Abstract. This article reviews recent research made on obesity using the Rorschach (Comprehensive System: CS) as the main assessment procedure. It focuses on the main results of a research program performed by the author within the Karolinska Institutet in Stockholm, Sweden. When we studied Rorschach characteristics related to obesity, patients demonstrated difficulties with emotions and coping with everyday demands. We found that severe obesity was associated with lower mental distress and bodily concern. In experimentations, Rorschach predicted outcomes such as eating behaviors and weight. Larger weight loss in obesity treatments was explained by physical or dependency needs for food. These aspects could be specifically altered by treatment interventions targeting hunger or eating habits. Ego dysfunctions such as distortions in perception of reality predicted smaller weight loss and indicated more profound difficulties in obesity.

Keywords: obesity, Rorschach, eating behavior

Introduction

Obesity is a fast growing health problem in the Western world which has been classified by the World Health Organization (World Health Organization, 2000) as an epidemic. Obesity is assessed by classifications of body mass index (BMI), which is calculated as weight in kilograms divided by the squared height in meters. Obesity is then defined as having a BMI of at least 30 kg/m². This can be compared to the BMI range for normal weight, which is set at 18.5 to < 25 kg/m². The intermediate range from BMI 25 to < 30 kg/m² is referred to as preobese or overweight. Obesity can be further divided into class I (BMI 30 to < 35 kg/m²), class II (BMI 35 to < 40 kg/m²) and class III (BMI ≥ 40 kg/m²) (World Health Organization,
An additional important measure of obesity is waist circumference, which is a practical indicator of abdominal fat (Aronne, 2002; Aronne & Segal, 2002). High levels of body weight and body fat are associated with an increased risk for adverse medical consequence such as insulin resistance, type 2 diabetes, hypertension, and dyslipidemia (Bjorntorp & Rosmond, 2000; National Task Force on the Prevention and Treatment of Obesity, 2000) as well as cardiovascular diseases, stroke, and some types of cancer (National Task Force on the Prevention and Treatment of Obesity, 2000).

Earlier Rorschach Research on Obesity and Eating Disorders

Although research with the Rorschach (CS) is expanding in various fields, few studies have yet been conducted on obesity. Only two published CS studies could be found up to 2003. The most recently published one from 1995 concerns the role of personality functioning for choice of treatment (Yoshida et al., 1995). In this study patients were subdivided on the basis of level of personality functioning according to the Rorschach. Dimensions chosen for classification were ability for adjustment, desire for comfort, flexibility, and imagination. The groups resulting from this classification could be divided into relatively healthy personality and relatively less healthy personality. Adaptability and control of impulse were two additional dimensions for describing the groups formed. This classification revealed that the prevalence of mental and physical symptoms as a result of very low calorie diet (VLCD) treatment as well as a later rebound of body weight after treatment were more frequent among the patients with a less healthy personality. The VLCD treatment was then adapted to the prerequisites for each group. Patients with “healthy personalities” received severe diet restrictions; those with “less healthy personalities” received a modified program, as severe restrictions would be too stressful to them and could cause undesirable reactions. Aims of weight reduction and duration of treatment were also different for the two groups. These adjusted versions of VLCD treatment, matched to the respective groups, resulted in a better treatment outcome. The precise method used for subdividing the patients on Rorschach variables is unfortunately not described in this study.

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2000). An additional important measure of obesity is waist circumference, which is a practical indicator of abdominal fat (Aronne, 2002; Aronne & Segal, 2002). High levels of body weight and body fat are associated with an increased risk for adverse medical consequence such as insulin resistance, type 2 diabetes, hypertension, and dyslipidemia (Bjorntorp & Rosmond, 2000; National Task Force on the Prevention and Treatment of Obesity, 2000) as well as cardiovascular diseases, stroke, and some types of cancer (National Task Force on the Prevention and Treatment of Obesity, 2000).
The other CS study stems from 1992 and describes a high prevalence of alexithymia (impairment in symbolization and expression of emotions) in an obese sample when compared to Exner’s reference data (Clerici, Albonetti, Papa, Penati, & Invernizzi, 1992). Hypothesized Rorschach alexithymia variables included those related to fantasy, affects, and available resources, which were lower among the obese. Impoverishment of fantasy and incapacity to express one’s feelings are discussed for the sample.

The remaining Rorschach studies within the field of obesity use earlier Rorschach systems. In one of these studies (Mattlar, Salminen, & Alanen, 1989), the Rorschach was administered as a group test with slides (Mattlar, 1986; Semenoff, 1976) on 30 obese persons in a weight-reducing program and scored according to a traditional primarily Klopfer-based scoring (Klopfer & Davidson, 1962; Mattlar, 1986; Rorschach, 1921). In this study, which included the Rorschach as well as other methods, repression and denial were described as common defense mechanisms. Subjects who achieved better weight loss results in the treatment were less hostile, but more depressed, vulnerable, and dependent. Among the Rorschach variables associated with less weight loss was faulty perception of reality (Mattlar et al., 1989).

Based on psychoanalytic theories of obesity, oral dependence seen in Rorschach oral imagery has also been studied. Higher levels of oral dependence in the obese compared to controls were found in one Rorschach study that scored answers for oral dependence and oral sadism (Masling & Rabie, 1967). However, using the same criteria for oral dependence in the Rorschach, now referred to as the Rorschach Oral Dependency Scale (ROD) (Masling, 1986), others failed to replicate this finding (Bornstein & Greenberg, 1991).

In psychiatric samples with eating disorders such as anorexia nervosa (AN) and bulimia nervosa (BN), oral dependence according to the ROD were also found (Bornstein & Greenberg, 1991; Narduzzi & Jackson, 2000). Other Rorschach studies of AN and BN describe psychological defense structures (Piran, 1990; Sugarman, Quinlan, & Devenis, 1982) and thinking disorders (Parmert, 1991; Small, Madero, Teagno, & Ebert, 1983; Smith, Hillard, & Walsh, 1991). These studies on AN and BN are based mostly on the CS, though some have also used earlier systems such as the Klopfer-based system (Klopfer, Ainsworth, Klopfer, & Holt, 1954) and various scales for psychological defenses and other aspects of personality.
**The Research Program of the Stockholm Karolinska Institutet**

**Aims**

The main aim of the research program was to investigate whether Rorschach personality data can contribute to our understanding of obesity, eating behavior, and treatment outcome. More specific aims were as follows:

- **Study I.** To investigate whether a priori-defined subgroups based on Rorschach data can be identified in an obese clinical population and be further validated to other types of data.
- **Study II.** To explore whether degree of obesity is related to Rorschach personality aspects of mental distress and self-estimated depression according to the Beck Depression Inventory.
- **Study III.** To study experimentally measured eating behavior such as initial eating rate and the eating curve during a single meal in relation to personality according to the Rorschach.
- **Study IV.** To investigate whether Rorschach data can explain differences in food intake with the satiety-enhancing drug sibutramine vs. placebo in an experimental within subject cross-over design.
- **Study V.** To investigate whether Rorschach and subjective ratings of depression can predict weight loss in treatment with sibutramine.
- **Study VI.** To investigate whether the Rorschach can predict weight loss in a behavior-modification treatment.

**Methods**

The Rorschach (Comprehensive System) (Exner, 1991, 2003) is the main method. There was a good or excellent interrater agreement for the majority of variables used in the studies. Fair agreement was reached for one variable, the CDI.

**VIKTOR** (VIKT moniTOR, English: WEIGHT moniTOR): For the measurement of eating behavior we used VIKTOR, a computerized eating monitor (Cabmek, Stockholm, Sweden), originally described by Kisseleff, Klingsberg, and Van Itallie (1980) and further developed by Barkeling, Rössner, and Björvell (1990; Barkeling, Rössner & Sjöberg, 1995). With VIKTOR the microstructure of eating behavior is measured through a hidden scale built into a table, connected to a computer reg-
Table 1: Methods, outcomes, study design, and statistics in Rorschach studies with obesity patients

<table>
<thead>
<tr>
<th>Study</th>
<th>Method</th>
<th>Research</th>
<th>Description</th>
<th>Outcomes</th>
<th>Participants</th>
<th>Age (m ± SD)</th>
<th>Gender</th>
<th>BMI (m ± SD)</th>
<th>Degree of BMI Initial eating rate</th>
<th>Weight loss</th>
<th>Weight loss follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Rorschach Interview data</td>
<td>Pretest-posttest</td>
<td>150 participants</td>
<td>32</td>
<td>36</td>
<td>45</td>
<td>Male</td>
<td>32.1 ± 5.4</td>
<td>43.1 ± 12</td>
<td>45 ± 12</td>
<td>45 ± 12</td>
</tr>
<tr>
<td>II</td>
<td>Rorschach Interview data</td>
<td>Pretest-posttest</td>
<td>100 participants</td>
<td>32</td>
<td>36</td>
<td>45</td>
<td>Male</td>
<td>32.1 ± 5.4</td>
<td>43.1 ± 12</td>
<td>45 ± 12</td>
<td>45 ± 12</td>
</tr>
<tr>
<td>III</td>
<td>Rorschach Interview data</td>
<td>Pretest-posttest</td>
<td>120 participants</td>
<td>32</td>
<td>36</td>
<td>45</td>
<td>Male</td>
<td>32.1 ± 5.4</td>
<td>43.1 ± 12</td>
<td>45 ± 12</td>
<td>45 ± 12</td>
</tr>
<tr>
<td>IV</td>
<td>Rorschach Interview data</td>
<td>Pretest-posttest</td>
<td>130 participants</td>
<td>32</td>
<td>36</td>
<td>45</td>
<td>Male</td>
<td>32.1 ± 5.4</td>
<td>43.1 ± 12</td>
<td>45 ± 12</td>
<td>45 ± 12</td>
</tr>
<tr>
<td>V</td>
<td>Rorschach Interview data</td>
<td>Pretest-posttest</td>
<td>140 participants</td>
<td>32</td>
<td>36</td>
<td>45</td>
<td>Male</td>
<td>32.1 ± 5.4</td>
<td>43.1 ± 12</td>
<td>45 ± 12</td>
<td>45 ± 12</td>
</tr>
<tr>
<td>VI</td>
<td>Rorschach Interview data</td>
<td>Pretest-posttest</td>
<td>150 participants</td>
<td>32</td>
<td>36</td>
<td>45</td>
<td>Male</td>
<td>32.1 ± 5.4</td>
<td>43.1 ± 12</td>
<td>45 ± 12</td>
<td>45 ± 12</td>
</tr>
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</table>

Main finding: A striking, although clinically significant, reduction in eating rate was observed in the group treated with the Rorschach protocol compared to the control group. Additionally, the level of obesity was found to be significantly different between the two groups.
istering the amount of food eaten every second. Among the data obtained are amount of food consumed in grams, initial eating rate (g/min) consisting of a linear coefficient, and the relative rate of consumption, i.e., a decelerating or accelerating rate of consumption during the meal, defined as g/min².

A structured interview on baseline characteristics was used for collecting sociodemography data and information related to eating behavior and obesity history. The items explored were education, socio-economic level, parental obesity, age at onset of obesity, weight during adulthood, weight fluctuations, meal patterns, emotional eating, binge eating, periodic eating variations, body size having a psychological significance, childbearing, obesity-related diseases, and pain problems.

The methods, outcome measures, and study designs used in studies I–VI are displayed in Table 1. Further details on methods can be found in the articles published.

Results

Study I

In this study subgroups with depressive features (Rorschach Depression Index) and coping difficulties (Coping Deficit Index) that could have a particular relevance in obesity were identified. The subgroup with depressive features was the largest, with around 40% of the patients included; this group was further characterized by intermediate or higher education, regular meals, more eating disorders like binge eating, periodic variations in eating, and experiencing body size as having a psychological meaning. The subgroup with coping liabilities comprising around a fourth of the patients was further associated with a lower socioeconomic level and irregular or chaotic meal patterns. For the group with emotional difficulties the results suggest a more complex psychological pattern, where eating and emotions could be closely related. The group with coping liabilities could have other types of difficulties concerning food and eating, such as finding a structure for eating and making changes in lifestyle and habits (Elfhag, Carlsson, & Rössner, 2003).
Study II

Although depression and psychopathology are often found to be more common in obese compared to normal weight subjects, it is unclear whether higher degrees of obesity are indeed associated with more depression and psychopathology than modest levels of obesity. In this study mental distress including depressive features and psychopathology such as distortions in perception and cognitions were not related to degree of obesity. Bodily concern and anxiety related to the body (An + Xy) was higher in relatively lower degrees of obesity. Patients in the lower ranges of obesity thus appear more concerned or anxious with their bodily status, although the heavier patients had more bodily pain problems according to the self-reported information (Elf hag, Rössner, & Carlsson, 2004).

Study III

This study investigated the relationship between the microstructure of eating behavior and personality aspects. Eating behavior was measured using the computerized eating monitor, VIKTOR, calculating initial eating rate and the eating curve. A higher initial eating rate, reflecting eating drive, was associated with Rorschach signs of psychological stress overload (D–), and higher affective responsiveness to external stimuli (Affective ratio).

Stress overload may prompt eating. Affective responsiveness also related to a higher initial eating rate entails being motivated by impressions from the outer world in a way that activates behavior. A higher sensitivity and reactivity to external stimuli such as the sight and smell of food may affect appetite and hence increase eating rate (Elf hag, Barkeling, Carlsson, & Rössner, 2003).

Study IV

This study related effects of the satiety-enhancing drug sibutramine (Meridia®, Reductil®) on food intake to personality. Less food consumed after sibutramine vs. placebo could be explained by a model including higher affective responsiveness (Afr), adjustment to social expectations (Populars), and unfavorable self-regard (MOR). These results
suggest sibutramine may reduce food intake in single test meals for subjects whose appetite is prompted by external stimuli including food cues, suggested by the Affective Ratio. Distress related to the body in obesity seen in damaged self-imagery (MOR), and adjustment to social expectations (Populads) could also have a moderating effect on the participants’ consumption of test meals in an experimental design. Psychological factors seldom accounted for could influence the results in experimental designs using a placebo condition (Elfhag, Barkeling, Carlsson, Lindgren, & Rössner, 2004).

Study V

This study investigated psychological and clinical factors in relation to weight loss results in treatment with sibutramine, an antiobiety drug enhancing satiety. A model including the Rorschach predictors physical demand states (FM) being intrusive or difficult to hold and a dependency orientation (Food contents) could explain almost half of the 6-month weight loss. A model including a well-known predictor such as initial weight loss in addition to the Rorschach predictors increased the explaining value additionally. Patients with difficulties concerning physical demand states also including hunger – which implies that behavior can be influenced more by these demand states – could in particular have reduced their eating behavior with enhanced satiety, resulting in more weight loss. Furthermore, enhanced satiety could also have helped patients with a dependent need for food, by limiting food intake. Alternatively, patients with a dependency orientation could have benefited simply from being enrolled in treatment (Elfhag, Barkeling, Carlsson, & Rössner, 2003).

Study VI

This study related 6-month weight loss for obese patients in a behavior modification program to Rorschach personality characteristics. Signs of perceptual and cognitive distortions indicated by the Schizophrenia Index (SCZI/PTI) predicted less weight loss, in particular for men. Indications of ego dysfunctions seen in distortions in perception of reality and coherent cognition would constitute more severe difficulties in obesity behaviors.
More weight loss was predicted by a dependency orientation and food preoccupation (Food contents). For women, physical demand states (FM) also including hunger was furthermore positively related to weight loss. Patients with these eating-related personality characteristics benefited most from learning how to handle the relationship to food and eating, as evidenced by more weight loss. Patients with a dependency orientation may also have benefited simply from being included in the social setting of the treatment program (Elfhag, Rössner, Lindgren, Andersson, & Carlsson, 2004).

Discussion

Emotional and Other Types of Difficulties in Obesity

Difficulties with emotions and a depressive tendency (DEPI) were found in half of our patients. This agrees with other research findings of depression in obese clinical samples, although these results cannot be generalized to a nonclinical obese population, as more depression and psychopathology are found in patient samples (Fitzgibbon, Stolley, & Kirschenbaum, 1993).

We suggest that patients with difficulties with emotions could be considered as constituting a distinctive subgroup among the obese patients, with a more complex relationship to food. Besides exhibiting more binge eating and periodic variations in food intake over time – known to be linked to depression in obesity – they also had a more complex relationship to the obese body itself, which was entangled in a psychological meaning; this may constitute an unforeseen difficulty in weight loss. We found no other recent research studies investigating such psychological motives for being obese since the psychoanalytic observations (Kaplan & Kaplan, 1957).

Findings from study III may also be related to the original psychological postulates in obesity and a psychosomatic hypothesis, as the obese patients with more signs of psychological stress overload (D-score minus) ate faster, suggesting that eating behavior is affected by inner strain.

Some essential parts of the early psychological theories on obesity (Babcock, 1948; Bruch, 1952, 1961; Hamburger, 1951; Kaplan & Kaplan, 1957) therefore still seem to have actuality and should not be totally discarded. At the same time, it is just as important to note that general-
izations such as ascribing emotional difficulties to all obese patients should be avoided. Quite different problems than emotional ones can account for the behaviors in some obese persons, although these correlates can be less easily recognized and understood in obesity treatment and research.

We suggested persons with difficulties in coping with everyday demands due to a lack of psychological resources (CDI) to form a subgroup in study II. The possibility of problems with managing eating was also strengthened by the irregular or chaotic meal patterns found for this group. Other patients may have still other difficulties that were not captured in the proposed subgroups. In study VI difficulties in achieving weight loss in obesity treatment was noted for patients with ego dysfunctions such as distortions in perception (SCZI/PTI). This implies problems quite different from those related to emotions or the psychological need for food that are less amenable to a popularized understanding.

Depressive features and psychopathology were not worse in persons with higher levels of body weight, according to study I and II. Such a lack of a linear relationship is noteworthy: It might be assumed that depressive features are worse, the more obese a person is, obesity having been shown to imply suffering (Sullivan et al., 1993). However, our results did not confirm such an assumption. In our patients referred to obesity treatment, there was no severity of obesity determining who has more emotional encumbrance; rather, aberrations in eating and a complex relationship to the body better identify patients with emotional distress.

**Bodily Concern**

More bodily concern (An + Xy) was found in the less obese in study II, and bodily concern as well as experiencing the body as damaged (MOR) were further possible psychological moderating factors in an experimental design with an antiobesity drug, as described in study IV. Being concerned or even anxious about bodily status in obesity may be a personality expression of the more unaccepting attitudes toward obesity in the higher socioeconomic groups (Furnham & Baguma, 1994; Jeffery, French, Forster, & Spry, 1991) to which the less obese patients more often belonged. Bodily concern may also imply a stronger wish for help and thus influence behavior in short-term measurements, as suggested by study IV.
Rorschach signs of bodily concern and anxiety concerning the body were less apparent in the massively obese patients, despite bodily pain being more common with higher weights, as described by study II. Because a personality measure of bodily concern was inversely related to body weight, this could provide information on the psychological mechanisms that exist in those patients who have reached health-hazardous, physically limiting weights. Realizing that these patients are not as alarmed by their physical state as we might have expected (considering their difficulties and self-reported problems) can help us understand some of the obstacles to making changes.

This discrepancy between unhealthy weight and pain problems on the one hand and bodily concern on the other could indicate that they avoid fully realizing the magnitude of the obesity-associated problems, as this could be too distressing. Alternatively, it could be argued that persons at risk for developing morbid levels of body weight have a psychological disposition that causes less alarm as body weight gradually increases, facilitating even more morbid levels of obesity to develop.

Our results can also be compared to findings on degree of BMI in research with the Minnesota Multiphasic Personality Inventory (MMPI), suggesting that more disturbed and anxious obese patients have a relatively lower BMI than the less distressed who have the highest body weights (Lauer, Wampler, Lantz, & Madura, 1996). Another MMPI study describes less hypochondria in the superobese compared to other samples (Hutzler, Keen, Molinari, & Carey, 1981).

**Responsiveness to Food Cues**

Affective responsiveness (Affective ratio) turned out to be a personality characteristic related to appetite through a higher initial eating rate (study III) and a greater effect of the satiety-enhancing substance sibutramine on immediate food intake (study IV). Affective responsiveness, however, was not related to later weight loss in treatment with sibutramine (study V). This suggests that Affective responsiveness could be a measure of appetite that is foremost apparent in single test meals.

Affective responsiveness implies being motivated by emotionally loaded impressions from the outer world and may reasonably be applied to food stimuli as well. Sensitivity to cues such as the sight and smell of food may affect appetite.

We do not know whether the link found between affective responsive-
ness and eating holds true in a normal weight sample. If food is perceived as a vital and interesting stimulus for the person, this will likely have impact on the behavioral response to food stimuli. For a normal weight person with less interest in food, there may not be such a link between affective responsiveness and appetite. Rather, quite different areas of life would be experienced as emotionally rewarding and elicit an emotional response.

Affective responsiveness is generally considered to be a personality resource, implying an interest in experiencing or being around emotional stimuli. Somewhat surprising then was that a personality asset was related to appetite. This may have some interesting additional treatment implications. Affective responsiveness indicates a potential to profit from many other life stimuli besides food. Persons with a high affective responsiveness therefore have the potential to be stimulated and enriched by a variety of life situations besides food. This may be a positive treatment focus for some obese patients, as they can be encouraged to find alternative sources of fulfillment in life.

### Needs for Food

The eating-related personality features associated with eventual weight loss were those related more to needs, as described in study V and VI. Such needs could have physical or emotional origins, seen as physical demand states (included in the primary needs in FM) and a food preoccupation and oral dependency (Food contents).

In obesity treatment with a satiety-enhancing drug, or in learning how to handle food and eating in a traditional program, physical and dependent needs for food could have become easier to handle. These treatment interventions can temporarily have facilitated the patient’s ability to alter food habits and abstain from food. Patients eating because of needs and oral preoccupation can have more to gain from treatment approaches targeting their type of difficulty: hunger and eating habits.

### Ego Functioning and Eating Behavior

The results can also be discussed in a framework of personality functioning. The positive predictors of weight loss were those related to oral traits such as dependency as well as the physical demand states reported.
in studies V–VI. Oral activities such as eating may have a particular importance with a dependency orientation. The notion of oral traits has roots in the psychoanalytic theories on libidinal development (Fancher, 1973). Due to fixations at the oral stage of development, or regressions to oral strivings as a response to later life situations, a preoccupation with oral activities such as eating may result. Food can also have an important symbolic meaning as a gratifier and comforter. The other crucial variable identified in relation to weight loss were deviating levels of physical demand states, including hunger. Theoretically, the physical demand states suggested by FM would be included in the biologically based urges described by drive theory (Pine, 1990).

This means that psychological needs for food as well as physical cravings could indicate relatively more neurotic and more “classic” reasons for overeating. From a personality perspective such characteristics could be considered as more benign. This also agrees with the ability to alter body weights found for these patients.

A negative predictor of weight loss was perceptual distortion according to study VI. Ego dysfunctions involving distortions in perception and thinking are more profound problems in personality functioning. Reality testing and coherent thinking are fundamental steps in ego development and in intact cognitive functioning. Ego distortions can be seen to a lesser or greater extent in persons with different underlying causes such as more disturbed personality processes (Kellerman & Burry, 1981). Impairments in ego functioning may also be related to neurological disturbances (Bartell & Solanto, 1995; Cotugno, 1995). An example of such dysfunction is attention deficit and hyperactivity disorder (ADHD), discussed in study VI. We suggest that distortions in perceptions and thinking could disrupt the ability to adhere to and gain from the treatment and function efficiently – or perhaps even difficulties in accurately perceiving and registering food intake as well as adjust food intake to energy expenditure. According to our results, men might further be more vulnerable than women in this area. Rorschach indications of distortions in perception and cognition have previously been useful for predicting poorer performance in a other areas of life (Hartmann, Sunde, Kristiensen, & Martinussen, 2003), supporting the idea that accuracy of perception and coherent ways of thinking are important for behavioral achievements.

From a personality perspective, some obese patients are more likely to have problems related to ego functioning to be considered than inner psychological motives for eating. Consequently, aspects of ego functioning could be regarded in assessment in obesity clinics.
Personality Functioning and Treatment Implications

Personality functioning and ego capacities are basic considerations in psychiatric assessment and treatment (McWilliams, 1994; Pine, 1990). Fundamental principles of personality functioning can also reasonably be applied to the treatment of obesity. Overeating due to ego distortions can represent more profound difficulties in treatment.

In the previous Rorschach study on VLCD treatment in obesity, the lower functioning patients, called the “less healthy personalities,” encountered more difficulties in VLCD treatment and regained their body weight after treatment (Yoshida et al., 1995). Furthermore, Rorschach signs of faulty perception of reality were related to poorer weight loss in previous obesity research (Mattlar et al., 1989) as well as in our results in study VI. Patients with these kinds of more profound difficulties in functioning are thus at risk for failure in traditional treatments. The demands posed on the participants in such treatments can be too difficult for them to accomplish. Taking charge of one’s eating habits and lifestyle, and refraining from eating as usual, poses considerable demands on the patient’s psychological resources. When VLCD treatment was adjusted to the less healthy personalities, implying less restrictions on diet, lower weight loss target, and giving more support, encouragement, and reward, the outcome results were better (Yoshida et al., 1995). This would constitute an ego-supportive approach.

We also found that patients with distortions in perception and thinking achieved the same weight loss in sibutramine treatment as patients without such dysfunctions (Elfhag, Rössner, unpublished results). This agrees with our assumptions, since a satiety-enhancing treatment poses little demands on the patient’s own abilities and efforts, the drug working directly on the appetite system in the central nervous system.

One implication for treatment is that posing demands on patients with little prospects of meeting them carries the obvious risk for failure and frustration, both for the patient and the staff.

On the other hand, and as suggested in studies V–VI, patients eating due to needs and drives at the onset of the treatment, suggested by oral traits and dependency and also difficulties with physical demand states, seem to have been better able to assimilate the treatment interventions and to profit from the treatment, as evidenced by more weight loss. These personality characteristics in the obese patients referred to treatment may imply a more benign treatable condition, in particular for women. We suggest that they indicate relatively more neurotic reasons
for overeating. Traditional obesity treatments targeting eating behavior seem to have matched these persons well. As long as active treatment persists, patients with these characteristics were able to alter their body weights.

Different kinds of treatment strategies were also suggested for patients with difficulties with emotions or difficulties coping with everyday demands, as described in study I. Patients having difficulties with emotions may need help in understanding the emotional influences found in eating behavior. Patients with coping difficulties may rather need help in finding their inner abilities and in forming a structure for eating habits. These patients could perhaps benefit from an approach that actively teaches the patient healthier habits and how to carry out changes in everyday behavior as well as encouraging and supporting the patients' own ability to manage this. This would, again, imply a treatment that is more ego-supportive.

**Limitations and Suggestions for Future Research**

A general limitation with the studies is the rather small sample sizes. Furthermore, gender-specific analyses could have been done for the Rorschach variables, beyond reporting gender in relation to body weights. Gender, for example, would have been of interest with regard to eating behavior.

What is the role of the Rorschach in future research on obesity? Working with the Rorschach is time consuming and requires extensive training. Therefore, it is unlikely to be used on a more general basis. Yet, the Rorschach can contribute unique information and provide enhanced understanding of the behaviors associated with obesity that are still too little known – and it can give ideas to pursue into further research with other methods. Thus, the Rorschach seems to have a potential role as a complementary method in research on obesity and eating disorders.

Constellations of Rorschach variables used in research on, for example, alexithymia, or coding the answers according to psychoanalytically influenced Rorschach scales for measuring psychological defenses, may best meet other research questions.

Because the Rorschach gives information that is not dependent on self-reports – and there can always be a discrepancy between what obese patients say and actually do – it could also be valuable to consider Rorschach data in crucial areas of obesity behaviors where self-reported
information has not provided sufficient understanding. The more underlying characteristics seen in Rorschach data that have a greater relevance to real-life behavior could provide more information on unrecognized, unavailable, or conflicted personality characteristics affecting behavior.

The results in studies I–VI furthermore gave information and suggestions to be pursued in further research exploring areas of potential importance for obesity-related behaviors. Examples are characteristics not linked to emotional difficulties or psychological need for food in obesity, but rather those that represent other types of psychological difficulties in obesity behaviors that are more seldom and less easily recognized. These are distortions in perception and cognition and the personality variables constituting coping capacity, such as psychological resources including available affects and also mental capacity such as imagination and intelligence.

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References


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Research on Obesity and the Rorschach


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Summary

This article reviews recent research made on obesity using the Rorschach (Comprehensive System: CS) as the main assessment procedure. It focuses on the main results of a research program performed by the author within the Karolinska Institutet in Stockholm (Sweden): Obesity is a fast growing public health problem and we need more understanding about obesity behaviors. 120 obesity patients were Rorschach-tested and interviewed before treatment start. In one of the six studies on these data, two different types of difficulties were identified. One subgroup demonstrated difficulties with emotions and a tendency toward depression, and another subgroup had difficulties coping with everyday demands. Severe obesity was associated with lower mental distress and bodily concern, in spite of more bodily pain problems, according to another study. In experimentations, Rorschach predicted outcomes such as eating behaviors and weight. Larger weight loss in obesity treatments was explained by physical or dependency needs for food. These aspects could be specifically altered by treatment interventions targeting hunger or eating habits. Ego dysfunctions such as distortions in perception of reality predicted smaller weight loss.

Personality functioning and ego capacities are basic consideration in psychiatric assessment and treatment, and could also be applied to the treatment of obesity. Overeating due to ego-distortions can represent more profound difficulties in obesity, and posing demands on patients with little prospect of meeting them has obvious risks to result in failure. On the other hand, patients eating due to needs and drives at onset of the treatment, suggested by oral traits and dependency and also difficulties with physical demand states, seem to have been better able to assimilate the treatment interventions and profit from the treatment, evidenced by more weight loss. These personality characteristics in the obese patients referred to treatment can imply a more benign treatable condition and relatively more neurotic reasons for overeating. Traditional obesity treatments targeting eating behavior seem to have matched these persons well. Furthermore, patients with difficulties with emotions could need help in understanding emotional influences in eating behavior. Patients with coping difficulties could rather need help in finding their inner abilities, and forming a structure for eating habits, thus implying a treatment that is more ego-supportive. In conclusion, it is important to realize that there are many different psychological difficulties in obesity and eating, which can pose obstacles in weight reduction.
Sammandrag


Personlighetsfungerande och jagfunktioner utgör grundläggande aspekter i psykiatriska bedömningar och behandlingar, och dessa aspekter kan även appliceras på fetmabehandlingar. Överätande som beror på jagstörningar kan utgöra mer omfattande svårigheter vid fetma och att ställa krav på patienter som har små förutsättningar att möta dessa krav riskerar att resultera i misslyckanden. Patienter som äter som svar på behov och beroende, indikerat av orala drag och svårigheter med fysiska kravstillstånd i Rorschach, kunde tillgodogöra sig behandlingsinterventionerna bäst och drä mest nytta av behandlingen, maniesterat av viktnedgångsresultaten. Denna personlighetskarakteristik hos fetmapatienter remitterade till behandling kan innaröra ett mer godartat och behandlingsbart tillstånd, och relativt sett mer neurotiska anledningar till överätandet. Traditionell fetmabehandling som inriktar sig på åtbeeet smatchade dessa patienter väl. Patienter som har svårigheter med känslor kan vidare behöva hjälp att förstå de känslosmässiga faktorerna bakom åtandet. Patienter med svårigheter att hantera krav i vardagslivet kan snarare behöva hjälp att hitta sina inre förmågor samt skapa en struktur för åtandet, i en mer
jagstödjande behandling. Det är sammanfattningsvis viktigt att se att det finns många olika psykologiska svårigheter vid fetma och ätande, som kan utgöra hinder vid viktnedgång.

Résumé

Cet article passe en revue les recherches récentes dans le domaine de l’obésité, et qui utilisent le Rorschach (Système Intégré) comme principal outil d’évaluation. Les auteurs s’intéressent plus particulièrement aux résultats d’un programme de recherche du Karolinska Institute basé à Stockholm (Suède). L’obésité est un nouveau problème de santé publique qui nécessite une meilleure compréhension.

120 patients obèses ont passé un entretien et le test du Rorschach avant le début du traitement. Dans une étude sur six, deux types de problèmes ont été identifiés. Un sous-groupe montra des difficultés sur le plan émotionnel avec une tendance à la dépression, et un autre sous-groupe indiqua une difficulté à faire face aux pressions de la vie de tous les jours. D’après une des études, l’obésité sévère peut être associée à un niveau bas de détresse mental et de préoccupations corporelles. Le Rorschach peut prédire des comportements alimentaires et le poids dans certaines situations expérimentales. Une perte importante de poids peut être expliquée par le niveau de dépendance alimentaire. Ces aspects peuvent être spécifiquement altérés, si le traitement cible les habitudes alimentaires et le niveau de la faim. La présence de dysfonctionnements du moi, tel que la distorsion de la réalité indiqua une perte de poids moins significative.

Le fonctionnement de la personnalité et les capacités du moi sont des éléments pris en considération dans l’évaluation et le traitement psychia- trique, et ils pourraient tout aussi bien être appliqués au traitement de l’obésité. La suralimentation due à une distorsion de la réalité peut présenter une plus grande difficulté qui peut mener à un échec du traitement. Par contre, les patients dont le comportement est plutôt causé par des états de besoin physique semblent avoir une meilleure capacité à assimiler et bénéficier du traitement qui leur est proposé afin de perdre du poids. Certains patients présentent des traits plus némotiques qui expliquent leur suralimentation. Les patients qui ont des problèmes à gérer les demandes externes bénéficieraient des traite- ments qui soutiennent les fonctions du moi et développent leur capacité psychique interne. Finalement, il est important de noter que les causes
Research on Obesity and the Rorschach

psychologiques de l’obésité sont nombreuses et peuvent former des obstacless aux tentatives de perte de poids.

Resumen
Este artículo revisa los estudios más recientes sobre obesidad mediante el uso del Rorschach (Sistema Comprehensivo: SC) como principal instrumento de evaluación. Se focaliza en los resultados de un proyecto de investigación creado por el autor, dentro del Karolinska Institutet en Estocolmo (Suecia), puesto que la obesidad es un problema de salud pública que está aumentando rápidamente y es necesario un mayor conocimiento sobre los comportamientos que se relacionan con ella. Se entrevistó y administró el Rorschach (SC) a 120 pacientes obesos antes de iniciar el tratamiento. En uno de los seis estudios que realizaron con estos datos, aparecieron dos tipos de dificultades. Uno de los subgrupos mostraba problemas en el manejo de las emociones y tendencias depresivas y el otro subgrupo tenía dificultades para atender las demandas externas cotidianas. La obesidad severa estaba asociada con menor malestar mental y menor preocupación por el cuerpo, a pesar de los problemas de dolor corporal que aparecieron en otro estudio. En los experimentos, el Rorschach predijo mejorías en las conductas de comida y peso. Las mayores pérdidas de peso en los tratamientos de obesidad se explicaban por la mejoría de la necesidad física o de dependencia hacia la comida. Estos aspectos podrían ser específicamente modiﬁcados por los objetivos del tratamiento en cuanto a sensaciones de hambre y hábitos alimentarios. Las disfunciones del Ego, como distorsiones perceptivas o sesgos en la captación de la realidad predijeron una menor pérdida de peso.

El funcionamiento de la personalidad y las capacidades yoicas son aspectos fundamentales en las evaluaciones y tratamientos psiquiátricos, lo que es aplicable también al problema de la obesidad. La sobrealimentación debida a distorsiones autoperceptivas puede representar un nivel más profundo de dificultades en la obesidad, y exigir un cambio de conducta alimentaria a los pacientes sin poder seguirlos de manera continuada y frecuente, tiene un alto riesgo de fracaso en el logro de objetivos terapéuticos. Por otra parte, los pacientes que comen en exceso por necesidades e impulsos al inicio del tratamiento debido a rasgos de dependencia oral y de dificultades para manejar los estados de demanda física, parecen ser más capaces de beneficiarse del tratamiento, obten-
iendo mayores pérdidas de peso. Estas características de personalidad en los pacientes obesos en relación al tratamiento pueden suponer la existencia de un proceso más benigno y abordable, y la existencia de razones más neuróticas para la sobrealimentación. Los tratamientos tradicionales de la obesidad parecen funcionar bastante bien con este tipo de pacientes. Además de esto, los pacientes con dificultades para manejar emociones pueden necesitar ayuda para alcanzar una mejor comprensión acerca de las influencias emocionales en su conducta alimentaria. Los pacientes con dificultades para manejar las demandas cotidianas de su entorno podrían necesitar ayuda para conocer y utilizar mejor sus propios recursos y poder establecer una estructura para sus hábitos alimentarios, lo que implica un tratamiento más de apoyo a sus funciones yoicas. En conclusión, es importante conocer que existen muchas diferencias en los problemas subyacentes a la obesidad, lo cual, de no ser tenido en cuenta, puede constituir un obstáculo en el logro de la reducción de peso.

K. Elfhag
この論文は、ホールシュッパ法（包括システム）を主なアセスメント手法としてもいて肥満について行われた研究をレビューしている。ストックホルム（スウェーデン）にあるKarolinska研究所における筆者によって達成されたありリサー
チプログラムの主要な結果に焦点が当てられている。肥満は
性急に成長してきた公衆衛生の問題であり、われわれは肥満
行動についてもっとよく理解する必要がある。120名の肥満
患者に、治療を開始する前にホールシュッパテストが施行さ
れ、面接がおこなわれた。このデータに行われた6つの研究
のうちの一つにおいて、二つの異なるタイプの困難が同定
された。ひとつのサブグループは情緒に関する困難とうつ
の傾向が示され、もうひとつのサブグループでは日常の要求
に対処することへの困難さがあった。重症の肥満は、別の研
究によるとより身体的な苦痛があるにかかわらず、低い精
神的苦悩と身体的な心配事の低さと関連があった。実験にお
いて、ホールシュッパ法は摂食行動や体重といった結果を予
測した。肥満の治療におけるより多くの体重減少は、身体的
あるいは依存的な食べ物への欲求によって説明された。空腹
あるいは食習慣をターゲットとした治療的介入によりこれた
側面は明確に変わりえた。現実の知覚の歪みといった自我
の機能不全はより少ない体重減少を予測していた。パーソナ
リティの機能と自我の力は精神医学的アセスメントと治療に
おいて基本的な考慮すべきであり、肥満の治療においても
また適応することができる。自我の歪曲による過食は肥満
におけるより重大に困難をあらわしており、
一方、治療の開始における欲求や動因による患者の摂食は、
口唇的特質や依存性、また、身体的な要求の状態に関連する
困難さによって支持され、治療的介入に同化することと治療
から利益を得ることがより可能なようであり、より多くの体
重の減少により明らかにされる。治療に紹介されてきた肥満
患者のパーソナリティの特徴は、よりやさしい治療可能な条
件を示唆しており、過食のより神経症的な理由を示唆している。摂食行動にターゲットをあてている伝統的な肥満治療はこれらの人々によくマッチしているようである。さらに、情緒に関連する問題を有している患者は、摂食行動に対する情緒的な影響を理解することを助けることが必要かもしれない対処の困難さを持っている患者は、彼らの内的な無能さを知ること、食行動習慣を組み立てること、そうして自我支撐的な治療を示唆すること、を助ける必要がある。結論として、肥満や摂食には、体重減少の障害となる、多くの異なった心理的困難があることを理解することが重要である。