



NEGATIVE EXPERIMENTAL RESULTS

The “psychosomatic” family system: are families with Eating Disorders more enmeshed and rigid than normal controls?

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Traditionally, the key features of the family system of Eating Disorders (EDs) have been considered those originally outlined by Minuchin in his description of the “psychosomatic” family patterns of interaction. This controlled study tests two of the principal characteristics of Minuchin’s model, namely enmeshment and rigidity, operationalised as extreme cohesion and low adaptability. Perceived and desired cohesion and adaptability, measured with the FACES III, were compared between 30 clinical families (mothers, fathers and daughters with an ED) and 30 non-clinical families. Differences across ED family members were also considered, as well as differences between ED symptomatological subgroups (restricting anorexics vs EDs with bulimic symptoms). High cohesion scores were found in ED families, but similar findings were also reported in control families. Cohesion scores were significantly higher in restricting anorexics than in patients with bulimic symptoms. Adaptability was normal in both ED and control families. This study does not support Minuchin’s observations on family enmeshment and rigidity. Although high levels of cohesion were found in ED families, the same relational pattern was found in the control families, suggesting that a tendency to a hyper-involvement of family members might be “normal” in some sociocultural contexts.

Keywords: anorexia, bulimia, family structure, family therapy, systemic therapy

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INTRODUCTION

Family therapy is a common treatment for eating disorders (EDs), with many research groups engaged in this field. After the two classical books written by Selvini Palazzoli (1974) and Minuchin, Rosman and Baker (1978), a relevant number of clinical observations and researches followed.

Traditionally, family therapies of EDs have been developed based on classical descriptions of the *typical* anorectic or “psychosomatic” family (Weme & Yalom, 1996). For decades the key features of the anorectic family system have been considered those clearly outlined by Minuchin and colleagues in their original observational setting (Minuchin, Rosman and Baker, 1978). According to their model, four family system characteristics were typical of the anorectic, psychosomatic families.

The first was **enmeshment**, defined as a form of hyper-involvement of family members result-

ing from weak family boundaries: observational signs of this phenomenon were excessive togetherness, lack of privacy, tendency of the members to speak for one another, and so on. It was suggested that in this case the perception of oneself as distinguished from the other family members was poorly differentiated, and that family loyalty was considered as a value of primary importance (the converse being that asserting a proper point of view had to be seen as a threat for the family wellbeing).

The second characteristic was **overprotectiveness**, each family member being involved in protective responses and excessive nurturing. Examples of this phenomenon are the anorectic patient that cooks for the others and controls that they eat enough while disregarding her own starvation, or the parents of anorexics perceiving their role in the family as a personal sacrifice, a phenomenon originally described by Selvini

Palazzoli (1974).

The third characteristic is the **rigidity** of the interactional patterns, rigid families being heavily committed to maintaining the status quo and denying the need for change. In “normal” conditions a rigid equilibrium can be asymptomatic, but the lack of adaptability when the situation changes can put the system into a crisis.

Finally, the fourth principal characteristic is **avoidance of conflict**: family members do not tolerate overt conflicts, and so any discussion involving differences of opinion is avoided. As a consequence, problems that are not discussed remain unresolved (lack of conflict resolution).

Overall, the Minuchin’s picture of the interactional style in anorectic, “psychosomatic” families, suggests that the eating disorder is a means to avoid overt family and parental conflict. The family is so concerned and over-protectively focused on the eating disorder that all the other problems can be scotomized.

Minuchin’s group tested for the presence of a specific “psychosomatic” family structure in a controlled study involving forty-five psychosomatic families (11 with anorectic children, 9 with psychosomatic diabetic children, and 10 with asthmatic children) compared to two control groups with non-psychosomatic diabetes. Although findings were supporting their model for all the psychosomatic groups, the study design was criticized because a detailed account of how the tested constructs were operationalized was not given: this study remaining an anecdotal report (Blinder, Chaitin & Goldstein, 1988).

Although anecdotal reports show a great deal of variability and evidence from research is conflicting (e.g., Kramer, 1983; Leon et al., 1985; Strober and Humphrey, 1987; Dare et al., 1994; Laliberté et al., 1999; Laporte et al., 2001; Cook-Darzens et al., 2005), the psychosomatic family model of eating disorders is still quoted as a main factor in their pathogenesis and family therapy is often aimed at modifying this relational pattern (Rutherford and Couturier 2007; Dattilio et al., 2010; Abbate Daga et al., 2011; Rasheed et al., 2011).

The aim of this study is to test two of the principal characteristics of the EDs “psychosomatic” family interactional patterns, namely enmesh-

ment and rigidity.

MATERIALS AND METHODS

Participants. All women referred to an inpatient Psychiatric Clinic over an 18-month period with an eating disorder were asked to participate in the study. After the initial socio-demographic and clinical assessment, patients and their parents were invited to complete the FACES III (Olson et al., 1979, 1985), administered in the Italian version (Galimberti and Farina, 1990). Subjects were clinically diagnosed as having an eating disorder according to the DSM-IV. Exclusion criteria were: a) a psychiatric diagnosis of schizophrenia, delusional disorder, delusional depression or bipolar disorder. Patients presenting with depressive symptoms without delusions were included only if the eating disorder was not a symptom of the depressive syndrome, its onset and course being independent; b) an history of drug addiction; c) a low cognitive level; d) the presence of a medical disease from which the eating disorder was better explained. Moreover, the family was excluded if one of the parents or any patient’s sibling had one of the above mentioned psychiatric disorders or drug abuse.

Thirty patients and their parents were recruited. All patients were females. Thirteen (43.3%) were restricting anorexics, 8 (26.6%) were binge-eating/purging anorexics, 8 (26.6%) were bulimics and one patient had an eating disorder not otherwise specified (chewing and spitting out syndrome).

All the contacted families fulfilled the diagnostic criteria and were included into the study.

In 8 cases, patients were living with one parent only (the mother): in 7 cases this was due to father’s death, while in one case parents were divorced. In one case, parents refused to fulfill the questionnaire. One father was unable to complete the test due to somatic handicap.

The control group of subjects with no psychiatric disorders was recruited among high-school and university students. Subjects were matched for sex and, as closely as possible, for age with patients. Their socio-demographic and educational status were comparable to patients. Parents were then approached to take part in the study. In one case parents refused to fulfill the questionnaire. In one case parents were divorced and the

father refused to fulfill the questionnaires. Axis I psychiatric diagnoses, drug abuse, low cognitive level and medical diseases influencing eating behavior were considered exclusion criteria. For family members, the same exclusion criteria of the eating disorder families were used.

Patients' mean age was 22.1 ± 4.91 , control girls' mean age was 22.8 ± 5.33 . Those mean ages were not significantly different ($p=0.59$).

Measures. Each member of the clinical and control families who accepted to enter the study completed the Italian version (Galimberti and Farina, 1990) of the FACES III, a self-administered questionnaire designed to evaluate some features of the family structure and communication style (Olson et al., 1979, 1985). It consists of two separate parts, the first one assessing how the subject perceives its family ("real" family), and the second one referring the same questions to the "ideal" functioning the subjects wish for their families. Each part is then to be divided in two different scores, one measuring family cohesion and the other assessing family adaptability. According to Olson and colleagues (Olson et al., 1983, 1989), cohesion is the emotional bond among family members, while adaptability is the ability of the family system to change its power structure, its roles and rules. The first index was considered as an indirect measure of the level of Minuchin's enmeshment while the second one was used to test family rigidity. To sum up, FACES III main indexes are the "real" family cohesion (RFC) and adaptability (RFA) on the one hand, and the "ideal" family cohesion (IFC)

and adaptability (IFA) on the other. All the above mentioned indexes can be considered separately for each family member or for the family as a whole (the last resulting from the mean of members' scores).

Data analysis. Statistical analysis was performed using the SPSS 10.0 for Windows statistical package. A Student's t Test was used to compare FACES III scores between clinical and control families as well as between family members. Comparison of FACES III scores between families of restricting anorectics and families of patients with bulimic symptoms (bulimics and purging/vomiting anorectics) was performed using the non parametric Mann-Whitney U Test.

RESULTS

Table 1 shows that the ED families did not differ from control families on the following FACES III indexes: "Real Family Cohesion", "Real Family Adaptability", "Ideal Family Cohesion", and "Ideal Family Adaptability".

Within the ED families, some differences were found either between the actually perceived family/ desired one and the comparison of each FACES III index score reported by each family member (Table 2). In particular, ED patients desired much more cohesive and adapted families, the differences being highly significant: patients' real vs ideal family cohesion: 34.5 ± 9.71 vs 42.5 ± 4.9 ($p < 0.001$); patients' real vs ideal family adaptability: 26.8 ± 6.3 vs 33.4 ± 4.95 ($p < 0.001$). ED mothers and fathers were both satisfied with their family cohesion,

Table 1
Eating Disorder Families vs Control Families

FACES III indexes	Eating disorders*	Controls*	p values§
Real Family Cohesion (daughters)	34.5 ± 9.71	36.5 ± 8.8	0.40
Real Family Cohesion (mothers)	38.1 ± 8.4	40 ± 7.15	0.38
Real Family Cohesion (fathers)	41.1 ± 4.6	41.1 ± 7.03	0.97
Real Family Adaptability (daughters)	26.8 ± 6.3	28.6 ± 5.77	0.26
Real Family Adaptability (mothers)	29 ± 6.91	30.2 ± 6.32	0.50
Real Family Adaptability (fathers)	28.2 ± 3.97	30.3 ± 5.77	0.14
Ideal Family Cohesion (daughters)	42.5 ± 4.9	41.2 ± 6.27	0.38
Ideal Family Cohesion (mothers)	41.3 ± 6.82	43.7 ± 4.2	0.13
Ideal Family Cohesion (fathers)	42.5 ± 5.01	44.6 ± 5.48	0.18
Ideal Family Adaptability (daughters)	33.4 ± 4.95	32.4 ± 5.22	0.47
Ideal Family Adaptability (mothers)	34.4 ± 5.32	32.7 ± 6.89	0.33
Ideal Family Adaptability (fathers)	30.9 ± 5.25	33.5 ± 5.61	0.13

*: Mean scores $\pm$ DS; §: Student's T Test

respectively 38.1 ± 8.4 vs 41.3 ± 6.82 ($p=0.14$, n.s.) and 41.1 ± 4.6 vs 42.5 ± 5.01 ($p=0.30$, n.s.). On the opposite, they tended to desire more family adaptability, but only mothers' scores were significantly different, respectively 29 ± 6.91 vs 34.4 ± 5.32 ($p<0.01$) and 28.2 ± 3.97 vs 30.9 ± 5.25 ($p=0.055$, n.s.). When ED family members were compared, daughters reported their family cohesion to be significantly worse than their fathers (34.5 ± 9.71 vs 41.1 ± 4.6 ; $p<0.01$), other differences being not significant. When mothers and fathers were compared, the only significant difference was that mothers desired a more adaptable family than their husbands: 34.4 ± 5.32 vs 30.9 ± 5.25 ($p<0.05$).

Finally, Table 3 shows that, when families of restricting anorectics were compared to families of patients with bulimic symptoms (bulimics and purging/vomiting anorectics grouped together), the former group perceived their families as much more cohesive than patients with bulimic symptoms ($p<0.01$). Another difference was that fathers of patients with bulimic symptoms tended to desire a family ideally more cohesive,

even if this tendency did not reach a statistical significance ($p=0.06$).

DISCUSSION

Our study was designed to explore some of the family characteristics which systemic-oriented therapists usually consider relevant in eating disorders.

Previous studies had found conflicting results on ED family cohesion, scores ranging from low (Laliberté et al., 1999) to normal values (Dare et al., 1994). In our sample, scores on ED family cohesion tended to be high (patients: 34.5 ± 9.71 ; mothers: 38.1 ± 8.4 ; fathers: 41.1 ± 4.6) and family members (particularly the patients) desire a further increase of cohesion. At first glance this result supports the classical "psychosomatic" model asserting that EDs families are enmeshed. However, when compared to "normal" families, differences were no more significant. This suggests that the enmeshment seen in early observational settings might be not specific of the EDs families but a quite diffuse condition even in "normal" families (at least in the specific cultural context of South-Center Italian families).

Table 2

Significant differences between "real" and ideal" scores, and between ED Family members

FACES III indexes	Mean scores $\pm$ DS		p values [§]
Real vs Ideal Family Cohesion (daughters)	34.5 ± 9.71	42.5 ± 4.9	<0.001
Real vs Ideal Family Adaptabil. (daughters)	26.8 ± 6.3	33.4 ± 4.95	<0.001
Real vs Ideal Family Adaptability (mothers)	29 ± 6.91	34.4 ± 5.32	<0.01
Real Family Cohesion (daughters vs fathers)	34.5 ± 9.71	41.1 ± 4.6	<0.01
Ideal Family Adaptabil. (mothers vs fathers)	34.4 ± 5.32	30.9 ± 5.25	<0.05

§: Student's T Test

Table 3

Restricting Anorectic Families vs Families of Patients with Bulimic Symptoms

FACES III indexes	Restricting Anorectics	Bulimic Symptoms	p values [§]
Real Family Cohesion (daughter)	39.23 ± 6.39	30.87 ± 9.58	0.01
Real Family Cohesion (mother)	38.83 ± 9.30	37.38 ± 8.16	0.18
Real Family Cohesion (father)	39.66 ± 3.57	41.87 ± 5.84	0.39
Real Family Adaptability (daughter)	28.61 ± 5.43	25.37 ± 6.92	0.13
Real Family Adaptability (mother)	28 ± 6.06	29.92 ± 7.99	0.38
Real Family Adaptability (father)	26.55 ± 3.74	29.5 ± 4.78	0.19
Ideal Family Cohesion (daughter)	43.04 ± 3.45	40.93 ± 5.55	0.13
Ideal Family Cohesion (mother)	42.81 ± 5.21	40 ± 8.36	0.72
Ideal Family Cohesion (father)	39.5 ± 5.18	45 ± 3.38	0.06
Ideal Family Adaptability (daughter)	34.15 ± 3.23	32.93 ± 6.15	0.72
Ideal Family Adaptability (mother)	34.45 ± 4.45	34.30 ± 6.35	0.72
Ideal Family Adaptability (father)	30.75 ± 5.39	30.62 ± 5.6	0.81

*: Mean scores $\pm$ DS; §: Mann-Whitney U Test

When subgroups were compared, the high cohesion appeared to be more specific of restricting anorectics, who reported higher scores on both real and ideal cohesion compared to patients with bulimic symptoms.

The other main characteristic considered in our study was adaptability. Both real and ideal adaptability were similar in ED and “normal” families, in line with previous research (Dare et al., 1994; Cook-Darzens et al., 2005). No significant differences were also found on adaptability between “restricting anorectics” and “bulimic symptoms” families. Thus, Dare and colleagues’ (Dare et al., 1994) report of more desired adaptability in bulimics than in anorectics was not confirmed. Overall, this finding contrasts the classical hypothesis that EDs families, being rigid, show low adaptability.

Before concluding, some possible limits of our study should be discussed.

First of all, according to North and colleagues (1995), there may be a significant difference between family self-perception and therapists/observers evaluations (in their study, anorectics and their mothers rated their family functioning as normal whereas the interview ratings suggested the families were dysfunctional). As a consequence of this difference, our data using a self-administered instrument should be compared to previous observational studies only with caution.

The second limit is that our sample was quite

small and thus subject to a possible type II error. However, our findings are supported by other similar results found in previous studies.

In conclusion, our findings suggest that high cohesion (*enmeshment*) and low adaptability (*rigidity*) are neither specific of EDs family structure nor commonly shared by all EDs subtypes. In particular, it should be stressed that the original “psychosomatic” model was based on observation of clinical settings in a particular era (the Seventies) and in a particular place (North America). A possible interpretation of our data, to be addressed in further studies, is that: a) in the meanwhile the characteristics of EDs might have changed (early studies were on more rare and severe cases, while today EDs are better known and early treated, so less severe cases are more likely to be seen in Eating Disorder Services), and b) the “psychosomatic” characteristics were “abnormal” in the American society, in which family values include early autonomization, while they are more in line with the “normal” strong commitment to the family in the South-Center Italian society.

Overall, our findings are in line with those researches that argue “against the ‘psychosomatic family’ stereotype and point in favour of family models which are more flexible and resource-based and seek to optimally mobilize the family’s strengths and normal strivings” (Cook-Darzens et al., 2005, p.233).

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