Self-Other Positioning in Obesity: A Pilot Study Using Repertory Grid **Technique**

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Abstract: Self-other positioning was investigated in a group of obese youths in order to empirically test the clinical hypothesis - based on the constructionist theory of Family Semantic Polarities - that obese people are affected by a negative self-perception and low self-esteem. Repertory grid technique was used with 30 participants (15 obese-overweight and 15 control) to elicit and compare their personal constructs and assess, via ad hoc measurement indices, the positions they assigned to the self and significant others in relation to these constructs. The results confirmed the research hypotheses, with obese subjects displaying a tendency to position both self and others at the negative pole of bipolar constructs and reporting greater self-ideal discrepancy. These findings and their limitations are discussed in relation to their clinical applications and in light of the methodological issues arising from the study.

Keywords: Eating disorders, family semantic polarities, obesity, personal constructs, positioning, repertory grid technique.

In Western countries, obesity has increasingly gained the status of a social epidemic and is constantly flagged by the media as one of the most alarming health issues of our time: the complications associated with this condition may lead to serious illness, such as chronic diseases including diabetes mellitus, cardiovascular disease, hypertension, kidney failure, osteoarthritis [1], and even death [2]. The World Health Organization [3] introduced the term "globesity" to describe the rapid spread of obesity in many world regions. A recent study by the International Obesity Task Force [4] estimated that worldwide approximately 1 billion adults are currently overweight and up to 200 million school-aged children are either overweight or obese. The United States currently has the highest incidence of obesity, but the phenomenon is also dramatically on the increase in the European Union: Approximately 60% of adults (around 260 million) and over 20% of school-aged children (over 12 million) are overweight or obese. This worrying trend appears to be correlated with factors such as an over-abundance of food, diets rich in fats and sugars and sedentary lifestyles [5].

The dangers for physical health are accompanied by risk factors for psychosocial wellbeing, such as depression, the perception of losing control, feelings of shame, low selfesteem and social stigma [6-11]. Obesity is perceived as an

abnormal condition, in some sense "voluntary" and therefore to be stigmatized [12, 13]. This is reflected in the fact that obese people, especially females, are increasingly victim to marginalization [14, 15]. Gordon [5] claims that the obese are a despised category that is subjected to discrimination in the workplace and in social life: Many people are unemployed as a direct result of over weightness, leading to discrimination, stigma, and social exclusion [16]. The stereotypical view of obesity includes psychological attributes such as laziness, self-indulgence and greed. This bears similarity with forms of racism insofar as negative perceptions of a person's character are based solely on a physical attribute: obesity is believed to be caused by a "moral vice" for which the subject is held to be responsible.

Numerous scholars of obesity [17-19] argue that the phenomenon should be studied using an interdisciplinary approach that recognizes the multifactorial nature of the problem: alongside a biological predisposition, psychological, environmental-sociocultural and familial factors may all significantly contribute to explaining the onset and maintenance of the disorder [20, 21]. Obesity and being overweight are also frequently connected with Binge Eating Disorder (BED), that is to say, recurrent episodes of overeating characterized by loss of control and significant distress, that are not followed by self-induced vomiting or the inappropriate use of laxatives (as in bulimia) but leads to the person becoming obese. The inclusion in the DSM-V [22] of "BED" seems to confirm the view of many clinical approaches that

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psychogenic obesity should be classified as an Eating Disorder (ED) alongside anorexia and bulimia [23-26].

The current study examined psychological and relational aspects of the position adopted by obese subjects within their relational system. Its theoretical basis is the "Family Semantic Polarities" (FSP) theory developed by Valeria Ugazio [25-27]. This theory suggests that the origin of some of the most common psychopathological disorders may be explained by the organization of family conversation within a shared plot of antagonistic meanings (e.g. fair/unfair, closed/open, attractive/disgusting). In an original development of the ideas of Guidano [24], Ugazio assumes a connection between the onset of psychopathologies and specific ways of organizing meaning. Her theory falls within the family therapy tradition, but - unlike the approach of family therapy pioneers [28, 29]-focuses on semantics rather than on pragmatics. In this regard, Ugazio's thinking resembles that of other constructivist authors such as Kelly [30], Neimever [31], Neimever and Mahoney [32] and Procter [33-35] as well that of Guidano. However, in line with her constructionist approach, FSP theory does not concern individual processes, but the joint construction of meaning within the family.

The prevalence of specific semantics in family conversation is a necessary but not sufficient condition for a member to develop a psychological disorder, given that the outcome also depends on family members' reciprocal *positioning* in relation to the critical semantics. In social constructionism, the concept of *positioning* is key to explaining the development of identity – whether "typical" or "atypical" [35-37]. Taking up a certain position within the relational and semantic context of the family may lead an individual member to experience a paradoxical dilemma or "strange loop" [38] – similar to a double bind [39]– assumed to be among the risk factors implicated in the psychological disorder.

According to Ugazio, the prevailing family semantics in eating disorders (obesity included) is that of *power*. The distinctive polarity, or dimension of meaning, in the semantics of power is "winner/loser", which is connected – via a means-end relationship – with the polarity "strong willed/yielding", represented by constructs such as "will, control, take the initiative, force/passivity, softness, weakness". This semantics is associated with strong sensitivity to the judgment of others and to parameters of social success.

In relation to the semantics of power, obese people tend to position themselves among the "losers": "Obesity is a surrender to the winners. With their fatness, they recognize they are on the wrong side: Passivity, giving in to impulse and lack of self-control are destructive. Their obesity is the tangible confirmation of the failure, which leads to pliancy, affability and indulgence in relation to their own impulses as well as to other people" [25; p. 201].

AIMS AND HYPOTHESES

The present study is part of a broader research program on the link between psychopathology and meaning construction, initiated by Ugazio [25-27, 40, 41]. Specifically, this study represents the continuation of two earlier works on eating disorders [42-44] conducted using Repertory Grid Technique (RET) [30, 45-48]. The results of the latter-mentioned studies suggested that power semantics were prevalent in obesity both in terms of frequency of use and in terms of importance to subjects.

We therefore set out to explore the positioning of a group of obese subjects with respect to their semantic universes, focusing in particular on selected characteristics of their definitions of self and significant others as identified via the repertory grid.

Definition of Self

Obese people tend to have a generally negative selfperception, displaying low self-esteem [7, 8, 9, 10, 25, 49]. They frequently perceive themselves as "losers", lacking in initiative, submissive, incapable of controlling their impulses (especially their voracious appetite) in a society that values control, thinness and physical fitness. Their low level of selfesteem may certainly be caused by the social stigma affecting obese individuals, but also by the particular position that they occupy in their families: obese people see themselves as contrasting with the successful figures in their context, and in defining themselves as losers, implicitly criticize the "winners" whose "supremacy" they wish to make little of.

Definition of Significant Others

For the reasons just described, the obese more or less explicitly challenge socially shared cultural models, especially those regarding thinness and the importance of physical appearance. They therefore tend to belittle others by issuing hypercritical and typically negative judgments: "These individuals are unconventional, generally friendly, but hypercritical of anyone who is socially committed and they tend to unmask those in a higher position. They tend to be antagonistic towards people of higher status and to develop that kind of equality enjoyed by the 'opponent' [...] With generally low self-esteem, they tend to maintain what remains of their positive identity by bringing down other people and exposing their supposed positive and superior attitude " [25; pp. 194-5].

In order to empirically test for some of the characteristics just outlined, the personal constructs [30] elicited from a group of obese youths were analyzed by comparing them with the personal constructs of a control group, in relation to the following *hypotheses*:

- 1. That the obese group would assign the self to the negative pole of *all constructs* significantly more frequently than the control group.
- 2. That the obese group would assign the self to the negative pole of *constructs related to the semantics of power* significantly more frequently than the control group.
- 3. That the obese group would display a significantly greater *discrepancy between actual self and ideal self* than the control group. In the literature such a discrepancy is considered an indicator of low self-esteem and to be correlated with negative emotions such as insatisfaction, shame and sadness [7, 50, 51].
- 4. That the *evaluations of significant others* expressed by the obese group in relation to the elicited constructs,

would be significantly closer to the negative poles of constructs than those expressed by the control group. It was hypothesized in other words that obese subjects would display a tendency to make systematically negative judgements, in contrast with the "natural" tendency, reported in the literature on the repertory grid, to positively value others as well as the self [45, 48, 52, 53].

METHOD

In order to empirically evaluate the presence of FSP in transcripts of therapeutic conversations, Ugazio et al. [40] devised a sophisticated method of textual analysis, known as the "Family Semantic Grid" (FSG). Using this method they found that the semantics of power were significantly more prevalent in the conversation of clients suffering from eating disorders. In contrast with this approach, the methodology adopted in the present study is based on RET, similarly to two earlier-reported studies on the semantics of eating disorders [43, 44], to which we refer readers for detail beyond the outline provided in the following paragraphs. The main rationale for our choice of a different methodology to FSG was that if a theoretical hypothesis is independently confirmed using two different methodologies, it may be said to display greater empirical robustness, especially if one of the two methods (such as the RET) has a long and well-documented tradition in a broad field of research [45-48]. But is the use of a typically constructivist method consistent with a socialconstructionist theoretical framework? Our choice was underpinned by the following considerations: a) the object of the current research is *not* the meaning construction process (which may be mainly individual as theorized by constructivists or familial-social as claimed by constructionists), but on the outcome of this process; b) the semantic dimensions identified using RET correspond to the so-called "narrated semantic polarities" (i.e. to explicit opposites expressing a relatively stable "self-narrative"), considered by Ugazio herself to be equivalent to Kelly's personal constructs [40]; c) RET has been shown to provide a precise mapping of the different positions characterizing the relational and semantic universe of a subject and is also used in constructivist family therapy: Within Personal Construct Psychology many authors [33, 34, 35, 54-56] have developed concepts that take into account the family context in which personal constructs originate and evolve and use RET to study family construct systems and the positions adopted by individual members within them. In this regard, Procter [35; p. 32], in reference to his Family Construct System theory, introduces the notion of the "construct as positional".

PARTICIPANTS

Participants in the study were 30 young people (10 men and 20 women), aged between 14 and 20 years (mean age 16 years), from a middle-class socioeconomic background and living in the Turin area (Italy)¹. The participants were evenly

divided into two groups according to their Body Mass Index (BMI²): Group 1 composed of overweight and moderately obese subjects (5 men and 10 women) with BMIs ranging from 26 to 36 (mean BMI =32), and Group 2 (control) composed of normal weight subjects with BMIs ranging from 19 to 22 (mean BMI =20). The control group was identical in number and as similar as possible in terms of sociodemographic composition to Group 1 (the "obese" group), in order to isolate the BMI variable and to minimize the effect of possible confounding variables (such as diverse cultural backgrounds, major differences in economic status etc.). Subjects' demographic and socio-cultural characteristics were evaluated on the basis of indicators such as age, geographical origin, area of residence, educational background and occupation. Given that it was not possible to control for all the potentially influencing variables (in particular family composition), statistically speaking subjects may not be said to be "paired" [58].

The 15 subjects in Group 1 ("subjects with obesity") were selected from amongst the patients at the dietetics outpatient clinic of a Turin hospital. Care was taken to exclude those whose excess weight was clearly associated with nonpsychological factors, such as metabolic disorders (diabetes, hypothyroidism, etc.) or pharmacological treatment; subjects with comorbid symptoms (major depression, borderline syndromes, cognitive delays or other diagnosed psychopathic disorders). Given that at the time of research no universally recognized criteria had been established for the definition of psychogenic obesity, Group 1 subjects were recruited from amongst those who, in the view of the therapeutic team, displayed a certain degree of egodystonia with respect to their body weight and awareness of making inappropriate use of food to compensate for psychological problems. Individuals who had already experienced the repeated failure of therapies and dietary regimes were also excluded from the study, given that this factor would have further complicated their clinical and metabolic profiles [59]. The sample does not include individuals affected by BED, given that the similarities and differences between binge eating and obesity in terms of psychological dynamics have not yet been fully established, although the two disorders appear to be closely related: Zeeck and colleagues [60] found statistically significant differences between binge eaters on the one hand and obese patients and normal weight controls on the other, with regard to negative patterns of emotions. All the subjects contacted had at least one other family member who was overweight. The application of these selection criteria led to the exclusion of over 50% of the clinic's patients. Fifteen subjects who were willing to take part in the research were identified from amongst the remaining patients. The breakdown between males and females in Group 1 was reasonably representative of the clinic's obese-overweight patient population.

¹ This study was carried out in keeping with Ethics Committee Guidelines of the University of Turin and approved by the the Ethics Committee Guidelines of MIUR (Italian Ministry of Education, University and Research). All participants signed an informed consent form. Written parental informed consent was sought for minors. The subjects themselves were also free to

take part in the research or to withdraw from it at any time; similarly they could decline to answer any of the questions they were asked.

 $^{^2}$ BMI, a widely used indicator in the literature on ED [57], is calculated using the formula: W/H², where W represents body weight in kilograms, and H² height in metres squared . BMI values between 25.0 and 29.9 indicate that the subject is overweight; values between 30.0 and 39.9 denote obesity and values of 40.0 or over severe obesity. BMI values of under 18.5 mean that the subject is underweight, while values between 18.5 and 24.9 indicate a normal weight.

The subjects in Group 2 ("control") were recruited at a secondary school in Turin and at Turin University. Every effort was made to chose individuals with similar sociodemographic characteristics to the Group 1 subjects, so that the two groups would be differentiated by the study variable only [61]. As well as having normal BMI values, the Group 2 subjects had never been affected by ED or other identified psychopathological problems, and had never undertaken diets or physical exercise regimes in order to lose weight. These inclusion criteria - in particular the latter two - were applied in order to minimize the risk of including individuals with potential ED in the control group, given that it is widely recognized in the literature that the various types of ED begin with the tendency to restrict one's diet [23, 62]. This made the selection of the "normal" subjects quite demanding. The current emphasis on physical appearance is so allpervasive that it is difficult to find people who have not gone on diets or done sport for weight control purposes. In this sense, we cannot take for granted that our control group is representative of the "normal" population, because we may have chosen individuals who by Western cultural standards could be seen as unusually disinterested in the issues of image, weight and dieting: It would therefore be more accurate to describe this group as "non-pathological". We selected these subjects as our control mainly on account of the methodological requirement to isolate the "weight" variable.

INSTRUMENTS AND PROCEDURE

Participant Selection

The personal data charts of the obese patients were compiled based on medical records and supplemented where required by a brief interview with their healthcare practitioner. For the selection of the control group, a self-report questionnaire already used in previous research [43] was administered (to a greater number of people than those ultimately recruited to participate in the study). The questionnaire was constructed ad hoc and was ostensibly on the topic "young people and sport" so as not to make its purpose obvious: The questions regarding weight, diet, etc. were presented within the overall context of the practice of sport and the related issue of physical form.

Repertory Grid Technique [30, 45-48] was applied to each subject individually via a four-stage procedure.

- Identification of significant others from the relational context of each subject ("elements"), following the elicitation through discussion method [63]. The roles used to identify the elements were: Actual Self ("Myself as I am now"); Ideal Self ("Myself as I would like to be"); mother, father, brothers/sisters; romantic partner; male/female friends; other significant adults; a person admired and a person detested (if not coinciding with the roles already cited).
- Elicitation of bipolar constructs using the dyadic method [64, 65]. The elements identified in the previous phase were compared two by two, in terms of similarities and differences, so as to obtain pairs of semantic opposites (the "constructs") such as "good-bad", "intelligent-stupid", etc.

- Application of the laddering technique [45, 66] to each construct, in order to produce further constructs: both more general in nature (e.g. what kind of personality does a person who behaves in a certain way have) and more specific (e.g. what sort of things does a person with these personality traits do).
- Rating of all elements with respect to constructs on a 7– point bipolar scale (ranging from -3 a +3 where 0 is the neutral point between the poles of the construct), in order to obtain quantitative data from the repertory grids that could be used to investigate self-other positioning. This data formed the basis for calculating the measurement indices described in one of the following paragraphs [67].

SEMANTIC CODING

Content analysis was used to provide a qualitative assessment of the constructs elicited from the subjects; we viewed each bipolar construct as a single entity, considering the two opposite poles together to express one construct [68]. All constructs were classified into mutually exclusive categories based on semantic content by two independent judges, who had not been previously informed of the aims of the study. Assignment of constructs to categories was always carried out with reference to the elicitation context, using a clinical-hermeneutic approach inspired by the FSG proposed by Ugazio et al. [40], with a number of additions informed by other constructivist methodological frameworks [69-71]. The level of inter-rater agreement, measured by Cohen's kappa coefficient (calculated for the classification of all constructs), was 0.81. In doubtful cases, the two raters were required to mutually agree the final classification. At the end of this process, 35.2% of the constructs elicited from the Group 1 subjects were found to be ascribable to the semantics of power, compared to 7.8% of those elicited from Group 2. This result is in line with the findings of earlier research [40, 42, 43, 44].

GRID ANALYSIS INDICES

The following measurement indices were used to evaluate the four research hypotheses.

To test Hypothesis 1, the proportion of constructs for which Actual Self was positioned on the negative pole was calculated for each subject by dividing the number of constructs with a "negative positioning" of self by the total number of constructs elicited [72, 73]. The positive pole (i.e. that which is positively valued by the subject) is inferred from where the subject positions Ideal Self. For example, in relation to the construct "has a critical attitude vs. is accepting of everything", a subject could position actual self ("Myself as I am now") on the "accepting of everything" pole, but ideal self ("Myself as I would like to be") on the "has a critical attitude" pole. The latter would therefore be the positive pole for the subject. The constructs in relation to which subjects positioned themselves exactly halfway between the two poles (i.e. at 0 on the rating scale that went from -3 a + 3) were omitted from the calculation of this index.

With regard to Hypothesis 2, the measure used was identical to that just described, with the difference that the calculations were only carried out for constructs related to the "semantics of power" instead of for all the constructs elicited.

In order to verify Hypothesis 3, the Self-Ideal Discrepancy index [72, 74, 75] was calculated by measuring the difference between actual self ("Myself as I am now") and ideal self ("Myself as I would like to be") for each construct elicited. The formula for the discrepancy index is: $D = S_i - S_r$ (where D = discrepancy; S_i = grid rating assigned to ideal self; S_r = grid rating assigned to actual self). Mean discrepancy was then calculated for each subject.

Finally, to evaluate Hypothesis 4, the *bias* index was used to measure subjects' tendency to use one pole of a construct more than the other pole [76]. The literature on RET reports a systematic tendency on the part of individuals to position other elements at the same pole of a given construct at which they have positioned themselves, which is usually the positive pole: People have been found to assign other elements to the same construct pole as themselves in 63% of cases – known as the *golden section* – versus the remaining 37% of cases in which they assign them to the opposite pole [52, 53]. The bias index is calculated for each of the constructs elicited from the subject using the following formula:

$$(\Sigma el^+ - \Sigma el^-) / \Sigma el^{+/}$$

where: $el^+ =$ the number of elements assigned to the positive pole of the construct; $el^- =$ the number of elements assigned to the negative pole of the construct; $el^{+/-} =$ total number of elements (excluding those with a rating of 'zero'). The bias index ranges from 0 to 1, where 0 represents perfect equidistribution of the elements with respect to the construct poles, and 1 indicates that all the elements were positioned at the same pole. The mean bias was then calculated for the full construct-set of each participant.

For all the measures just outlined, summary indices (mean, standard deviation, etc.) were then calculated for each of the two groups to enable statistical comparison via Student's t test.

RESULTS

Table 1 reports summary data regarding the number of constructs and elements elicited from the two groups.

Student's t test for independent samples was used to compare the two groups in relation to the research hypotheses. Levene's test of homogeneity of variance was used to confirm that it was appropriate to use Student's t for all of the required comparisons.

The means and standard deviations of the four indices used to compare the two groups are reported in Table 2.

With regard to the first hypothesis, relative to the "negative" positioning of self with respect to the full set of constructs, a statistically significant difference was found between the scores of the two groups ($t_{28} = 2.41$, p =.021; C.I. 0.03-0.34), with an effect size value (Cohen's d) of 0.91. Specifically, the Group 1 subjects displayed a tendency to position their Actual Self on the negative pole of constructs, in support of the first directional hypothesis.

Similarly, for the second hypothesis relative to the negative positioning of actual self with respect to constructs based on the semantics of power, a significant difference was found between the two groups ($t_{28} = 2.69$, p =.011; 0.04-0.27). It was therefore possible to reject the null hypothesis. Furthermore, the effect size value of 1.01 suggested strong practical significance [77, 78].

Analysis of the Self-Ideal discrepancy index values led to rejection of the third null hypothesis given that once more significant differences were found between the means of the two groups ($t_{28} = 2.33$, p =.027; 0.71-1.08) with lower discrepancy scores in the control group. Effect size was lower than in the previous analyses (Cohen's d = 0.88), but the size of the differences was in line with the other findings.

Table 1.	Constructs and Elements Elicited in the Two Groups: mean, Standard Deviation, Range (Minimum and Maximum Num-
	ber) and Total Number

	Constructs			Elements				
	m	sd	Range	Tot.	m	sd	Range	Tot.
Group 1	19.93	3.99	15-28	299	10.8	1.43	8-22	162
Group 2	22.13	7.54	12-38	332	10.92	2.21	8-17	164

Table 2.	Main Descriptive St	atistics for the Four	· Indices of Self/Other Positioning
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	Group 1 (obese)			Group 2 (control)		
	m	sd	95% CIs	m	sd	95% CIs
Proportion of negative positionings of self (all constructs)	0.47	0.24	[0.34-0.61]	0.29	0.17	[0.19-0.38]
Proportion of negative positionings of self (only power constructs)	0.91	0.11	[0.85-0.97]	0.75	0.20	[0.65-0.86]
Self-ideal discrepancy index	1.88	0.73	[1.47-2.29]	1.30	0.61	[0.96-1.64]
Bias index	0.21	0.13	[0.14-0.28]	0.34	0.13	[0.27-0.42]

Finally, concerning the fourth and last research hypothesis, again significant differences were found between the bias index scores of the two groups ($t_{28} = 2.88$, p =.007; -0.23-0.04). Specifically the control group displayed greater bias, in line with the evidence reported in the literature; given the effect size value of 1.08, this was the finding displaying the strongest practical significance [77, 78].

DISCUSSION

The hypotheses developed in a clinical context by Ugazio [25, 26] - as operationalized in this study – appear to have been confirmed by the results obtained. Obese individuals appear to "co-position" themselves [25, 26] at the losers' pole of the "win-lose" dimension (Hypothesis 2). The negative self-positioning of the "obese" subjects appears to also extend to the other dimensions of meaning, even those unrelated to the semantics of power (Hypothesis 1). Support was also found for Hypothesis 4, according to which obese subjects tend to make little of others, positioning the other elements predominantly at the negative pole of constructs, in contrast with the typical bias reported in the literature on the golden section. This may be interpreted as an effort on the part of individuals with obesity to preserve what is left of their positive identity, as the results relative to the third hypothesis would appear to bear out: overweight and obese individuals display lower self esteem - as measured by the Self-Ideal discrepancy index.

Finally, some brief methodological remarks regarding the limitations of our research and its possible further developments. Our findings, although displaying statistical significance for all the research hypotheses, should not be overemphasized insofar as the small sample size targeted for this pilot study clearly does not allow us to generalize from the results. This is particularly the case for the second hypothesis relative to the difference in positioning of the two groups with respect to the semantics of power. While power is the dominant semantic category of obese subjects – as emerged from the semantic coding of their constructs, in line with the earlier research cited [40, 42-44] this was not the case for the control group subjects, whose grids featured a low proportion of constructs related to the semantics of power.

Moreover all the participants in this study belonged to the same homogeneous cultural group (Northern Italian); it would therefore be of interest to study cross-cultural groups in a range of Western cultures (other European countries, US, etc.), given the widespread incidence of obesity.

With regard to the implications for future research, a promising direction could to apply the method used in this study to monitor the therapeutic process [67,71] : changes in self-ideal discrepancy as well as in the positioning of self and others on the repertory grid (with particular regard to parents), could provide the therapist with valuable clinical indicators. In this perspective, Maor [20], in line with the contemporary emphasis on the central role of mother–daughter relationships in the development of women's bodily identities, interviewed 22 Jewish-Israeli self-identified fat women finding that the mother–daughter relationship was a prominent subjective factor in the construction of fat identity laden with negative meanings. Rodgers & Chabrol [21] analyzed the contribution of parental influences to the sociocul-

tural pressures on body image disturbance and disordered eating of adolescents and young adults finding that both mothers and fathers are important sources of influence for their offspring. Application of RET in family therapy sessions [55, 34] could be a useful tool in terms of both diagnosis and clinical intervention. The methodology proposed here could also be used to compare patients with different eating disorders, such as anorexia and bulimia and BED: pathologies which – according to the literature on which this study was based - present a number of aspects in common with obesity, but also key differences. In this view, it would be interesting for future research to compare the different types of eating disorder via RET, in terms of subjects' positioning [37] in relation to salient semantics, similarly to the comparison carried out by Ugazio et al. [40] via the analysis of transcripts of psychotherapeutic sessions. This kind of methodological cross-comparison between RET and analysis of transcripts of therapeutic conversations [40, 79-81] appears to be a promising line of enquiry that could also provide data for the comparison of patients receiving treatment within different clinical approaches.

In any case, it must be borne in mind that in general empirical methodologies cannot substitute for clinical knowledge but at best can be complementary to it. Nor can they confirm or disconfirm a theoretical model as a whole; they may only be used to evaluate circumscribed hypotheses operationalized from a broader theory [27, 82]. Allowing for these limitations, the current results seem nonetheless to support the idea that subjects' negative self-other positioning plays an important role in obesity.

CONFLICTS OF INTERESTS

The authors confirm that this article content has no conflicts of interest.

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