomes show a higher frequency of insecure attachment classifications in the patients compared to a non-clinical population. Mentalizing capacity, whose development looks highly correlated with secure attachment experiences, was found to be lower in ED patients than in controls. No correlations were found between a particular insecure attachment classifications and a specific ED diagnoses or symptoms. The authors concluded that the frequency of specific attachment classifications in different ED patient groups (AN, BN, BED) might be due to differences in sample size and in co-morbidity, highlighting a deep lack in the literature on ED on the thematic method of attachment investigation.

**Researches with Interviews on Adolescents**

Ward et al. (2001) have aimed to examine the attachment status of 20 patients with severe AN and their 12 mothers, using the ‘golden standard’ AAI. High level of
insecurity among the patients (women with AN, with or without bulimic behaviors), a higher rate of insecurity among the mothers compared with normative population, and some attachment style associations within mother-daughter pairs were investigated. Nineteen (95%) daughters and 10 (83%) mothers were rated insecure on the AAI. Of these, 15 (79%) daughters and seven (70%) mothers were dismissive in type. The incidence of unresolved loss was elevated among the mothers (67%). Idealization scores were high and reflective functioning scores low in both mother and daughter groups. The authors did not find any association between mothers’ and daughters’ specific attachment style. According to the attachment theory, the authors concluded that difficulties in maternal emotion regulation, linked to the failed elaboration of loss, can be a serious risk factor in the onset of daughters’ pathology.

**Projective techniques**

To the best of our knowledge, only two studies measured attachment in ED with a projective method: the first one is the pioneer job of Armstrong and Roth (1989) using the Separation Anxiety Test (SAT; Hansburg, 1980) on adults. This tool identifies the mode of attachment of the individual starting from plates depicting responses to situations of separation. The results have highlighted the high incidence of insecure attachment (96%) in women with ED, significantly higher than in the control group, but no details or differences between the BN vs. AN patients emerged.

One study was carried out by Lis et al. (2011). Unfortunately, this work did not include a sample of ED subjects but is a single case study, in which the authors evaluated attachment patterns and personality dimensions in an anorexic young woman, aged 17, to address some basic questions regarding the place of attachment in a multi-method assessment when compiling a complete picture of the patient’s personality functioning. The Attachment was evaluated with the Adult Attachment Projective Picture System (AAP; George, West, 2001). The article demonstrates how the AAP is integrated with the Rorschach Comprehensive System (Exner, 1991; 1993) and other assessment tools in both the assessment and in developing a treatment plan and how attachment defense processes become more relevant to highlight specific characteristics of this patient’s insecure attachment and planning treatment.

From this study it is impossible to generalize any kind of conclusion about ED category and attachment pattern category, even some suggestion on methodology issues (deep analysis of defense mechanisms) could be useful.

Recently, Delvecchio et al. (2014) have pointed out the role of defensive exclusion (Deactivation and Segregated Systems) in the development of early relationships and related to subsequent manifestations of symptoms in AN, using the AAP. Fifty-one anorexic patients were primarily classified as dismissing or unresolved. The results showed potential benefits of using the AAP defense exclusion coding system, in addition to the main attachment classifications, in order to understand
better the developmental issues involved in anorexia. The results suggested how an unresolved attachment pattern could develop through subtle and traumatic experiences of misattuned mothering, and not only via traumas – such as separation due to adoption, premature birth, or physical trauma. As a consequence of infants’ affective dysregulation experience, states of body-mind link disintegration develop. In such situations, the infant may attempt to find comfort by a permanent dissociation from intolerable levels of anxiety via self-regulating behaviors, such as thumb sucking or demands for food. The authors concluded that eating disorder symptoms could be seen as self-regulatory mechanisms, imprinted in early childhood as primary comfort and self-care systems, replacing unadjusted early attachment relationships and mutual caring.

**Conclusions**

Bowlby’s attachment theory emphasizes the importance of early child-environment interactions in order to develop “internal working models”, secure or insecure, which will influence future relationships with caregivers, peers and other members of the environment. The hitherto collected results indicated an increasing interest in the very last years in matching the presence of ED with attachment issues, particularly using self-report measures, both in adults and adolescents groups. Unfortunately, a wide choice of attachment tools (ASQ; AAQ; RAQ; RQ…) have emerged, as Ward et al. (2000) highlighted, making it seriously difficult to compare realistically different findings. In general, another limit consistent with Ward et al. (2000) review, was the problematic use of terminology about ED category definition: even if it seems easy to assume that anxious – ambivalent/preoccupied/hyperactivating represent broadly overlapping categories, as do avoidant/dismissing/deactivating, it is true that different instruments used the term in a slightly different sense. Some studies have been conducted using interviews on attachment, with a predominance of AAI. To the best of our knowledge, only two studies were carried out, since 2000, using a projective technique, such as Adult Attachment Projective Picture System (AAP; George, West, 2001).

The results from this set of clinical studies from 2000 to 2015 support the hypothesis that people affected by some ED also show attachment difficulties and insecurity.

The attachment in patients with ED would tend towards the typical forms of entangled attachment (Friedberg, Lyddon, 1996), or avoidant distancing (Ward et al., 2001), as well as the presence of mixed forms, with avoidant attachment to the current relationships and entangled bond to the old ones (Calvo, Battistella, 2003). Overall, therefore, the results reported throughout literature did not seem consistent and did not allow us to say that the different dimensions of attachment pattern clearly differentiate the various diagnostic subgroups of EDs, confirming the previous review devised by Ward et al. (2000).
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<td>Broberg, Hjalmer, Nevonen (2001)</td>
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<td>Orzolek-Kronner (2002)</td>
<td>IPPA PAQ</td>
<td>44 ED, 28 clinical controls, 36 non-clinical control: Clinical groups demonstrated a weaker sense of attachment quality compared to their non-clinical peers. The role of symptomatology in eating disorder may produce or stimulate an increase in physical proximity between the teenagers and the mother.</td>
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<tr>
<td>Study Authors</td>
<td>Measures Used</td>
<td>Findings</td>
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<tr>
<td>Tasca, Taylor, Ritchie, Bissada, Balfour (2004)</td>
<td>ASQ Anxiety subscale</td>
<td>30 AN restricting vs. 44 AN binge Self-reports of high anxious attachment predicted completing treatment only for ANB: attachment anxiety, characterized by high preoccupation with relationships, may facilitate remaining in treatment for those with ANB.</td>
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<tr>
<td>Battistella, Calvo (2003)</td>
<td>AAQ</td>
<td>30 AN, 60 Parents Higher incidence of insecure attachment in patients compared to the peer control group (avoidant style 56.7%). No transmission of insecurity from ED parent to ED children.</td>
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<td>Troisi, Di Lorenzo, Alcini, Croce Nanni, Di Pasquale, Siracusano (2006)</td>
<td>ASQ, SASI BSQ BDI</td>
<td>31 AN, 65 BN No differences in insecure attachment category distribution were found. In a hierarchical regression model, early separation anxiety and preoccupied attachment emerged as significant predictors of high levels of body dissatisfaction.</td>
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<td>Delannes, Doyen, Cook-Darzens, Mouren (2006)</td>
<td>Ca-mir FACES-III AAI</td>
<td>Not confirm the relationship between insecure attachment and AN, or attachment and family functioning.</td>
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<td>Eggert, Levendosky, Klump (2007)</td>
<td>MEBSa AAS NEO-PI-R</td>
<td>85 female twins and triplets; attachment influences indirectly ED through personality characteristics.</td>
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<td>Boone (2013)</td>
<td>ECR-R PSP SSP</td>
<td>328 BED adolescents; their parents Anxious attachment was associated with PSP, SPP, and BED. Avoidant attachment towards mother was only associated with SPP, whereas PSP fully mediated the relation between avoidant attachment towards father and binge eating.</td>
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<tr>
<td>Interviews</td>
<td>ASQ – anxiety scale</td>
<td>102 BED</td>
<td>Attachment anxiety condition moderate the alliance relationship and the psychotherapy outcome.</td>
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<tr>
<td>Tasca, Ritchie, Demidenko, Balfour, Krysanski, Weekes, Barber, Keating, Bissada (2013)</td>
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<tr>
<td>Interviews</td>
<td>AAI</td>
<td>13 AN or EDnos</td>
<td>High frequency of dismissing or entangled states of mind was found.</td>
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<td>Ramaciotti, Sorbello, Pazzagli, Vismara, Mancone, Pallanti (2001)</td>
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<tr>
<td>Interviews</td>
<td>AAI</td>
<td>26 BN, 17 BED</td>
<td>All women with an ED were anxiously attached. Lack of resolution of trauma or loss among the mothers was found, and it elicited extreme strategies for generating parent-child contingency from the daughters.</td>
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<td>Ringer, Crittenden (2007)</td>
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<tr>
<td>Interviews</td>
<td>AAI</td>
<td>20 AN, 12 mothers</td>
<td>No association between mothers and daughter attachment styles.</td>
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<td>Ward, Ramsay, Turnbull, Steele, Steele, Treasure (2001)</td>
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<td>Study</td>
<td>Methodology</td>
<td>Findings</td>
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<td>Barone, Guiducci (2009)</td>
<td>AAI</td>
<td>30 ED, 30 control ED presented higher insecure attachment pattern, and suggesting to analyze AAI coding system scales in order to understand better the developmental issues involved in ED.</td>
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<td>Kuipers, Bekker (2012)</td>
<td>AAI review</td>
<td>High frequency of insecure attachment classifications in ED. No correlations between specific insecure attachment classifications and specific ED diagnoses or symptoms.</td>
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<tr>
<td>Zachrisson, Karderud (2013)</td>
<td>AAI Review on 10 studied</td>
<td>Prevalence of insecure attachment in the ED population but no evidence about specific mechanisms for this connection.</td>
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<td>Delvecchio, Di Riso, Salcuni, Lis, George (2014)</td>
<td>AAP</td>
<td>Analysis of AAP defenses mechanism in 51 Anorectic patients: evidence of dysregulated defense and pathological mourning.</td>
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<tr>
<td>Lis, Mazzeschi, Di Riso, Salcuni (2011)</td>
<td>AAP</td>
<td>Single case: 17 years old woman with AN. Analysis of AAP defenses mechanism in a Dismissing patient.</td>
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Source: own work.
Results of our research review support the evidence that the EDs are statistically related to types of insecure attachment, but literature does not provide unambiguous definitions specifying distinct types of insecure attachment (Dismissing, Entangled or Unresolved) and the different EDs (AN, BN or BED). According to Ward et al. (2000), it is possible to conclude that AN, BN and BED seem united by similar difficulties in attachment. Discordant results shown by data may be due to the several systems of measurement and classification of attachment styles and different selection criteria of the ED samples.

The general assumption that there is a relationship between the presence of ED and insecure attachment, seems to be widely acknowledged. It seems in fact that insecurity, fear of abandonment and lack of autonomy differentiate people with AN or BN from peers without any ED.

The basic assumption in attachment research and ED was that the quality of early relationships is an important factor in the development of ED, as risk vs. protective factor. At the moment, Recent literature confirmed the attachment (particularly, insecure one) to be a “mediator” construct (Milan, Acker, 2014; Keating, Tasca, Bissada, 2015) between ED and personality structure, or ED and symptom severity, or ED and level of compliance to the psychotherapy too. In other words, it seems possible to assume that the insecure attachment experiences may influence the severity of ED symptoms, rather than the specific form which they assume. In this perspective, e many factors are involved in the development of ED. Some authors considered ED behaviors as the actual-form of an old psychological regulation devised (or learned) by an early mother-infant relationship regulation (e.g. Ward et al., 2000; Brown, Wright, 2001).

As in the genesis of each kind of psychopathology, early relationships characterized by a marked dysfunctional mother-child bond, leading to the development of insecure attachment type, may increase the risk of onset of EDs (Brown, Wright, 2001; Milan, Acker, 2014; Keating, Tasca, Bissada, 2015). The insecurity of early relationships would increase the developmental difficulties in construction of self and body image, self-esteem development and in the regulation of internal states, leading to feelings of inadequacy in interpersonal relationships. In this perspective, childhood attachment insecurity provides a vulnerability (Ward et al., 2000; Brown, Wright, 2001), and ED psychopathology would be a sort of psychological or behavioral nonspecific response, whose symptomatic manifestation results from the increased individual vulnerability due to shortcomings in early relational dysfunctions and determined by later life events (Simonelli, Calvo, 2002). Conversely, secure attachment relationships, resulting from the sensitive and appropriate mother-child bond, may protect against such eventualities. The presence of adequate adult reference figures permits a solid sense of security, trust in ourselves and in relationships with others, promoting the development of communication skills, interpersonal and affective-emotional skills (Simonelli, Calvo, 2002).

These findings suggest that attachment states of mind as assessed by AAI may have an impact upon the way patients with ED make use of psychotherapy. Evid-
ence from research on non-eating disorder patient groups suggested that psychological treatments can change attachment states of mind from insecure to secure (Wallin, 2007; Tasca, Ritchie, Balfour, 2011; Tasca et al., 2013; De Palo et al., 2014; Salcuni, Di Riso, Lis, 2014). Such research using the AAI and the AAP in a sample of those with eating disorders had not yet been fully analyzed (Delvecchio et al., 2014). The effect of attachment states of mind as assessed by the AAI on treatment processes and outcomes in eating disorders remains an important and largely untapped area of research. From the qualitative point of view, self-report studies have been the most widely used, but their contribution to understanding specific differences between different kinds of ED is not so relevant. Moreover, attachment style, as emerged from self-report measures, is a subjective personal description about patient own prevalent attachment behavioral approach to Other. Literature has revealed quite a significant correlation between self-report categories and attachment pattern emerged (Bartholomew, Shaver, 1998) and some research has provided significant evidence for changes in psychotherapy using self-report measures (Keating et al., 2014; Maxwell et al., 2014); however, it is important to highlight the effects of social desirability or malingering intentions so often present using self-report measures. Unfortunately, none of the attachment questionnaires prevent social desirability or lie scale. On the contrary, studies focalized on attachment inferred by clinicians using interviews or projective methods seemed to bring a higher discriminant power (even on limited samples) in understanding specific hidden psychological representations or adjustment aspects for the development of different kinds of ED. Tools capable to “discover the unconscious” could better discover the meaningful representation of the behavioral approach, highlight defenses’ processes, skipping social desirability, quality of traumas or inner self and other representation – generally, we need the tools capable of distinguishing not only general attachment insecurity but also specific differences in different ED diagnosis. Studies with an interview or projective techniques investigating attachment might be improved to fill the gap between the attachment style reported (typically describing behaviors or attitude) and the attachment Internal Working Model (linked to self and other representations and emotional activation). The lack in literature and the ambiguous results highlight the necessity to change the point of view on attachment, from the attachment style to the attachment pattern analysis. Research based on attachment patterns, using tools able to detach Internal Working Model (such as AAI or AAP) on ED is still at an early stage (Gander, Sevecke, Buchheim, 2015). More advanced studies are required in this field to move forward: insecure attachment in ED might be studied from a distinct point of view, more exhaustive than a simple “final attachment category” classification, and probably the microanalysis of attachment narratives (such as catching defense processes in interviews or projective methods, as suggested by Waller et al., 2007) may add new and more consistent results on discrimination between different EDs.

One optimum hypothesis would be to administer both self-report and interview or projective techniques on attachment to the ED patient, increasing the incremental
validity of data and powerful communication with patients (Finn, Tonsager, 1992; Meyer, Hunsley, 2003; Finn, 2007). Another very important approach could be increasing longitudinal studies, such as Milan and Acker’s (2014) one. The authors tested data from 447 girls over a 12-year period, showing that early attachment quality (measured in the first year of life with a modified Strange Situation Procedure) was not directly associated with disordered eating attitudes and behaviors (DEABs), but moderated relations between teenage ED risk factors and DEABs. Specifically, among girls with an insecure attachment history, higher BMI at age 15 directly predicted more DEABs, while maternal negative affect and pubertal weight gain indirectly predicted DEABs via greater preoccupation with parental relationships. The same direct and indirect paths did not emerge among adolescent girls with a secure attachment history. Moreover, the authors concluded that delineate early attachment quality may contribute to EDs among adolescent girls, and support efforts to incorporate relational components into obesity and ED prevention programs.

Assessing and understanding an ED patient’s quality of attachment insecurity, analyzing prevalent defense mechanisms and relational schemas, could provide a deeper guide for psychotherapists helping to personalize therapeutic stances and aims, to optimize patient outcomes and giving a second chance to experience a reliable and caring relationship, an extra possibility to have a heaven of safety (Bowlby, 1969; Wallin, 2007; Salcuni, Di Riso, Lis, 2014; Tasca, Balfour, 2014), particularly inside a psychodynamic psychotherapy framework (Tasca, Balfour, 2014a; Thompson-Brenner, 2014).

References


to Early Separation Anxiety and Insecure Attachment. *Psychosomatic Medicine*, 68 (3), 449-453, doi: 10.1097/01.psy.0000204923.09390.5b


BADANIA NAD PRZYWIĄZANIEM I ZABURZENIA MI ODŻYVIANIA: MOŻLIWOŚĆ POMIARU – PRZEGŁĄD LITERATURY PRZEDMIOTU

**Streszczenie.** Głównym celem przedstawionych badań było opisanie dotychczas stosowanych metod pomiaru przywiązania oraz oceny stylu przywiązania lub wzorca przywiązania u pacjentów z zaburzeniami odżywiania. Zaprezentowano krytyczną dyskusję na temat różnych metod pomiaru stosowanych dotychczas w tym obszarze. Przeprowadzono krytyczny przegląd prac na powyższy temat z lat 2000-2015 opublikowanych w PubMed, ERIC, Psychology and Behavioral Science, PsycINFO, ScienceDirect, SCOPUS, SocINDEX.

Główny nacisk był położony na porównanie metod opartych na *self-report* i metod narracyjnych stosowanych do pomiaru przywiązania u osób z zaburzeniami odżywiania, zarówno wśród dorosłych, jak i dorastających. W ostatnim czasie odnotowano wzrost zainteresowania związkami pomiędzy występowaniem zaburzeń
odżywiania a problemami dotyczącymi przywiązania. Dane na ten temat zbierano najczęściej za pomocą self-report, zarówno w grupie dorosłych, jak i dorastających, niewiele badań przeprowadzono za pomocą Adult Attachment Interview, a zaledwie kilka – za pomocą technik projekcyjnych, takich jak Adult Attachment Projective Picture System, które okazały się wnosić dużo informacji. Nasze wyniki sugerują, że pozabezpieczne przywiązanie u osób wykazujących zaburzenia odżywiania powinno być badane bardziej szczegółowo, z uwzględnieniem nie tylko kategorii przywiązania (mikroanaliza), ale również na podstawie mikroanalizy danych z badań narracyjnych (dotyczących np. procesów obronnych ujawnionych w wywiadach lub za pomocą metod projekcyjnych), aby uzyskać nowe i bardziej spójne wyniki umożliwiające wyjaśnienie występowania różnego rodzaju pozabezpiecznego przywiązania u pacjentów z zaburzeniami odżywiania oraz aby promować bardziej zindywidualizowane interwencje terapeutyczne.

Słowa kluczowe: pomiar przywiązania, zaburzenia jedzenia, przegląd literatury, dorosłi, adolescenci

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