



Applying Genetics Data and the Temperament Character Inventory to Treatment

| By Ken Weiner, MD, FAED, Medical Director at EDC-D

The integration and utilization of the biological basis of eating disorders and the Temperament Character Inventory (TCI) have become important parts of treatment at Eating Disorder Center of Denver. (See article on page 3 for more information on the TCI). On admission, each patient takes a computerized version of the TCI that is scored and rated by a trained clinician. The information is an integral part of the assessment data and is used to shape and formulate the treatment plan. Patients are educated regarding the bio-psycho-social model of understanding and treating eating disorders. This relatively new genetics data from the Price Foundation Study is explained to help patients and families understand that eating disorders are not “disorders of choice.” With regards to the individual, EDC-D clarifies that while patients initially choose to diet or binge and purge, one’s temperament determines whether this behavior becomes a transient, misdirected coping mechanism or a life-threatening disorder. As evidence, we cite the high number of women who diet compared with the .5-1% of women ages 13-35 years who develop Anorexia Nervosa. Clearly, there is something that sets these individuals apart and predisposes them to the illness. One way to think of it is that for Anorexia Nervosa, “genes load the gun and dieting pulls the trigger.” That is to say, an individual can have the genetic predisposition but if they never go on a diet, they will never develop the illness.

While no one chooses to have an eating disorder, it is important to help patients understand that recovery does involve a conscious choice. The center provides a nurturing, safe environment; the dietitians provide the food plan for recovery and staff help patients alter meal time behaviors; the psychiatrists diagnose and effectively medicate co-morbid conditions; and finally, the multi-disciplinary treatment team teaches the patients and families the skills necessary to be able to implement the choice to be well. We clarify that families do not cause eating disorders and that the illness of a loved one seriously impacts the family. We explain that family members have a choice: they can be part of the problem or part of the solution. The primary focus in individual

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family sessions and multi-family groups is to identify strengths and provide tools to families so as to maximize recovery in the patient. In those situations where there are concurrent multi-generational issues, these issues need to be identified and addressed for treatment to move forward.

Sharing the TCI with the patient can be very helpful to the treatment process. For example, in Anorexia Nervosa, the classic TCI has very high harm avoidance and very low novelty seeking subscales or a “turtle temperament.” Helping the patient and family understand and respect “turtle power” facilitates self-understanding, communication and decision making. In general, change will be slow, transition will be difficult and considerable planning, communication and support will maximize the patient’s outcome.

In Bulimia Nervosa, the classic TCI has high harm avoidance, but paradoxically is accompanied by high novelty seeking. These individuals tend to be fearful of being hurt but are multi-impulsive, frequently putting themselves in dangerous or compromising situations. This

“hare temperament,” an inherent contradiction with regards to harm avoidance, is clarified for patients and families and Dialectical Behavioral Therapy tools are taught to help patients use mindfulness skills to effectively accept their “hard wiring.” An especially interesting manifestation of utilizing the TCI in treatment comes up when a patient has high harm avoidance and low novelty seeking, i.e., “turtle temperament,” but is acting like or masquerading as a “hare.” Exploration of this contradiction dramatically improves self-understanding and often provides a road to recovery that until now was hidden from the patient.

By helping the patients at EDC-D to understand and accept their basic temperament, we can more effectively work on the “root system” of their eating disorder. This then, maximizes the possibility that patients will interrupt destructive behaviors on a more consistent basis and allow their authentic self the opportunity to move forward into health and recovery.

More Research Needed as Link Between Genetics and Eating Disorders is Found

| By Pat Riley, Vice President of Marketing at EDC-D

Research studies on the genetics of Anorexia Nervosa and Bulimia Nervosa began more than 10 years ago with funding from the Price Foundation, a private, European-based foundation. As a result of the findings from these studies, the National Institute of Mental Health (NIMH) awarded a grant to these same researchers involved in the Price Foundation studies to conduct a genetic study of Anorexia Nervosa. The researchers, representing one data and ten clinical centers in North America and Europe, worked collaboratively to compile and analyze DNA from approximately 600 families with two or more members who had Anorexia Nervosa or Bulimia Nervosa. In addition, the researchers conducted association studies with 700 Anorexia trios and 700 control women in an effort to locate regions of the genome that contain genes that influence the risk of Anorexia Nervosa.

While analysis of the data showed evidence of the linkage on chromosome 1 and 10 for Anorexia Nervosa and Bulimia Nervosa, the researchers agreed that more studies were needed. Results from the studies estimate that Anorexia Nervosa and Bulimia Nervosa have the same heritability as Type II diabetes and such mental health illnesses as schizophrenia and depression. It is clear that as we get a better understanding of the role of genes and brain physiology in an individual developing Anorexia Nervosa or Bulimia Nervosa, we will be better able to detect, prevent and treat these complex and life-threatening illnesses. For more information on the Collaborative Study of the Genetics of Anorexia Nervosa and Bulimia Nervosa, visit the web site: www.wpic.pitt.edu or email: edresearch@msx.upmc.edu.

For more information regarding material presented in this newsletter or to refer patients, please call EDC-D at: 866-771-0861

Eating Disorder Genes: Where Do They Take Treatment?

| By Emmett R. Bishop, Jr, MD, Director, EIOP and Outpatient Services at EDC-D

We frequently hear the question “Why do some people get eating disorders and others don’t?” Part of the answer to this question is related to genetic factors that are only beginning to be elucidated. We know that eating disorders are highly heritable but what is inherited? A piece of the puzzle may lie in the area of phenotypic traits of the personality such as cognitive style, temperament and character. These phenotypic traits are thought to be the result of expression of genes under environment influence. In fact, there is substantial evidence to support this. In what follows, some of these traits are explored and how they may play a role in the treatment of eating disorders.

Individuals with eating disorders are often described as perfectionistic, having negative emotions, obsessive thinkers, anxiety prone and exhibiting compulsive behavior. Impulsivity is an added descriptor for bulimic persons. There is evidence that these traits were present prior to the onset of the eating disorder and that they persist after recovery. For example, it has been shown that 40% of individuals with Anorexia Nervosa and Bulimia Nervosa had anxiety symptoms prior to the onset of their eating disorder. Women recovered from Anorexia Nervosa and Bulimia Nervosa still evidence temperament and character traits that distinguish them from control women. Even though the disordered eating behavior is gone, vulnerabilities remain, which can stifle existence.

When we look at studies of treatment of eating disorders of all types, we see that there is a relatively high relapse rate at longer term follow-up regardless of the therapeutic strategy used (cognitive behavioral therapy, interpersonal psychotherapy, etc.). At 12 months follow-up, relapse can be greater than 40%. Based on my work, I believe that this is related to at least two significant factors: 1) unregulated emotional drives emanating from extremes of temperament; and 2) low level of character development, especially self-directedness.

Regarding temperament and character in eating disorders, there has been considerable research using the Temperament Character Inventory (TCI). TCI is an instrument that measures four dimensions of temperament and three dimensions of character. The temperament dimensions are novelty seeking, harm avoidance, reward dependence

and persistence. The character dimensions are self-directedness, cooperativeness and self-transcendence.

The TCI and its predecessor, Tridimensional Personality Questionnaire, have been studied extensively in eating disordered patients. These studies have shown that individuals with eating disorders have an increased harm avoidance temperament, meaning that they overestimate the risk of hurt and overreact to cues of danger such as “unsafe” foods or weight gains. Restrictive anorexia and bulimic individuals typically sort along the continuum of low to high novelty seeking with bulimic persons having higher novelty seeking scores. Novelty seeking reflects individual differences in attraction to unfamiliar stimuli and activation of approach behavior. Reward dependence, an indicator of social sensitivity, is not consistently associated with diagnosis except that it is low in male anorexics but it can impact significantly on treatment issues such as therapeutic alliance. Anorexic individuals may show high persistence, that is, perseverance in the face of frustration, which may interfere with their shifting mental sets or acting flexibly when a more healthy orientation is needed.

Temperament differences among people are determined by individual variations in perception of physical sensations as well as variations in processes of selective attention and emotional salience. This means that, in a sense, persons with different temperaments see the world through a different lens. Temperament is the manifestation of heritable biases in the brain that determine the importance of sensory information coming in, that is, whether it has relevance to the self. It also means that individuals have different responses of what is learned outside of conscious awareness (pre-conceptually) or implicitly and what habits are formed along the several dimensions describing temperament—novelty seeking, harm avoidance, reward dependence and persistence. “Temperament describes what grabs our attention and how intensely we respond,” (Cloninger, 2004).

The character dimensions of the TCI can have much to say about treatment challenges with eating disorder sufferers and with personality problems. Different personality disorders have unique permutations of the temperament dimensions, but temperament has less to do with maturity level or personality disorder. Treatment challenges largely

relate to the character dimensions of personality. Character determines how individuals manage the emotional drives emanating from their temperament dimensions. In general, the level of maturity of an individual can be measured by the sum of the scores of the self-directedness and cooperativeness scales of the TCI. However, most personality disorders have low self-directedness in common. Thus, low self-directedness is associated with both personality and eating disorders. Low cooperativeness is also frequently encountered in those who are considered personality disordered. Eating disorders are often accompanied by lower self-transcendence scores, which reflect a pervasive disconnectedness from other persons and the world around them.

Newer therapies address some of the stickier issues of modern affective- and neuro-sciences. As genetic research informs us that temperament and, even, character dimensions have significant heritable components, psychotherapy is forced to take a different slant.

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Therapies that aim to change mental content are less useful and less efficient. On the other hand, newer therapies that focus on functional analysis, acceptance and self-transcendence and facilitate awareness of one's true nature can move rapidly beyond struggles with mental content. Rather than changing the contents of the mind, the aim is to find coherence and, simultaneously, well-being. Coherence is obtained by recognizing and releasing the resistance to the natural order of things and letting go of struggles with one's own nature, e.g., the genetic hand one was dealt or his/her prior conditioning.

To transcend the automaticity of one's genetically-biased outlook and conceptualized self, individuals must see themselves with their core values as they are in actuality. The self is often defined as what is enveloped by the skin or is considered roughly what is subsumed under the term ego-identity. A simpler way of describing the self is

how we conceptualize ourselves by our prior conditioning and autobiographical memory. This conceptualized self can be contrasted to the self-as-process and the self-as-context. Most adults relate more to the conceptualized self—especially those with eating disorders. It is the conceptualized self that torments these individuals with idealized images of whom they should be. The conceptualized self, when it is so discrepant from one's true nature, is essentially a "false self." With the self-as-context, one identifies with one's self-awareness as the observer of one's mental contents, not the mental contents themselves. It is the understanding that thoughts are not external reality, but products of the mind which may or may not have some quasi-survival purpose. As such, thoughts are not one's identity, but content of the mind that may or may not be useful in terms of serving as valued life goals and purposes. Identifying with the self-as-context might be considered to be an act of self-transcendence or mindfulness.

Most people with eating disorders lack mindfulness and there is marked incoherence that leads to increasing distress. Life becomes increasingly about managing emotions, that is, escaping from negative feelings and pursuing the promise of positive ones. There is increasingly wishful thinking of becoming someone he/she can never be without paying a tremendous price given his/her genetic endowment. An increasing spiral of self-centeredness ensues. Increased emotional arousal results in cognitive narrowing so that thoughts about shape, weight, and food dominate consciousness. There are constant conflicts over wants and desires reflective of this incoherent state. These individuals struggle with these conflicts by trying to control the uncontrollable—their own emotions and thoughts that arise spontaneously in their minds. Their understanding of themselves and their relationships remains shallow and superficial. Self-directedness becomes increasingly impaired as avoidance of internal experience progressively displaces cognizance of the core values that orient and direct behavior.

At the Eating Disorder Center of Denver, the incoherent state of eating disorders is addressed through CAMSA. CAMSA stands for connectedness, acceptance, mindfulness, sense of self and action. These five concepts serve as the backbone of the bio-psycho-social treatment approach used at EDC-D. CAMSA helps our patients function in a self-directed way in the presence of their genetic makeup. Regardless of their genetic biases, our patients can find coherence and well-being in the pursuit of their valued directions.



EDC-D Receives Award for Excellence in Marketing

EDC-D is pleased to announce that it is a winner in the 24th Annual Healthcare Advertising Awards competition sponsored by Healthcare Marketing Report, a national newspaper of healthcare marketing. EDC-D received a bronze award in the calendar category for its 2006 holiday card, which features a photo of the center's female staff and the tagline, "Bodies come in all shapes and sizes, as do the women of EDC-D."



EDC-D's new web site is now LIVE!!!

Our goals were to make the site easy to navigate, provide information relevant to our audiences and provide information based on the common questions asked of admissions, the front desk and marketing. As you browse through the new web site, take the time to become familiar with the contents. The web site is a great resource for professionals, potential patients, current patients and alumni and their families, so please remember to visit the site often and encourage your patients and their family members to do so.

As you peruse our web site, remember that we want to hear from you. Your feedback is important! You may contact us by visiting our web site at www.healthwithinreach.com and clicking on the "contact us" page.

EDC-D has facility contracts in place with the insurance companies listed. In addition, single case agreements are completed with most insurance companies to cover the intensive levels of care.

- Anthem-BC/BS
- Cigna
- EAP International
- Great West Life
- Kaiser Permanente
- PacifiCare PPO
- Sloan's Lake
- Student Health/Mega Life
- United Behavioral Health
- WellPoint

The Eating Disorder Center of Denver has received for the second time the PacifiCare Behavioral Health Honors for Outcomes quarterly award in recognition for achieving exemplary clinical outcomes.

The award is based on patient responses to a questionnaire before and after treatment, adjusted case mix analyses, and the availability and consistency of the provider's data. PacifiCare's Honors for Outcomes program is currently available in California, Colorado, New Mexico, Oklahoma, Oregon, Texas and Washington.

Established with the mission of helping patients with eating disorders make healthy long lasting change and experience the success of recovery, EDC-D is very proud to be listed on PacifiCare's Honors for Outcomes provider honor roll.

Honors for outcomes
Quality you can measure

PacifiCare®
Behavioral Health
Caring is good. Doing something is better.™

Programs at EDC-D

Partial Hospitalization Program (PHP):

Available to individual patients who are 16 years and older. Patients attend seven days a week, 11-hour days with shortened weekend schedules. This highly structured program includes: medical and psychiatric evaluation and follow-up, individual therapy, family/couples therapy, group therapy, psycho-educational groups and nutrition therapy including three meals and two snacks per day. **Housing is available.**

Evening Intensive Outpatient Program (EIOP):

An integrated program meeting three times per week comprising: 13 hours per week of therapy including psycho-educational groups, group therapy, multi-family group, DBT and three meals. Also included are a weekly individual session, nutritional monitoring/consultation and psychiatric oversight. These groups are presented on a 12-week rotation and are open for patients to join at any time. Sessions are held for this program Monday, Wednesday, & Friday: 5-9 PM.

Outpatient Services provide an effective alternative for individuals whose symptoms do not require a more intensive setting. Patients can also participate in one or more of our Outpatient Services to enhance work with outside treatment providers. Our services include: individual and family/couples therapy; group therapy including DBT and aftercare; psychiatric evaluation, therapy and medication monitoring; gastric bypass evaluations; and nutritional counseling.

Support Groups:

Aftercare Outpatient Process Group

Monday 5:30-7:00 PM

An open recovery group consisting of individuals in recovery who have completed an intense eating disorders program at EDC-D or other national programs. \$50 per group

DBT Skills Training

Monday 5:00-6:15 PM

Didactic and experiential education in four different skill areas: core mindfulness, interpersonal effectiveness, emotion regulation and distress tolerance. \$75 per group

Body Image 101

Tuesday 5:30-7:00 PM

12-week ongoing group utilizing cognitive behavioral and experiential techniques to mend the relationship between a woman and her body. \$50 per group

Minding the Body

Monday 6:30-8:00 PM

12-week ongoing group for individuals establishing positive lifestyles while maintaining weight loss. \$75 per group

Please Contact Us For A Free Assessment to our intensive programs or to schedule an outpatient appointment
303-771-0861
 Or toll free: **1-866-771-0861**

Pat Kokora, RD, will be in EDC-D's Louisville office the 2nd & 4th Friday of each month. Pat specializes in helping patients to normalize their eating patterns and problems, including anorexia, bulimia, compulsive eating, binge eating and weight management. She assists patients in establishing a healthy relationship with food and to move towards a balance lifestyle for more optimal health. Services include individual sessions and family support.
To schedule an appointment, call Pat at 720-889-4221.

For a complete list of events, visit the Professional Network section of our web site www.edcdenver.com.

Upcoming Events:



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 Suite 1010
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