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Personality Characteristics of Females Seeking Treatment for Obesity, Bulimia Nervosa and Alcoholic Disorders

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Abstract

The personality traits of 134 female patients, seeking treatment for obesity, bulimia nervosa and alcoholism in Stockholm were assessed with the KSP personality inventory. The results indicate that the personality traits of women seeking treatment for obese, bulimic and alcoholic problems are very similar. Compared to the population average, they were more anti-social, more psychasthenic and were also more anxiety prone. The obese subjects showed a similar personality profile as the bulimic and alcoholic women, but differed less drastically from the population average. This supports the conclusion that different types of eating and drinking disorders are associated with similar personality traits.

Key words: Personality; Obesity; Bulimia nervosa; Alcoholism; Addiction

Introduction

The amount of psychological research on eating disorders is extensive.

Bruch (1973) reports that people with eating disorders seem incapable of differentiating feelings of hunger and satisfaction. Instead, they misinterpret various feelings of dissatisfaction as hunger. According to Bruch, this may be caused by faulty learning processes in childhood, when parents provided the child with food whenever he or she was dissatisfied. In Bruch's view, these parents taught their children that eating was a proper response to various feelings of dissatisfaction.

Johnson and Connors (1987) summarise the current knowledge on the personality of bulimics in terms of problems in identifying and articulating their internal states, highly variable moods and low self-esteem in association with high aspirations. Sohlberg (1987) reports that bulimics have weaker impulse control than average people.

Björvell (1985) found that obese subjects were higher than the population average on Somatic Anxiety, Muscular Tension, Impulsiveness, Monotony Avoidance and lower on Socialisation on the Karolinska Scales of Personality (KSP, see Schalling and others 1983). Björvell considers this pattern as an impulsiveness syndrome; it is also found in psychopaths and drug addicts. The syndrome is characterised by an inability to learn from experience and a tendency for "acting on the spur of the

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moment". Such individuals know how to behave, but cannot act according to the best of their knowledge. Björvell suggests that these characteristics could explain the common Obesity history of repeated attempts to lose weight with accompanying relapses. Similar behaviour can be observed among obese persons, alcoholics and other addicts.

People with an impulsiveness syndrome as described by Björvell may have a tendency to react to stress with a craving (Striegel-Moore and Rodin 1986) for immediate satisfaction. Depending on the learning patterns, as described by Bruch above, people may be conditioned to react with non-appropriate conscious experiences (i.e. with hunger feelings as a conscious symptom of anxiety) on certain internal stimuli. These different experiences may then cause, for example, overeating or overdrinking.

Bergh (1988) notes that there is a tendency in recent research to look at the common denominators of alcoholism and drug abuse on the one hand and non-drug forms of addictions like excessive eating, gambling and sex on the other. Bergh states that the inclusion of obesity and especially bulimia in the discussion might create a more unified approach to the understanding of excessive behaviours and lessen the imbalance due to an over-emphasis on male forms of excessive behaviour.

In sum, bulimics and obese people can be characterised as having:

- (1) Problems with interpreting their internal states,
- (2) Highly variable moods,
- (3) Impulsiveness or weak impulse control,
- (4) A strong need for immediate satisfaction,
- (5) High levels of anxiety and tension,
- (6) Low adjustment to social norms.

The eating disorder patient has problems in accurately pinpointing the real cause of feelings of dissatisfaction. The patient experiences dissatisfaction as a strong craving to eat. Such patients are controlled by external and/or internal impulses which they can neither properly identify nor control.

It is reasonable to assume that similar personality traits can be observed in patients seeking treatment for eating and alcoholic disorders, since both categories use ingestion of substances to achieve satisfaction and/or to dampen negative feelings. The aim of this study was to test this assumption by comparing the personality traits of both categories of patients.

Gossop and Eysenck (1980) and De Silva and Eysenck (1987) report on studies of personalities of bulimic and anorexic patients. They found that bulimic patients showed personality traits which in many ways are similar to those of drug addicts: High scores on Psychoticism and Neuroticism, and Addiction and low scores on Social Desirability and Extraversion.

Method

Subjects

Two categories of females seeking treatment for eating disorders in 1990-91 were investigated. One group was chosen to conform to the definition of Bulimia Nervosa, as given by Fairburn and Garner (1986) and the other group was chosen to be obese subjects with Body Mass Index (BMI) (Llewellyn-Jones and Abraham, 1984) greater than 25. Most of the patients had much higher body mass index. The limit to define obesity varies with different cultures. In the U.S.A., a limit of 27 is often used. Only 5 of the 43 patients in this study had a BMI between 25 and 27, so the results in this study are probably valid also if a higher limit is used. The groups consisted of 81 women, 39 obese and 42 bulimic, selected from patients who visited a private psychotherapeutic clinic in Stockholm for treatment of eating problems. A few participants were volunteers from an organisation for people with eating problems (Anorexia-kontakt). Subjects who did not clearly belong to the defined categories of Obesity or Bulimia were excluded. This means that the subjects do not necessarily represent females with similar problems who do not seek treatment. Subjects who had both binge eating problems and

were obese at the same time were excluded from this study, in order to more clearly distinguish between the categories of bulimic and obese women.

The comparison data for alcoholic female patients were taken from previous studies within the KARTAD and EWA projects at the Magnus Huss Clinic (Bergman 1987 and Bergman and others 1987).

The age range of the bulimics was 16 to 61 years, with an average of 27 years, and the age range for the obese patients was 21 to 63 years, with an average of 38 years. The Body Mass Index averaged 21.8 for the bulimics and 32.8 for the obese subjects.

Of the obese and bulimic subjects, 20 percent had only primary school education, 49 percent secondary school education and 31 percent university degrees. Sixty percent lived alone while 40 percent were married or living together with a partner.

Procedure

The subjects were asked to respond to the items of the Karolinska Scales of Personality (KSP) (see Schalling and others 1983). KSP consists of 135 statements, and the subjects are asked to indicate for each statement how well it applies to themselves. The subjects sat alone in a room, responding to the items given to them by a computer. To ensure anonymity, information identifying the individuals was not stored in the computer.

The KSP inventory contains 15 personality subscales grouped into three main domains: Neuroticism (symptoms of tension and anxiety), Ego strength (ability to suppress and control impulses contrary to societal norms or personal long-term goals) and Aggressiveness (containing various ways of handling aggressive impulses). The internal consistency reliability (Cronbach alpha coefficients) of KSP has been found to vary between .39 and .88, but is above .60 for all but two of its subscales (Bergman and others 1988). Only one of the subscales found to distinguish obese and bulimic patients, Suspiciousness, had an internal consistency less than .75. The lowest internal consistency of the subscales was found for Guilt feelings, .39, so the results on this subscale should be treated with caution.

The comparison values, representative of the general population, were taken from a random sample of 191 females living in the Stockholm area as reported by Bergman and others (1988). The results from this random sample were re-computed to get a comparison group with the same age distribution as the sample of bulimic and obese subjects and expressed in T-scores (linearly transformed to $M=50$, $SD=10$ for the random comparison group, but not normalised to enforce a normal distribution). The results of the three clinical groups were then compared pair-wise and with those of the random sample using two-tailed t-tests at a .05 significance level.

Results

Table 1 shows the main results. Figure 1 shows the same data pictorially. There was a greater difference between the personality profile of the females with eating problems and the female random control sample, than between the bulimic and obese females. Only four of the fifteen personality traits measured differed significantly ($p<.05$) between bulimic and obese subjects, and only three of eight traits differed significantly between bulimics and alcoholics. As many as seven personality traits differed significantly between the obese and the controls and no less than ten traits differed significantly between bulimics and controls. The personality of bulimics was thus found to deviate more from the population norm than that of alcoholic and obese subjects.

The general impression from the results is that bulimic females differ from females at large in the same way as obese females, but to a larger degree than the latter. There was no subscale in which bulimic subjects differed significantly in one direction and obese subjects differed significantly in the other direction, as compared to the results of the random female controls. The scales where bulimics differed significantly from obese subjects were Suspiciousness, Psychasthenia, Irritability and Guilt feelings.

Table 1.

KSP results of obese, bulimic and alcoholic subjects, linearly transformed to Mean values, M=50 and standard deviations, SD=10 for the control group, but not normalised to enforce a normal distribution.

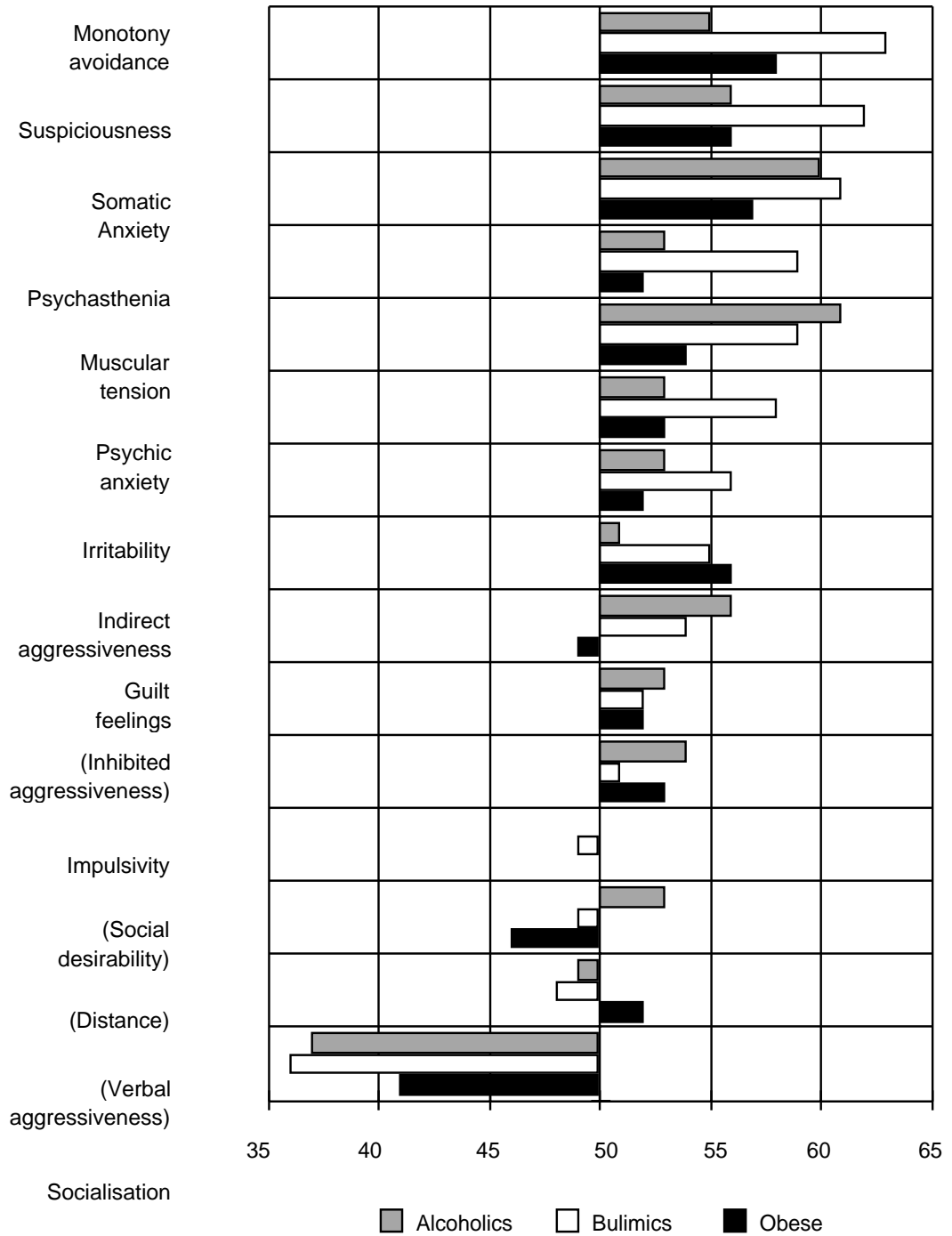
		Obese (n=39)		Bulimic (n=43)		Alcoholic (n=52)	
		M	SD	M	SD	M	SD
Neuroticism	Muscular tension	54*	12	59*	11	61*	15
	Psychasthenia	52	13	59**	14	53	13
	Psychic anxiety	53	11	58*	11	53	12
	Somatic anxiety	57*	11	61*	11	60*	12
Ego strength	Impulsivity	53*	10	51	12	54*	12
	Monotony avoidance	58*	11	63*	11	55*	13
	Socialisation	41*	12	36*	11	37*	14
Aggressiveness	Inhibited aggressiveness	52	11	52	12	53	11
	Guilt feelings	49	10	54**	10	56*	10
	Indirect aggressiveness	56*	10	55*	10	51	9
	Irritability	52	10	56**	9	53	9
	Suspiciousness	56*	13	62**	13	56*	10
	Verbal aggressiveness	52	9	48	11	49	10
Other traits	Distance	46	12	49	11	53	11
	Social desirability	50	10	49	9	50	11

An asterisk (*) in the table marks values which differ significantly from the random control group with $p < 0.05$ according to two-tailed t-tests. Two asterisks (**) marks values which also differ significantly between the bulimic and the obese subjects.

The alcoholic women differed from the random controls in the same direction as bulimic women; the difference was sometimes larger for the alcoholics and sometimes larger for the bulimics. The most significant difference between bulimics and the random sample was observed on *avoidance of monotony* (high for bulimics) and *socialisation* (low for bulimics). Avoidance of monotony is the tendency to seek exciting and stimulating activities and difficulties in coping with boring situations. By socialisation is meant a tendency to identify with commonly accepted norms and roles and a capacity for empathy. Bulimic women were thus found to seek excitement and to behave in more anti-social ways. According to the hypothesis behind this study, Monotony avoidance is a factor related to the craving for quick tension release through eating or drinking, while Socialisation is a factor of relevance for the ability to control this craving.

In general, the three clinical groups were found to have less Ego strength than the random controls, which probably made them more vulnerable to seek pleasure in not always socially accepted ways.

Figure 1. KSP results of obese, bulimic and alcoholic women, sorted according to the values for the bulimic patients. Parentheses mark those personality traits, where no significant difference was found in this study between the subjects and the control group.)



The subscales are sorted according to the results of the bulimic patients.

Comparison with previous studies

The present results agree well with those reported by Björvell (1985), who used the same personality measure in a sample of 45 obese women. Gossop and Eysenck (1980) and De Silva and Eysenck (1987) found similarities in the personalities of bulimics and drug addicts, just like this study. Their results on individual personality traits were somewhat different, as shown by table 2:

Table 2.
Comparison of personality traits found in bulimics in three studies

Gossop and Eysenck (1980)	De Silva and Eysenck (1987)	The present study
Low Extraversion		Not significantly different on the related characteristic Distance
High Neuroticism	High Neuroticism	High Neuroticism
Elevated Psychoticism	High Psychoticism	High Suspiciousness
	Low Social Desirability	Not significantly different Social Desirability, but low on the related characteristic Socialisation
	High Addiction	Not measured

As shown in table 2, the results in the present study agree well with those of the previous studies except for Social Desirability, which De Silva and Eysenck found low but where the present study found no significant difference from the population norm.

Discussion

One might claim that it is a disadvantage with the study that the bulimic women on average were 27 years old, while the obese women on average were 38 years old. However, this does represent a reality in Swedish society today in that bulimics are more common among young women and obesity is more common among older people. The T-scores used in the statistical comparisons compensated for personality differences between age groups by linearly transforming the results of each woman to a scale with $M=50$ and $SD=10$ for an average group of the same age.

Obese people are generally regarded as a heterogenous group, where psychological problems, cultural attitudes and the common increase in weight with reduced calorie needs with age are different causes. Since this study was based on women seeking treatment, those with psychological problems are probably more highly represented than the average. Still, the fact that this study finds less personality difference for obese than for bulimic and alcoholic women may be because to many of the obese women, the obesity was caused by other than psychological factors. Since this study is based on women who sought treatment, it is probably not possible from this research to draw conclusions for those obese people, whose obesity was not psychogenic.

The main impression of the results reported in the present study is the great similarity of the personality of women seeking treatment for obese, bulimic and alcoholic problems. Obese women had mostly the same personality profile, but differed less drastically from the random female control sample from the general population, than the bulimic subjects. This finding would seem to support the hypothesis that similar personality factors are associated with excessive eating and drinking. The findings are also consistent with the general picture of the personality of females with eating disorders, which was summarised in the introduction of this paper, i.e. variable moods, impulsiveness, anxiety and tension, craving for immediate satisfaction and low adjustment to social norms.

Looking at the main personality differences between the clinical groups and the random population sample, one can note the higher levels of Anxiety, Muscular tension and Suspiciousness in the clinical groups. Perhaps the subjects used excessive eating or drinking in order to counteract these negative

feelings. One hypothesis is that excessive eating causes an increase in the release of anxiety-reducing substances. The high value on the Psychasthenia subscale for excessive eaters and drinkers may be due to a need to strengthen themselves by eating or drinking. Maybe excessive alcohol consumption and overeating give a feeling of increased vitality. The low value on the Socialisation scale may mean that such anti-social behaviour as overeating or excessive drinking is more acceptable for these clinical groups than for others. Maybe other people also have tendencies towards overeating or excessive drinking, but because of higher levels of Socialisation, they will not permit themselves to eat or drink excessively.

Overeaters and excessive drinkers had higher scores on Anxiety, Muscular Tension, Suspiciousness and Psychasthenia, and lower ones on Socialisation as compared with the population average. One hypothesis is that anyone of these personality traits *per se* does not cause excessive eating or drinking, but that a combination of them might be necessary for the excessiveness to appear. Another hypothesis for the appearance of the combination of traits is that it is a symptom of or even caused by biological or psychological processes not assessed in the KSP inventory. It is, of course, possible that some of the personality traits, possibly those in the Ego strength group, i.e., Impulsivity, Monotony Avoidance and Socialisation, may relate to causes of the disorders, while other traits found, like those in the Neuroticism group, might instead be a result of the disorders.

One should also note that the bulimic, obese and alcoholic subjects were all women who had voluntarily sought help for their disorders; thus, we cannot ascertain if men or those women who do not ask for help have the same personality characteristics.

When such a personality inventory as KSP is used, one is of course limited in scope by the particular characteristics assessed in the inventory. Some of the personality traits expected to appear in connection with eating disorders according to previous research are not included in the KSP inventory.

Future work

It would be valuable to run a study, similar to this one, on people with the same addictive disorders, but who do not seek voluntary treatment, in order to check whether the results found in this study are valid only for those seeking treatment or also for other people with similar problems.

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