Disturbances in the development of the self have been identified as important factors that contribute to the formation and persistence of eating disorders. Thus, they are an important focus for intervention to promote attitudinal and behavioral change.

In her early theoretical work, Hilde Bruch argued that anorexia nervosa (AN) is caused by the failure to develop a diverse set of identities or self-definitions.1, 2 Highly controlling and perfectionistic parenting was believed to limit the child's opportunities to function autonomously and to interfere with development of a clear and richly elaborated self. Bruch suggested that the adolescent turns to body weight as a viable source of self-definition and as a means of compensating for the lack of a clear identity and for associated feelings of powerlessness and incompetence. From this perspective, the adolescent's fixation on body weight as a viable source of self-definition and as a means of compensating for the lack of a clear identity and for associated feelings of powerlessness and incompetence. From this perspective, the adolescent's fixation on body weight as a viable source of self-definition and as a means of compensating for the lack of a clear identity and for associated feelings of powerlessness and incompetence.

Deficits Enhance the Persistence of AN and BN

More recently, other eating disorders researchers have similarly argued that disturbances in the self play a primary role in the formation of both AN and bulimia nervosa (BN). For example, Strober conceptualizes the failure to establish a clear and stable set of self-definitions as the core psychopathology underlying AN.3 However, he suggests that a genetically-based personality style of high stimulus-avoidance, low novelty seeking, and high reward dependence, rather than restrictive parental behaviors alone, inhibits the natural exploration necessary for normal self-development.

Vitoresek and Ewald suggest that both genetic and environmental factors contribute to the failure to develop a clear and stable set of positive selves, leading to an over-reliance on environmental cues to define the self. 4 Boskind-Lodahl and, more recently, Schupak-Neuberg and Nemeroff similarly argue that, at its core, BN stems from the absence of a true self and from the overemphasis on physical appearance as a concrete solution to the absence of an authentic self. 5,6

A Lack of Clear Definitions

Although these theories point to disturbances in the self as an important cause of the eating disorders, several problems have limited their effectiveness as

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Self-schemas are comprised of three distinct types of knowledge, including: (1) semantic knowledge, generalizations, or abstractions that reflect "who the self is" that are stored at the highest levels of the hierarchy; (2) episodic knowledge, special autobiographical memories nested at the lowest levels of the hierarchy; and (3) procedural knowledge, or action-based memories in the form of skills, rules, and strategies for making judgments, drawing inferences, and accomplishing goals relevant to the domain (Personality and Social Intelligence, 1987).

Self-schemas can be developed about any aspect of the person, including physical characteristics (short, fat, bald), social roles (mother, friend, student), personality traits (independent, outgoing), and areas of particular interest and skill (computer expert, cello player, tennis player). Because of the rich array of information encoded in the self-schema and its repeated activation, self-schemas are stable, enduring structures that are chronically accessible in working memory (J Personality & Social Psychology, 1988; 55:599).

Functional Memory Structures

Once established in memory, self-schemas are functional memory structures. They influence information processing, and organize, motivate, and regulate behavior. Studies have shown that self-schemas enable consistent, competent, goal-directed behavior; stability of the self-view and positive affect states.

In contrast to self-schemas, other, more peripheral, knowledge about the self is stored in less fully developed memory structures. (Figure 1 offers a schematic overview of the cognitive components of the self-concept.) These structures may be comprised of isolated episodic memories of the self in specific contexts and lack the abstract semantic conceptions derived from repeated experience in the content area. As a result, these peripheral self-conceptions are not chronically active in work-
ing memory and are less able to function as reliable guides for information processing and behavioral regulation.

Despite having equal ability and intention, persons without a self-schema in a given content area are more susceptible to environmental challenges. They are also less able to reliably translate their intentions into effective behaviors and less able to utilize social information to support their self-view. They also report higher levels of emotional distress and dissatisfaction.

In addition to individual differences in the content of self-schemas, differences also exist in the extent to which each self-schema reflects a positive or negative characteristic of the self. Furthermore, studies have shown important differences in the regulatory consequences of positive and negative self-schemas. Whereas positive self-schemas facilitate goal-directed behavior and positive mood states, negative self-schemas are associated with negative mood states and withdrawn, risk-avoidant behaviors (J Personality & Social Psychology, 74: 1364). The relative proportion of positive to negative self-schemas available in memory may be the cognitive foundation of observed differences in global self-esteem, the affective component of the self-concept. Studies have shown that in normal samples, persons with low self-esteem have more unstable peripheral self-conceptions and fewer positive self-schemas available in memory (Self-esteem: The puzzle of low self-regard, 1993) but these properties of the self-concept have not been systematically examined in clinical samples.

Based on the eating disorder theory of self disturbances and research that has shown that individual variation in the array of self-schemas influences emotional health and well-being, we predicted that women with an eating disorder would have fewer positive self-schemas available in memory and would be more likely to have a fat self-schema available in memory compared to controls. Furthermore, we hypothesized that the number of positive self-schemas would predict the availability of a fat self-schema, which would in turn predict body dissatisfaction and disordered eating behaviors.

**Study Population and Methods**

Our study included 79 women with a diagnosed ED and 34 women with no history of an eating disorder or other mental disorder (controls). The Structured Clinical Interview (SCID) was used to determine eligibility to participate. Of the 79 ED women, 26 met either full criteria for AN (n = 12) or subthreshold level criteria for the disorder (n = 14). Fifty-three women met either the full criteria for BN (n = 29) or subthreshold level criteria for the disorder (n = 24).

Zajonc’s card-sorting task was used to measure the number of valenced self-schema. Participants were given a stack of 52 blank index cards and asked to write down all descriptors that are important to how they think about themselves. Next, they were asked to rate each descriptor according to: (1) degree of self-descriptiveness, (2) degree of importance to one’s self-description, and (3) whether the descriptor was positive, negative or neutral. In keeping with previous research on self-schemas (Personality & Social Psychology Bulletin, 1997;23:139), descriptors that were rated highly self-descriptive and highly important (8 to 11 on an 11-point scale) were identified as self-schemas.

**Results Support the Concept of Disturbed Self**

The results provide evidence to support the self-concept disturbance hypothesis. While women in the three groups did not differ according to the total number of self-schemas available in memory, women in both the AN and BN groups had fewer positive schemas compared to women in the control group. For women in the AN group, 57.5% of their self-schemas were positive, for women with BN, 60.5% were positive compared to the 82% of self-schemas that were positive for controls. The three groups also differed according to the number of negative self-schemas, with both AN (29%) and BN (28.4%) reporting...
more negative self-schemas compared to control women (7%). Also as predicted, women in the BN group demonstrated a pattern of information processing suggesting that they have a “fat” schema available in memory. Controlling for the effects of BMI and general information processing differences, the BN group endorsed as self-descriptive a greater proportion of fat adjectives, and were slower to make “not me” judgments of fat adjectives compared to the control group. No differences were found in the recall scores.

When considered along with the fact that all but six women in the group were currently within a low normal-to-normal weight range (body mass index, or BMI: mean = 22.2, range, 18.2 – 27.9), these results support the hypothesis that women with BN have an unrealistic conception of the self as fat. However, women in the AN group did not show clear information processing evidence of a fat self-schema.

Finally, fewer positive self-schemas predicted a higher fat self-schema score, which in turn predicted higher body dissatisfaction scores and higher disordered eating behaviors scores. Objectively measured BMI was also predictive of fat self-schema scores, and high BMI predicted higher fat self-schemas scores.

What Is The Proper Focus of Intervention?

The results of this study highlight the importance of the total collection of self-schemas as the context for the development of eating disorder symptoms, and offer preliminary evidence to suggest that interventions designed to promote the development of new positive self-schemas may be an important factor in identifying alternative sources of motivated behaviors and promoting recovery from the eating disorders.

References

Bulimia Nervosa and Parental Interference

The combination of a jealous or competitive mother who invades her adolescent daughter’s privacy, and a seductive father may contribute to their daughter developing bulimia nervosa (BN). Maternal and paternal over-concern with their daughters’ eating, weight, and shape may also propel daughters to binge-eat and purge.

Dr. Marcia Rorty, Pasadena, CA, and colleagues used the Parental Intrusiveness Rating Scale (PIRS) to evaluate 86 women with a lifetime history of BN and 573 comparison subjects (Int J Eat Disord 2000;28:202). The PIRS Scale is a 40-item scale that uses a 5-point Likert-type response format ranging from 1 (never) to 5 (always). The PIRS was developed in 1997, and was based on in-person interviews with active and remitted bulimic women.

More than any other factor, these women cited problematic interactions with their parents as a cause of their bulimia. They described their parents not as over-involved or globally under-involved with them, but as intrusive in specific areas where they sought personal privacy and autonomy (such as personal appearance, private space, and weight and shape).

As they developed the PIRS, Dr. Rorty and colleagues found that women with a lifetime of BN reported higher levels of intrusion by parents and less clearly defined boundaries during adolescence than did comparison women. Specifically, the women with BN reported that their mothers were more likely to invade their personal privacy, relate to them in a jealous and/or competitive manner, and show over-concern about their daughters’ eating, weight, and shape. And the fathers also played a role: bulimic women reported higher levels of seductive or sexualized interactions from their fathers and greater paternal concern with the daughters’ eating behavior. However, the fathers of BN patients were not more likely to

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intrude upon their privacy than fathers of comparison subjects.

**A pattern across ethnic backgrounds**

The study included 239 Caucasians, 177 Asian Americans, 83 Latinas, 34 African-Americans, and 23 who identified themselves as "Other," and were mainly Middle Eastern. In the current study, ethnicity apparently did not play a part—women from varied ethnic groups reported relatively similar patterns of parental behavior. One exception was that Caucasian women reported significantly higher levels of jealous and competitive behavior by their mothers than did Asian American/Pacific Islander subjects.

**‘What Caused Your Eating Disorder?’**

When women described what they felt had caused their eating disorder, many pointed to cruel teasing by parents and siblings, family competitions to see who could lose the most weight, and fathers or brothers reacting to the daughters’ changing adolescent bodies by labeling the girls as “fat,” or using other derogatory terms. Others reported pressure to be thin to maintain family appearances and even modeling their binge-eating and purging behavior after their mothers’ behaviors.

**Magazine Ads and Body Dissatisfaction**

Drs. Robyn L. Williams and J. Kevin Thompson at the University of South Florida evaluated the effects of advertising on body image by having 138 female undergraduates view a 5-minute slide presentation with 1 of 4 magazine ads: a 2-page ad with an attractive model on one page endorsing a beauty product, the same ad but only with the beauty product, an ad with an attractive model demonstrating a household product, and a neutral ad showing a household product alone. The women who viewed ads with the models reported greater degrees of body dissatisfaction, lower levels of physical fitness, higher levels of overall appearance dissatisfaction, depression, and anger.

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**Book Review**

**Treatment Manual for Anorexia Nervosa: A family-based approach**

(J. Lock, D. Le Grange, W. S. Agras, and C. Dare. New York: Guilford Press, 2000, 279 pp, $35.00)

When a new treatment manual for anorexia nervosa appears, we should all take notice. When the treatment manual is based on empirically supported and validated methods, we should applaud. When the treatment manual based on empirically validated methods is the first of its kind? in this case a family therapy approach? we should all run out to purchase a copy, read it, and incorporate the methods into our thinking and practices.

Among the few published evidence-based studies concerning psychotherapeutic interventions for anorexia nervosa, that of Dare, Eisler, Russell and their colleagues at the Maudsley Hospital in London has certainly achieved the highest ranks. That research, which examined the efficacy of family therapy for younger patients with anorexia nervosa, incorporated some of the concepts of earlier family theorists such as Minuchin, Madenes, Palazzoli and their co-workers, and went beyond them to develop controlled studies examining the impact of family therapy on anorexia nervosa.

Building on that work, and incorporating the work of Robins, Lock and his colleagues, who are using the manual as the basis for ongoing research at Stanford, have given us an extremely welcome review of the rationale for a family therapy approach and a guidebook for achieving a meaningful intervention. Focused largely on adolescent anorexia nervosa patients living at home, the treatment entails approximately 20 visits over one year. The primary treatment team ideally consists of a knowledgeable clinician and a co-therapist. An associated consulting team includes a primary care physician, usually a pediatrician, a nutritionist, and other specialists as needed. The lion’s share of the work falls to the family in the home under the guidance, support, and supervision of the treatment team.

Treatment is designed to occur in three phases. The basic philosophy is pragmatic and “agnostic” regarding the efficacy of family therapy for younger patients with anorexia nervosa—families are not blamed for the patient’s disorder. Here’s the bottom line: ‘The first phase, usually requiring 3 to 5 months, compels the parents to re-assume parental control over the patient’s eating. The family’s perspectives about the eating disorder and their actions toward the adolescent are prescribed by the treatment. Parental authority and sib-sib boundaries are re-established and reinforced. The family is obligated to find solutions that work for them—to devise a way to see to it that the patient eats and that a healthy weight is restored. They are to treat the patient with dignity and respect, acknowledging her point of view and experience, and making clear distinctions between the patient, who is cherished, and her disease, which is objectified and battled. During this time other family conflicts and disagreements related to the impact of the eating disorder and other issues are deferred.

Phase II begins once the patient accepts the family’s demands that she eat and as weight is being restored. At this time, control over eating and weight is restored to the patient, and the other family issues can be addressed. In Phase III, the team and family focus on the adolescent’s development, particularly upon needs for increasing autonomy and separation from the family, getting back on track, and helping the family to focus on non-eating-disorders issues.

The manual addresses many practical issues, including dealing with noncompliant families and with hospitalized patients, and how the approaches described here still apply to weight-restored patients. The early treatment sessions are spelled out in great detail, and rich case vignettes are used to illustrate treatment phases. Many common questions posed by families and intercurrent difficulties likely to be experienced are anticipated and discussed.

To sum up, every clinician who works with adolescents with eating disorders will want to own and study this book. It’s an extremely welcome addition. We can expect that the ongoing research based on this manual will produce refinements and modifications in the years to come. Until future editions incorporate those changes, this manual is likely to become a standard for the field.

– J.Y.
Meal Support, Part II

(Part I, in the last issue, introduced the concept of meal support, and discussed its benefits and drawbacks, and issues of practice during treatment. The second article in this two-part series describes meal support guidelines at the St. Paul’s Hospital Eating Disorders Program, Vancouver, British Columbia.)

A Brief History of the SPH Meal Support Program

Meal support began at St. Paul’s Hospital (SPH) Eating Disorders Program in 1994. At that time the average length of stay in the inpatient program was reduced from 3 months to 3 weeks. Understandably, the treatment team was concerned that the program shift might interfere with the clients’ ability to become medically stable and to begin weight restoration. Meal support was introduced to solve this treatment dilemma. The rationale for meal support is the same today as it was 6 years ago: to respectfully monitor clients’ food intake and to provide them with emotional support during meals.

Making the Decision to Eat with Clients

Establishing meal support at SPH has been a process of trial and error. Unfortunately, nothing could be found in the scientific literature that could be used as a reference or a guide. Thus, client feedback and staff observations have shaped the manner in which meal support is provided to clients.

Shortly after meal support was implemented, the SPH team made the decision to eat with the clients because patients felt self-conscious and “watched” during the staff-supervised meals. Almost immediately after the staff began eating with patients, the patients reported feeling more supported with eating. As part of a survey study in spring 1999, 18 clients were asked how helpful it was to have support staff eat a “balanced” meal with them. Using a five-point Likert scale, ranging from “extremely helpful” to “not helpful at all,” 100% of the clients responded that it was “extremely helpful” to have staff members eat with them.

Almost All Team Members Participate

All team members in the inpatient program and almost all the outpatient treatment programs take turns providing meal support to clients. Depending on what the patient is eating, the support staff will have a hospital tray or a meal brought from home. Hospital trays for both patients and support staff are funded by the treatment programs and are provided by the patient food services department at SPH.

The SPH team believes that meal support is an exceptional situation that requires modeling healthy eating behavior for clients. The staff eats a “balanced” meal that includes at least 3 of 4 major food groups. While personal dietary practices and preferences are a part of real life, staff members are aware of their potential negative impact on clients. Thus, dietary practices such as vegetarianism and diets necessary for medical reasons are acceptable during meal support, but eating patterns that exclude one or more food groups or that emphasize low-fat and diet food items are not.

Meal Support Guidelines

Staff observations and client feedback have also been instrumental in the development of meal support guidelines. In the survey study mentioned earlier, 62.5% of clients reported that staff needed to be more aware of eating-disordered behaviors. One client responded: “The staff needs to be aware of the specific rules around meal-taking at all times and keep their eyes open to suspicious eating disorder behaviors. We are the experts, you know!” Patients also stated that support staff were not consistent about checking meal trays and permitting clients to get up from the table during the meal.

The results of the survey study were used to revise existing meal support guidelines in an attempt to improve consistency among support staff. The following guidelines are currently used in the inpatient and outpatient programs:

Duration of the meal. To encourage healthy social and emotional aspects of eating, clients on the inpatient unit ate staff meals together at the table for 3 weeks. Under-
Clients in the outpatient programs are asked to replace uneaten food with solid food because they are further along in their nutritional recovery. The staff assists patients in choosing an appropriate food replacement. Liquid supplement is only used in extenuating circumstances, such as illness. Occasions when patients refuse replacement are documented and discussed with them at another time, away from the table.

Mealtime conversation. To promote the social aspects of eating and to create an environment that facilitates eating, clients are asked not to discuss topics related to food and weight during the meal. The staff redirects unhealthy conversation by focusing on neutral subjects, such as cultural events, hobbies, and pets. The staff refrains from discussing their own beliefs and practices concerning weight/shape, eating, and exercise.

Eating-disordered behaviors. To develop "normal" eating habits, clients are asked to not engage in eating-disordered behaviors during the meal. Examples of eating disordered behaviors include: eating or drinking diet foods and beverages, using excessive amounts of spices and condiments, consuming excessive amounts of caffeinated beverages, mixing foods together in an unusual manner, and diluting food and beverages with water. Support staff promptly addresses eating disordered behaviors at the table, always in a supportive and respectful manner.

Post-meal support. To break the binge-eat/purge cycle and promote effective coping strategies, clients on the inpatient unit receive support from the staff for one hour after the meal. During post-meal support, staff encourages clients to engage in distraction activities such as arts and crafts. Another staff member on the unit accompanies clients who need to temporarily leave the support group. In the outpatient day program, post-meal support is more informal. Staff checks with clients to determine whether they need support at the end of the meal.

Therapeutic boundaries. To help the staff avoid disclosing personal information that could interfere with the therapeutic process, clients are informed that some team members may choose not to answer personal questions. Since this guideline may be confusing to clients, those needing clarification of this rule are asked to speak with staff.

Meal Support Enhances Nutritional Recovery

The SPH team believes meal support is extremely useful for clients working on their nutritional recovery. This treatment component helps clients improve their nutritional status and provides them with an opportunity to develop a healthier approach to food and eating. The program's decision to eat with clients during meal support has been well received by patients. Having a meal with clients creates a greater sense of community and enhances the social aspect of eating.

Through experience, the treatment team has come to understand the importance of well-developed guidelines. Meal support guidelines provide clients with a sense of safety and structure because they communicate eating and behavior expectations. Guidelines should clarify the expectations for clients, define the responsibilities of support staff, and briefly explain its rationale.

A Change of Focus May Improve Efforts to Prevent Eating Disorders

Over the past 20 years, research into preventing eating disorders has been pioneering and ambitious, but has had little effect, according to Dr. S. Bryn Austin, Harvard School of Public Health, Boston. Dr. Austin suggests that a more effective means of preventing eating disorders may involve taking a proactive approach to changing the social environment and using cross-disciplinary collaboration to reach students (Psychol Med 2000;30:1249).

After an intensive search, Dr. Austin found only 20 empirical intervention studies in the literature, and half of these involved only girls and young women. Although eating disorders have garnered much attention from feminist researchers during the last 25 years, Dr. Austin writes, "Little of the interest in social, political, and economic factors has been carried over into the prevention end of eating disorders research."

Changing the social environment

According to the author, past interventions may have failed due to a fundamental disjunction in the transition from theories of etiology to theories of prevention. Primary prevention strategies train patients to view media and cultural messages relating to the thin ideal with a critical eye and to foster psychological resilience to the pressure to control weight at any cost. Thus, such interventions use a therapy of adaptation, aimed at training girls and boys how to adapt to a noxious environment. "Expecting boys and girls to develop resilience to unhealthy pressures may prove to be less successful than searching out avenues to make significant changes in that social environment," Dr. Austin writes.

Dr. Austin suggests that information about the disordered eating risk environment in schools not only reveals something about the individuals but also gives an indication of dieting patterns at a school and the amount of exposure the student population has to dieting peers. Even the curricula can be revealing. For example, health, media education, physical education, sciences, social studies and other course materials can be evaluated in terms of the degree to which healthful nutrition, and exercise, body acceptance, and other related topics are promoted.

The physical and social environment of a school can also be assessed. For example, are healthful foods available in the cafeteria? Are cafeteria foods promoted as "diet

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Clarifying Perfectionism in Anorexia Nervosa

Q. I’ve often heard “perfectionism” referred to as a typical characteristic of patients with anorexia nervosa, but I’ve never been quite sure as to what this perfectionism refers. My own patients with anorexia nervosa seem far from perfect, and many of them seem to have little interest in becoming “perfect.” Can you elucidate? (W.W., West Virginia)

A. “Perfectionism” is a term used to describe a psychological trait with associated behavioral tendencies. It is applied to individuals who believe that perfect states actually exist in certain domains (for example, beauty, physical fitness, academic achievement, the expression of a talent, religious devotion, interpersonal manners, altruism, compassion, etc.), and that one should try to attain these states.

Studies of patients with anorexia nervosa have shown that they tend to score higher than comparison groups on multidimensional measures of perfectionism even after long-term weight recovery. These measures typically assess such qualities as concerns and efforts over avoiding mistakes in daily life and parental criticism, adhering to personal standards and parental criticism, adhering to perfectionistic standards, and guilt when they fail to meet their unrealistic standards. Not achieving perfection may be experienced as utter failure, which is an example of “black and white” thinking. In working with such patients, it’s important to appreciate that “Perfect is the enemy of good.”

- J.Y.

In the Next Issue

Detecting Infection-triggered Anorexia Nervosa

by Mae Sokol, M.D.

One type of anorexia nervosa may be triggered by streptococcal infection. This may be one of the Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus, or PANDAS. Seven essential laboratory tests will help make the diagnosis. A Patient Information Sheet on PANDAS will be included

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PREVENTION continued from page 7

Eating Disorders Review

Questions & Answers

Nibbles, by Hunter

“OK -- I’m too rich... Now, how do I get too thin?”

“Perfect is the enemy of good.”

Dr. Austin also suggests that the most politically and economically feasible means to advance eating disorders prevention may lie in cross-disciplinary collaboration with researchers working to prevent other public health problems, such as coronary heart disease, cancer, and obesity. Because public schools have limited resources, most are not likely to have the ability or willingness to design and/or implement new programs designed for the prevention of eating disorders.