

**Oral Scientific Paper Session IV**  
**Friday, May 3, 2013**  
**2:30 – 4:00 p.m.**

**Body Image & Prevention III**

**Chair:**

**Weightism in Young Girls: A Twist of the Kenneth and Mamie Clark Study**

*Ashley Kroon Van Diest, MS, Texas A&M University, College Station, TX, USA; Marisol Perez, PhD, Texas A&M University, College Station, TX, USA*

Weightism, or the tendency to report negative attitudes and biases towards overweight individuals, flourishes among individuals within American society such that discrimination towards overweight individuals is deemed culturally acceptable. However, few studies have explored trends of weightism in young girls. Placing a twist on the Kenneth and Mamie Clark doll task that examined racial stereotypes, the current study seeks to explore weight-related stereotypes held by young girls using dolls of different body sizes. Participants for the current study include 150 girls who are 5 to 7-years-old. All girls were presented with five dolls that were identical in appearance with the exception of their size, ranging in size from underweight to overweight. The girls were asked which doll they wanted to play with most and why; which doll was the prettiest and why; if they would play with the largest doll; and if they would be friends with someone who looked like the largest doll. Review of the data indicates that a number of girls choose the thinnest, emaciated doll as the doll they would want to play with the most and the doll that is the prettiest because “she is skinny.” The majority of girls report that they would not want to play with the largest doll because it was “too fat.” A large number of girls also indicate that they would not want to be friends with someone who looked like the larger dolls because they were “fat”, but some girls stated that they would be friends with the largest doll even though she was “fat” because they did “not want to be mean.” This preliminary information suggests that young girls are already engaging in negative weight-related stereotypes, and can be used to guide interventions to reduce weightism and discrimination towards overweight individuals in girls at a young age.

**Learning Objectives:**

- Describe weightism and how it is pervasive in American culture.
- Assess negative weight-related stereotypes in young girls.
- Describe potential ways to develop interventions to reduce weightism in young girls.

**Do Family Meals Help to Prevent Disordered Eating in the Homes of All Adolescents?**

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This study aimed to answer this question: Is the association between family meal frequency and use of disordered eating behaviors moderated by (1) family-environment variables, including family functioning, parent-led conversations about weight, weight and body talk in the home, weight teasing, and (2) the atmosphere at family meals, including parent feeding practices and enjoyment of family meals. The sample included 1,983 adolescent-parent dyads who participated in two coordinated studies designed to examine factors associated with weight status and weight-related behaviors in adolescents. Adolescents completed surveys at school and parents completed questionnaires via mail or phone. Initial findings suggest that the protective nature of family meals was moderated by characteristics of the family-meal atmosphere (parent feeding practices, adolescent enjoyment of family meals), among boys and by characteristics of the broader family environment (weight-related teasing, family functioning) among girls. For example, among boys whose parents reported a low level of pressure-to-eat, extreme weight control behaviors were found to decrease with greater frequency of family meals (OR=0.83,  $p<0.01$ ). In contrast, among boys exposed to a high level of pressure-to-

eat, no associations were found between family meal frequency and use of extreme weight control behaviors (OR=1.00, p=0.99). Among girls who reported low levels of weight teasing, dieting was found to decrease with greater frequency of family meals (OR 0.88, p<0.01). Conversely, for girls who experienced high levels of weight teasing a greater frequency of family meals was found to be associated with increased odds of dieting (OR=1.1, p=0.04). Study findings suggest that family meals are important to the prevention of disordered eating behaviors and should be encouraged for most adolescents; however, there may be some familial situations in which family meals are not only of reduced benefit, but harmful.

### **Learning Objectives:**

- Describe associations between family meal frequency and adolescent disordered eating behaviors.
- Understand how characteristics of the family-meal atmosphere and characteristics of the broader family environment moderate the protective nature of family meals in the development of disordered eating behaviors in adolescents.
- Note gender differences in the family characteristics that moderate the relationship between family meal frequency and disorder eating behaviors in adolescents.

### **The Psychological Impact of Body Mass Index Labels**

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Body mass index (BMI; kg/m<sup>2</sup>) labels such as “normal” and “overweight” are commonly used for information about health. However, no study to date has explored the potential consequences of BMI labels on body dissatisfaction and other psychological constructs. Given that body dissatisfaction is predictive of subsequent eating disorder pathology, research identifying the impact that BMI labels may have on body image is warranted. In this ongoing experiment, male and female undergraduates (mean age = 22.04 years) were weighed and measured to obtain their BMI. Based on randomization, participants were either told they were “normal” or “overweight.” For believability of deception, participants with BMI 21.75 – 27.49, the upper half of the “normal” BMI label range and the lower half of the “overweight” BMI label range, were included in the current study. Participants then completed self-report measures assessing body dissatisfaction, perceived health, and affect. The investigators anticipate presenting data from approximately 120 participants. Preliminary analyses consist of data from 91 participants who have completed the study thus far. Two-way ANOVAs (BMI label x accuracy) indicate significant group differences for body dissatisfaction, perceived health, and negative affect (p < .05). Post-hoc tests reveal that overweight individuals assigned an accurate BMI label of “overweight” reported significantly more body dissatisfaction, significantly lower perceived health, and significantly greater negative affect than their overweight counterparts assigned an inaccurate BMI label of “normal.” It is anticipated that additional data collection will strengthen these results. Thus, BMI labels may have an impact on body image, affect, and perceived health, particularly for heavier individuals. This may have implications for the eating disorder field include recommendations for how BMI labels should be conveyed and interpreted by health practitioners and the general public.

### **Learning Objectives:**

- Describe the potential consequences of BMI labels on psychological constructs.
- Consider the implication of widely used body mass index labels on body image, perceived health, and negative affect.
- Consider how BMI labels should be conveyed and interpreted by health practitioners and the general public.

### **Optimal Defaults in the Prevention of Childhood Obesity**

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This USDA-funded study applies behavioral economics to optimize child food and activity choices via parent-driven decisions. Specifically, this project tests an optimal defaults paradigm, representing new and innovative research aimed at co-opting the default-influenced response bias to stay with an existing, pre-selected, or easier choice (rather than seeking out an available alternative) as a critical strategy in the prevention of pediatric obesity. While the paradigm has yielded powerful effects in other areas of public policy (e.g., organ donation), it currently remains theoretical in its potential for application to obesity prevention. This study involves two randomized 2x2 experiments to test the effects of (a) shifts toward optimal defaults in the food and exercise domains, and (b) parent education that teaches the concept of optimal defaults and empowers parents to facilitate healthy choices for their children. We hypothesized that making the default option more optimal (less

obesogenic) will yield more frequent choice of healthier foods and behaviors, and that parent empowerment education will potentiate these effects, in parent-child (ages 3-8) dyads. Results from logistic regressions for the food (breakfast) paradigm (N=62) showed a significant main effect for default condition ( $\beta = 5.02$ , Wald's chi square = 19.45,  $df = 1$ ,  $p = .000$ ) but not for type of education or the interaction of default x education. The physical activity paradigm is underway; preliminary analyses (N=22) indicate a significant effect for default condition (chi square = 4.43,  $p = .04$ ). This is the first controlled study to test obesity-related optimal defaults in children by targeting behavioral, environmental, and attitudinal variables that influence excessive weight gain. Results are critical in informing policy pertaining to obesogenic environmental factors in schools and the larger community.

### **Learning Objectives:**

- Discuss the concept of optimal defaults in behavioral economics.
- Apply optimal defaults as a theoretical framework to pediatric obesity prevention.
- Describe the results of two experiments testing optimal defaults as a strategy to optimize child food and activity choices via parent-driven decisions.

### **Universal Online Screening, Targeted, Evidence-based Intervention, and Ongoing Symptom Monitoring for Eating Disorders in a College Population**

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Colleges are faced with an elevated prevalence of eating disorders (EDs), yet less than 20% of students report receiving treatment. This study represents the first large-scale implementation of 1) universal online screening, 2) targeted, evidence-based intervention, and 3) ongoing symptom monitoring for EDs in a college population. The online Stanford-Washington University ED Screen was directed to all incoming freshmen at Washington U and made available to all students at Stanford U. Students were screened as being at low or high risk for ED onset or with a clinical or FECNEC DSM-5 ED in need of further evaluation. Students at low or high risk were offered the online preventive interventions StayingFit or StudentBodies, respectively. Students evaluated as having an ED were offered a referral. Students could elect to complete the screen again in 3 months for ongoing symptom monitoring. Community-wide health and wellness was promoted by leaders living in the residence halls and campus student groups. To date (i.e., in the first 4 weeks of the 2012 academic year), 820 students (50% of target population; 43% male) have completed the screen. 632 (77%) were identified as low risk, 168 (21%) as high risk, and 20 (2%; 1 male) as having a probable ED. 26 students reported a history of an ED. Weight/shape concerns significantly increased with increasing risk/clinical status ( $p < 0.001$ ); BMI significantly decreased with increasing risk/clinical status ( $p < 0.001$ ). Females had significantly higher weight/shape concerns than males ( $p < 0.001$ ); BMI was equivalent across sexes ( $p > 0.05$ ). To date, 46% have elected for ongoing symptom monitoring, and 7 campus programs have been offered. Screening and intervention can effectively identify EDs and reduce their prevalence on college campuses using minimal person-based resources. Our model showcases a platform that can be nationally disseminated and easily adopted, reducing burden for mental health services while increasing access to care.

### **Learning Objectives:**

- Describe a model for screening, intervention, and symptom monitoring for eating disorders in a college population.
- Review rates of eating disorders and high risk across two college campuses.
- Discuss the process of implementing a universal screening program within the college health care system.

### **“War on Weight”: Reframing the Tension between the Eating Disorders and Obesity Fields**

*Manuela Ferrari, PhD, MSc, FAED, University of Toronto, Dalla Lana School of Public Health, Toronto, Canada; Gail McVey, PsyD, The Hospital for Sick Children, Community Health Systems Resource Group, Toronto, Canada; Carla Rice, PhD, University of Guelph, Guelph, Canada; Niva Piran, PsyD, University of Toronto, OISE, Toronto, Canada*

Attention has been devoted to exploring ways to integrate the eating disorders (ED) and obesity (OB) prevention fields. Although research has revealed considerable overlap between the risk factors for ED and those for OB, collaboration between the two fields remains strained. The Beyond Obesity and Disordered Eating in Youth (BODY) study aimed to answer the following questions: a) What keeps the areas of ED and OB prevention apart? b) Can, and should, an integration between these areas be implemented? Based on a total of 61 study participants, 35 researchers/practitioners who work in either ED or OB (for a total of 55 in-depth interviews); and 26 youth (aged 16–26 who attended six focus groups and 12 in-depth interviews), this presentation examines issues underlying the tension between the two domains, as well as the feasibility and ethical implications of integrating the ED and OB fields. As the data analysis shows: 1) The ED and OB fields currently

exist as “two camps”, which are defined, and at the same time differentiated, by their language, philosophical understanding of the health problems, knowledge, and practices; 2) There is a perceived tension between the two fields caused by differences in ideology and philosophy, identity, power and knowledge, and attention given to the analysis of gender issues; 3) There is a disconnection between diagnostic criteria for both ED and OB and the lived bodily experiences of youth ; and 4) There is further disconnection between how healthy lifestyles are promoted by professionals (from both fields) and the contexts in which youth live their lives. For example, the impact that body-based harassment has on self-care, especially among girls and women, is a neglected area of prevention study. Implications for prevention, practice, and policy will be discussed.

### **Learning Objectives:**

- To uncover the discourses embedded in eating disorders, obesity, disordered eating, and weight-related problems conceptualization, and prevention practices.
- To unpack the discourses that circulate about the relationship between the obesity and eating disorders prevention fields.
- To describe the development of a new ethical framework more in harmony with youths’ bodily experiences that could inform eating disorders and obesity prevention.

## **Diagnosis Classification & Measurement III**

### **Chair:**

#### **Psychometric Properties of the Body Checking Questionnaire in Non-clinical College Women**

*Emily K. White, BA, University of Nevada, Las Vegas, Las Vegas, NV, USA; Kim Claudat, BA, University of Nevada, Las Vegas, Las Vegas, NV, USA; Sarah C. Jones, BA, University of Nevada, Las Vegas, Las Vegas, NV, USA; Kimberly A. Barchard, PhD, University of Nevada, Las Vegas, Las Vegas, NV, USA; Courtney S. Warren, PhD, University of Nevada, Las Vegas, Las Vegas, NV, USA*

Although understudied in non-clinical samples, research suggests that body checking behaviors (i.e., measuring, pinching, or scrutinizing particular body parts) are associated with increased severity of eating pathology and functional impairment in women. To encourage research on body checking in non-clinical populations, this project examined the factor structure, validity, and sensitivity of the Body Checking Questionnaire (BCQ; Reas, Whisenhunt, Netemeyer, & Williams, 2002) in two ethnically diverse samples of college women. Specifically, Study 1 examined the factor structure of the BCQ, and Study 2 aimed to confirm the factor structure and examined the concurrent validity and diagnostic sensitivity of the BCQ. In Study 1 (N = 326), an exploratory factor analysis of the BCQ yielded a two-factor structure measuring two unique aspects of body checking: Behavioral Checking and Visual Checking. In Study 2 (N = 1010), confirmatory factor analysis examined the goodness-of-fit of the two-factor solution. We randomly divided the sample in two and found adequate fit in both halves (First half: CFI = .90; RMSEA = .07, n = 505; second half: CFI = .90; RMSEA = .07; n = 505). Scores on both factors were significantly, positively correlated with eating pathology. To examine the sensitivity of these factors in detecting at-risk levels of eating pathology, we conducted a receiver operating characteristic (ROC) analysis and found that Behavioral Checking scores were superior indicators of at-risk eating pathology (AUC = .86; 95% CI = .83-.88). Results suggest using a parsimonious, two-factor solution for the BCQ yields psychometrically sound data that can help identify women at risk for eating pathology.

### **Learning Objectives:**

- Explain the rationale for examining the BCQ factor structure in independent samples of diverse women.
- Understand the importance of examining the clinical utility of these factors.
- Describe the clinical implications of the two-factor (Behavioral Checking and Visual Checking) solution.

#### **The Lifetime Prevalence of Eating Disorders and Eating Disorder Behaviours in a United Kingdom Population Based Cohort of Women**

*Radha Kothari, BSc, BA, University College London, London, United Kingdom; Ellie Russell, PhD, Cardiff Metropolitan University, Cardiff, Wales; Janet Treasure, PhD, MD, MRCPsych, FAED, Institute of Psychiatry, King's College London, London, United Kingdom; Nadia Micali, MD, MRCPsych, PhD, FAED, University College London, London, United Kingdom*

The purpose of this study was to investigate the lifetime prevalence of eating disorders (ED) behaviours and diagnoses in a population-based cohort of women enrolled in the 1990s whilst pregnant. In phase one of the study 9465 women in the Avon Longitudinal Study of Parents and Children were sent the Eating Disorder Diagnostic Survey (adapted for lifetime use); 5716(60.4%) women returned the questionnaire. In phase two we invited for interview the 934 women (16.3% of responders) screening positive for lifetime ED behaviours and a random 698 screening negative (14.6%). Of the 1,632 women in this sample, 1110(68%) were interviewed with the Structured Clinical Interview for DSM Disorders. DSM-IV criteria were used to diagnose ED. We aimed to describe lifetime behavioural ED phenotypes: these were based on ED behaviours being present at least weekly for three months. Four phenotypes were derived using a hierarchy (bingeing and purging trumping other behaviours). Mean age of women at interview was 50.6 years old (range:38–66). With regard to lifetime ED

behaviours: 127(2.2%) = lifetime restricting/excessive exercising phenotype; 67(1.2%) = lifetime purging phenotype; 68(1.2%) = lifetime bingeing phenotype; and 71(1.2%) = lifetime bingeing and purging phenotype. Mean age of onset for ED behaviours was 21.7 years of age (range:9–54). With regard to diagnosis, at first episode 270(4.7%) women were diagnosable with an ED (AN=1.2%; BN=0.5%; BED=0.6%; Purging Disorder=0.4%; Other EDNOS=2.6%). Data regarding diagnostic cross-over during lifetime and lifetime diagnosis is being analysed. Results indicate a high prevalence of lifetime ED behaviours in this population-based cohort. EDNOS was the commonest first diagnosis. A low percentage of women were diagnosable with BN at first episode, though we predict that further analysis of the course of ED over lifetime will show that a substantial number of those initially presenting with AN crossed-over to a diagnosis of BN.

### **Learning Objectives:**

- Describe the prevalence of eating disorders over lifetime.
- Gain an insight into the trajectory of eating disorders over lifetime.
- Make a comparison between eating disorder diagnoses and eating disorder behavioural phenotypes with regard to prevalence and lifetime trajectory.

### **Eating Disorders Inventory: Measurement Equivalence Across Ethnic Groups in the United States**

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The purpose of this study was to assess the measurement invariance of the Eating Disorders Questionnaire (EDI) across ethnic groups. The sample consisted of 2,264 adult women between the ages of 17 and 49 years ( $M = 19.13$ ,  $SD = 1.89$ ). The groups included 1,541 White, 246 Black, 275 Latina, 133 Asian and 58 Native American, with 27 individuals failing to provide ethnicity. Participants completed paper questionnaires in groups, ranging from 12 to 281. Participants completed the original 64 items of the EDI including the three main clinical scales (drive for thinness, bulimia, and body dissatisfaction) and an additional 5 subscales assessing psychological constructs related to eating disorders (Ineffectiveness, Perfectionism, Interpersonal Distrust, Interoceptive Awareness, Maturity Fears). Of the eight subscales from the original EDI, only 3 (drive for thinness, bulimia, interoceptive awareness) had a one factor model fit required for invariance testing. The most invariant subscale was drive for thinness. The bulimia subscale was invariant across all ethnic group comparisons except when comparing Black and Asian groups. Interoceptive awareness was found to be invariant across White, Latina and Asian groups only. These results have both research and clinical implications for the use of the EDI and suggest that five of the eight subscales may not be suitable for assessing clinical severity of psychopathology among any ethnic group including Whites.

### **Learning Objectives:**

- Discuss the overall measurement invariance of the Eating Disorders Inventory.
- Determine the appropriateness of the Eating Disorders Inventory for use with various ethnic populations.
- Address the clinical and research implications of using the Eating Disorders Inventory with diverse ethnic populations.

### **Collate: An iPad Application for Digital Questionnaire and Data Management for Real Time Data Collection, Calculation and Collation**

*Sloane Madden, MBBS, FAED, The Sydney Children's Hospital Network, Sydney, Australia; Jane Miskovic, DClinPsy, BA, The Sydney Children's Hospital Network, Sydney, Australia; Michael Kohn, MBBS, The Sydney Children's Hospital Network, Sydney, Australia; Joanne Titterton, MA, RN, The Sydney Children's Hospital Network, Sydney, Australia; Andrew Wallis, BA, The Sydney Children's Hospital Network, Sydney, Australia*

The Eating Disorder Service at the Sydney Children's Health Network – Westmead Campus is a busy clinical research team that like many similar services, struggles with the capacity to conduct clinical research activities within a small team with a large client load. To help address this issue, the team has created a digital questionnaire and data management tool for the iPad for real time data collection, calculation and collation. The main aim of the digital data management system is to improve patient enjoyment and commitment to questionnaire completion, improve scoring speed and accuracy, manage comprehensive research data and provide instantaneous and clinically-relevant feedback within the clinic day.

Research teams using questionnaires often underestimate the significant time commitment required. The need for an efficient data collection system arose from the four-year management of a large randomised-controlled clinical research trial. With 82 families and all family members assessed 3-8 times with a 1-3.5 hour package, the trial generated around 2,000 hours of questionnaire completion and over 3,500 hours of preparation, distribution and collection, scoring and data entry. With the digital system, patients enter their own data and a fully scored and graphed report can be in the hands of the clinician within seconds of completion.

Psychological questionnaires can be uploaded onto the “app”, bundled into protocols, and scheduled for delivery to registered clients. Clients and family members can complete personalised bundles whilst sitting in the clinic waiting room via an interactive interface on the iPads with responses instantly recorded and scored. Clinicians can receive instant feedback of data in relation to previous scores and population norms, and data could be collected into spreadsheet format for empirical use.

### **Learning Objectives:**

- Describe and understand an automated data management system for collection, calculation and collation of psychometric questionnaires.
- Describe patient friendly aspects of an automated data management system.
- Understand the importance, relevance and convenience of an automated data management system for collection, calculation and collation of psychometric questionnaires.

### **Relationship Between Emotional Processing and the Severity of Symptoms of Anorexia Nervosa Before and After Treatment**

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Difficulties in the processing of emotions (EP), understood as emotional awareness, expression, and regulation, have been implicated in the development and maintenance of anorexia nervosa (AN). Different authors have conceptualized the symptoms of AN as means to control, displace, or disconnect from emotions but empirical support for these relationships remains insufficient. The goal of this investigation is twofold: 1) to explore if deficits in EP predict more severe symptoms of AN and 2) to identify if improvement in EP over time predicts decreased symptomatology of AN. In study 1, 48 women with an AN-spectrum disorder (AN or eating disorder not otherwise specified – anorexia spectrum) were recruited from two specialized eating disorders programs in Quebec. They completed self-report measures of AN symptomatology and emotional processing, such as the Eating Disorders Examination Questionnaire and the Toronto Alexithymia Scale. Results pointed to a role of emotion regulation through suppression in AN symptomatology. Specifically, a multiple regression analysis showed that emotional suppression predicted more severe symptoms of AN (*Adjusted R*<sup>2</sup> = .27, *p* < .001). Deficits in emotional awareness and expression were not significant predictors. In study 2, longitudinal data were collected for the 22 participants from study 1 who were in day treatment for AN. Multiple regression analysis showed that a decrease in emotional suppression, but not in emotional awareness or expression, predicted improved AN symptoms at the end of therapy (*Adjusted R*<sup>2</sup> = .29, *p* < .01). Results will be discussed in the light of existing literature.

### **Learning Objectives:**

- Discuss relationship between processing of emotions and eating disorders.
- Assess if deficits in emotional awareness, expression, and regulation predict the severity of symptoms of anorexia.
- Assess if change in emotional processing predicts change in symptoms of anorexia following day treatment.

### **Are Eating Disorders Dimensional, Categorical, or Hybrid Dimensional-Categorical? A Test of the Three-Dimensional and Transdiagnostic Models of Eating Disorders**

*Kelsie Forbush, PhD, Purdue University, West Lafayette, IN, USA; Jennifer Wildes, PhD, University of Pittsburgh, Pittsburgh, PA, USA*

There are several theoretical models that describe the structure of eating disorders (EDs). Williamson and colleagues have developed a Three-Dimensional Model based on prior factor analytic studies of ED symptoms, which includes general psychopathology, binge eating and purging, and restrictive eating. Fairburn's Transdiagnostic Model proposes reducing the current ED categories into a single diagnostic class. However, no previous studies have directly tested these theories. The purpose of this study was to use structural equation mixture modeling (SEMM), which combines features of factor analysis and latent profile analysis, to examine the latent structure of EDs. 88 items from the Eating Pathology Symptoms Inventory were administered to psychiatric patients (N=303) and patients with EDs (N=158). Items were grouped into scales based on independent exploratory and confirmatory factor analyses carried out in each sample. The resulting eight scales were highly replicable between groups and were used as indicators (along with BMI) in subsequent SEMM analyses. Covariates included age, gender, and race/ethnicity. Results indicated a categorical 6-profile model fit the data better than latent dimensional or hybrid models. Latent profile 1 (LP1) was a low-pathology group; LP2, muscle dysmorphia with strong negative attitudes toward obesity; LP3, binge eating disorder, with obesity and high body dissatisfaction; LP4, bulimia nervosa; LP5, restricting anorexia nervosa; LP6, EDs characterized by multiple purging methods, with the highest body dissatisfaction levels and moderate binge eating. External validation analyses indicated LP6 had the highest psychopathology (including high scores on suicidality,

depression, and panic) and LP1 had the lowest pathology. Results do not provide strong support for either the Three Dimensional or Transdiagnostic Models and indicate that expanding the number of EDs included in the DSM is likely to result in a more valid diagnostic system.

### **Learning Objectives:**

- Describe previous theoretical models of eating disorder symptoms (including the Three Dimensional and Transdiagnostic models).
- Explain the basic rationale for factor mixture models and describe the utility of these models for testing the latent structure of EDs.
- Evaluate whether the results of this study support eating disorder dimensions, categories, or a combination of dimensions and categories.

## **Gender Ethnicity & Culture II**

### **Chair:**

### **Family and Community Perspectives on Addressing Loss of Control Eating and Obesity in Rural African American Girls**

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Increased rates of obesity have paralleled a rise in disordered eating, including loss of control (LOC) eating, among racial/ethnic minorities. LOC eating predisposes youth to excess weight gain and the development of partial or full-syndrome binge eating disorder (BED). Data suggest that LOC eating is prevalent in African Americans (AA), but may manifest differently than in Caucasians (C). Therefore, while eating disorder and obesity prevention is essential in AAs, it must be culturally appropriate. Interpersonal Psychotherapy for the Prevention of Excess Weight Gain (IPT-WG) targets improvements in interpersonal functioning to reduce LOC eating and prevent excess weight gain and BED. Yet, IPT-WG has not been adapted for AAs. Utilizing Community-based participatory research methods, we assessed views of obesity, LOC eating, relationships, and IPT-WG among rural AAs to adapt IPT-WG to be more culturally appropriate and acceptable. Seven focus groups were conducted with 21 overweight girls (12-17y; M±SD, BMI-z, 2.26±0.47) who endorsed LOC-type eating behaviors, 21 parents/guardians, and 8 community leaders (N=50). Themes were analyzed using content analysis. Girls and parents understood the concept of LOC eating, assigning terms such as “pigging out” or “being greedy.” Parents believed that obesity, in the absence of co-morbid health problems, was not a problem for their daughters. The concept of IPT-WG resonated with girls and parents, yet there were concerns regarding the utility of certain skills. Unlike IPT-WG in its current form, there was a desire for parents to participate in IPT-WG to discuss progress and issues relevant to the IPT-WG model. Community leaders emphasized the importance of considering family dynamics (e.g., respect for parents) when making revisions to the intervention. Findings will be used to adapt IPT-WG to ensure it respects cultural values and is highly relevant to AA families in order to improve sustainability within community settings.

### **Learning Objectives:**

- Understand rural African American perspectives on obesity, loss of control eating, and interpersonal relationships.
- Understand Community-based participatory research methods.
- Considerations involved in adapting eating disorder prevention programs for underserved populations.

### **Exploring Barriers and Facilitators in Eating Disorders Treatment Among Latinas in the United States**

*Mae Lynn Reyes-Rodriguez, PhD, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA; Juanita Ramirez, BA, University of North Carolina, Chapel Hill, NC, USA; Kendra Davis, BA, University of Georgia, Athens, GA, USA; Keshia Patrice, BA, California State University, Sacramento, CA, USA; Cynthia M. Bulik, PhD, FAED, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA*

The purpose of this study was to explore facilitators and barriers that may contribute to or prevent the engagement and retention of Latinas in eating disorders (EDs) treatment. A qualitative design based on grounded theory was used to guide in-depth interviews with 5 Latinas (mean age 31.2) with history of EDs and with 5 Latino mental health providers (mean age 36.4). Six main themes were found in the discussion with

patients and mental health providers: immigration stress, treatment experience in the U.S., facilitators of help seeking, barriers to help seeking, treatment needs, and facilitators of treatment retention. For patients, lack of information about EDs and lack of bilingual treatment were identified as practical barriers. Other emotional factors such as stigma, fear of not being understood, family privacy, and not being ready to change were identified as barriers to seeking help. Among facilitating factors that encouraged patients to seek help, the most salient were the perception of the severity of the ED and emotional distress. For treatment retention, family support was a key element among patients. For providers, offering short-term treatment and directive treatment were seen as relevant factors for treatment retention in Latinos. Based on the themes discussed by both patients and providers, we suggest a culturally sensitive intervention model for Latinas with EDs in the U.S. addressing four levels: patient; family; providers; and system.

### **Learning Objectives:**

- To discuss facilitators that may contribute to the engagement and retention of Latinas in eating disorders (EDs) treatment.
- To demonstrate barriers that prevents Latinas to engage in the eating disorders treatment.
- To illustrate a culturally sensitive intervention model for Latinas with EDs in the U.S.

### **Sociocultural and Peer Predictors of Disordered Eating: Differences Between Early Adolescent Girls from Australian, Middle-Eastern and Asian Backgrounds**

*Siân McLean, BSc, La Trobe University, Melbourne, Australia; Susan Paxton, PhD, MPsych, BA, FAED, La Trobe University, Melbourne, Australia*

Many Australian adolescent girls are affected by body dissatisfaction and eating concerns. However ethnic differences in body dissatisfaction and disordered eating in Australian girls are largely unknown. This study aimed to explore these differences in early adolescent girls of Middle-Eastern, South-East Asian, and Australian backgrounds, and to identify factors that contribute to body image and eating concerns in these groups. Female grade seven students (mean age=12.84, SD=0.42; mean body mass index (BMI)=20.50, SD=3.81) of Australian (N=184), Middle-Eastern (N=110), and South-East Asian (N=62) backgrounds completed questionnaires assessing dietary restraint, bulimic eating symptoms, and a range of disordered eating risk factors. Middle-Eastern participants had higher BMI than Asian students, higher weight and shape concerns than Asian students (no longer statistically significant when controlling for BMI), and higher expectancies for thinness than Australian and Asian students. Multiple regression analyses revealed that dietary restraint was predicted by weight and shape concern for all groups. Weight teasing also predicted restraint in Australian students and expectations for thinness predicted restraint for Asian students. Weight teasing, appearance conversations, and body comparisons predicted variance in restraint for Middle-Eastern students. For bulimic symptoms, significant predictors were appearance conversations for Asian students, media exposure for Middle-Eastern students, and media exposure and appearance comparisons for Australian students. BMI was not a predictor for any group. These findings demonstrate that different variables are important for the prediction of two types of disordered eating in ethnically diverse groups of adolescent girls. Peer variables are particularly relevant for Middle-Eastern participants. Interestingly, few variables predicted bulimic symptoms. Further exploration of relevant factors in these populations is needed.

### **Learning Objectives:**

- Describe ethnic differences in disordered eating and associated risk factors in early adolescent girls.
- Assess the contribution of sociocultural risk factors in accounting for variance in disordered eating in girls of Australian, Middle-Eastern and South-East Asian backgrounds.
- Discuss potential implications for ethnically specific prevention interventions.

### **Acculturation and Ethnic Group Differences in Eating Behaviors and Attitudes Among Canadian Adolescents**

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Adolescents' weight-control behaviors and disorders are largely influenced by personal as well as sociocultural factors. Research on immigrant adolescents indicates that although some groups exhibit better outcomes than others, body dissatisfaction, poor body image and low self-esteem are associated with higher risk for eating and mental health problems among immigrant adolescents (e.g., Granillo et al., 2004; Nieri et al., 2005; Siegel et al., 1999). The goal of the present study is to examine (i) ethnic group differences in body esteem, beliefs and attitudes in a Canadian multiethnic sample; and (ii) the role of acculturation in immigrant adolescents' outcomes. Ethnic majority (N=1163) and minority (N=384, 139 foreign-born) adolescents (Mean=14 years)

completed measures of acculturation, demographics, body esteem, beliefs about appearance and weight, mainstream sociocultural attitudes and eating behaviors (restrictive, emotional). Hierarchical linear regression analysis indicated that a separation orientation predicted higher appearance ( $\beta = -.129$ ,  $t = -2.08$ ,  $p < .05$ ) and weight ( $\beta = -.142$ ,  $t = -2.30$ ,  $p < .05$ ) esteem among ethnic minority adolescents. No other statistically significant findings were observed for separation or assimilation orientation. MANOVA results revealed a significant main effect for ethnicity ( $F(7,1360) = 3.51$ ,  $p < .01$ ), controlling for age and sex. Ethnic majority participants internalized mainstream sociocultural attitudes ( $M = 14.89$ ,  $SD = 6.69$ ) and engaged in restrictive eating behaviors ( $M = 1.65$ ,  $SD = .70$ ) more than their ethnic minority peers did ( $M = 13.68$ ,  $SD = 6.86$  and  $M = 1.72$ ,  $SD = .72$ , respectively). Further research is needed to examine acculturation orientation and changes in immigrant adolescents' eating behaviors and attitudes over time. Our results suggest that immigrant adolescents are less likely to endorse North American attitudes, and adherence to their heritage culture is associated with better esteem outcomes.

### **Learning Objectives:**

- Describe the ethnic group differences in body and eating-related beliefs and attitudes.
- Identify the role of acculturation in eating-related variables.
- Future suggestions for acculturation research.

### **Does the Tripartite Influence Model of Body Image and Eating Disturbance Differ as a Function of BMI and Weight Status? An Examination of the Model in a Geographically and Ethnically Diverse Sample of College Women**

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The tripartite influence model of body image and eating disturbance suggests that three primary influences (peers, parents, and the media) influence body image and eating pathology. There is an association among body mass index, body dissatisfaction, and eating pathology; however, weight status has yet to be investigated as a moderator of the model despite theoretical rationale. Given this, the purpose of the current study was to investigate the tripartite influence model in a large sample of diverse college women ( $N = 1740$ , Mean BMI = 23.10, BMI range = 15.33 – 57.13) from four geographically diverse regions of the United States focusing on weight status as a moderator. The ethnicities of participants were as follows: African American (9.60%), Asian (10.86%), Caucasian (58.68%), Hispanic (9.48%), Multiethnic or Other (10.00%). Participants completed questionnaires on relevant constructs, including the recently developed and validated Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4), and the model was tested using structural equation modeling (SEM). The model provided good fit to the data based on relevant criteria, but results differed by body mass index and weight category. Implications and limitations of these findings will be discussed.

### **Learning Objectives:**

- Describe the tripartite influence model and the research that supports its use in predicting body image dissatisfaction and eating disturbance.
- Discuss the impact of weight status on sociocultural pressures, internalization of appearance ideals, body dissatisfaction, and eating pathology.
- Conceptualize the tripartite influence model within the context of ethnically diverse clientele and research participants.

### **Does Thin-Ideal Internalization Predict Body Dissatisfaction Among Sri Lankan Adolescents?**

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Impacts of societal thin-ideal on women's body image and eating behaviors have been extensively studied in East Asia as well as its western counterparts. However, such issues as body image and eating behavior problems have rarely been documented for Sri Lankan adolescents. The present study sought to examine thin-ideal internalization, self-esteem, and body dissatisfaction and their relationships among adolescents in Sri Lanka. A survey was conducted with 2016 Sri Lankan adolescents (906 girls and 1104 boys, six did not respond) ranging from 12 to 20 years old. Data were collected at high schools in city areas. Participants' socioeconomic status was measured in terms of fathers' academic attainment: junior high school ( $n = 150$ ), high school ( $n = 1257$ ), 4-yr college ( $n = 295$ ), graduate school ( $n = 119$ ). Descriptive statistics revealed interesting gender differences for thin-ideal internalization, body dissatisfaction, and self-esteem. Girls scored lower for thin-ideal internalization/awareness and higher on self-esteem compared to boys. Different from previous studies, body

dissatisfaction did not significantly differ between girls and boys. Hierarchical linear multiple regression analyses were performed to examine relationships among variables. Self-esteem was found to moderate a relationship between thin-ideal internalization and body dissatisfaction among girls but not for boys. Although eating disorders are much less prevalent among girls in Sri Lanka compared to their counterparts in other regions, it was implied that patterns of relationships among thin-ideal internalization and body dissatisfaction among Sri Lankan girls are similar to previous findings.

#### **Learning Objectives:**

- Be aware of cultural differences in body image and disordered eating behaviors.
- Familiarize themselves to sociocultural issues related to body image and derive for thinness.
- Discuss the role of self-esteem on relationships between thin-ideal internalization and body dissatisfaction.

### **Treatment of Eating Disorders IV**

#### **Chair:**

#### **What Is “Eclectic” Eating Disorders Treatment, Exactly? Alberta Therapists’ Approaches**

*Kristin von Ranson, PhD, FAED, University of Calgary, Calgary, Canada; Laurel Wallace, MSc, FAED, University of Calgary, Calgary, Canada; Andrea Stevenson, BA, University of Calgary, Calgary, Canada*

Many psychotherapists report using eclectic treatment approaches with their eating disorder (ED) clients. However, the term “eclectic,” which implies the integration of multiple approaches or techniques, is ambiguous and hard to interpret. Understanding the ways therapists approach ED treatment may have implications for improving uptake of evidence-based treatment. The purpose of the present study was to identify the specific elements of community therapists’ eclectic approaches to treat their clients’ EDs, i.e., what therapists meant when they described using an “eclectic” approach to ED treatment. Of 573 therapists working in Alberta’s 15 largest communities who we screened, 130 had treated EDs; of these therapists, 118 (90.8%) completed a phone interview. Almost all therapists reported having used an eclectic approach in treating ED clients (89.0%). The most frequently endorsed primary psychotherapeutic approach for EDs was eclectic (43.2%). Cognitive-behavior therapy was the most frequently mentioned component of an eclectic approach (46.7%), followed by strategic or solutions-oriented (17.1%), narrative (16.2%), and a variety of other therapies. Among the other components mentioned were alternative (e.g., meditation, guided imagery), psychodynamic, humanistic/existential, psychoeducation, interpersonal, and family therapies. Some participants (14.3%) declined to describe the specific techniques used in their eclectic approaches. In conclusion, Alberta therapists frequently used eclectic treatment approaches for EDs, at rates similar to those seen in samples of ED specialists (32.7%-41.9%; Wallace & von Ranson, 2012). Although surely well-intended, the use of multiple treatment approaches for EDs is untested, and is probably inconsistent with the provision of evidence-based treatment. Future research should examine the effectiveness of specific mixed treatment approaches for EDs.

#### **Learning Objectives:**

- Describe frequency of use of eclectic treatments for eating disorders.
- Describe frequently-used components of eclectic treatments for eating disorders.
- Discuss how the use of multiple treatment approaches pertains to evidence-based treatment provision.

#### **Intensive Community Management for Anorexia Nervosa: A Community Eating Disorder Services’ Approach**

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Purpose of the study is to find the use of intensive community management, a new multiprofessional treatment method, in order to avoid in-patient admission in the management of patients with Anorexia Nervosa. This intervention is specifically offered for those patients who were losing weight and when an in-patient admission is actively considered. The study sample is a series of patients whose BMI was less than 14 and they were losing weight at the time of their placement under the intensive community management programme. There is no control group but all patients who met the inclusion criteria and receiving care from our service from January 2012 to June 2012 were included in the study. Differences between group of patients who successfully recovered in the community without in-patient admission and the other group of patients who continued to deteriorate leading to in-patient care despite intensive community management are described. Key components of this multi-professional approach ( medical, dietetic, therapeutic, support working and the role of family) are described in detail thereby enabling other centres with similar skill mix to adapt this method. Binding principles of this management method are described in the presentation. Impact of such treatment in our service's overall budget is also described.

### **Learning Objectives:**

- Learn about the use of combined multiprofessional skills in the management of anorexia nervosa.
- A new method of cost effective case management resulting in avoidance of admission and recovery in the community.
- Binding principles of an eating disorders team's work in the management of critically ill Anorexia Nervosa patients.

### **Self-Compassion and Fear of Self-Compassion Interact to Predict Response to Eating Disorders Treatment**

*Allison Kelly, PhD, University of Waterloo, Waterloo, Canada; Jacqueline Carter, DPhil, FAED, Memorial University of Newfoundland, St. John's, Canada; David Zuroff, PhD, McGill University, Montreal, Canada; Sahar Borairi, BSc, York University, Toronto, Canada*

Gilbert (2005) proposed that the capacity for self-compassion is integral to overcoming shame and psychopathology. We tested this model among 74 individuals with an eating disorder admitted to specialized treatment. Participants completed measures assessing self-compassion (e.g., 'I try to be loving towards myself when I am feeling emotional pain'), fear of self-compassion (e.g., "I fear that if I become kinder to myself and less self-critical, my standards will drop"), shame, and eating disorder symptoms at admission and every three weeks during treatment. At baseline, lower self-compassion and higher fear of self-compassion were associated with more shame and eating disorder pathology. Multilevel modeling also revealed that patients with combinations of low self-compassion and high fear of self-compassion at baseline had significantly poorer treatment responses, showing no significant change in shame or eating disorder symptoms over 12 weeks. Results highlight a new subset of treatment-resistant eating disorder patients. Findings also support the value of incorporating interventions that target self-compassion and fear of self-compassion into eating disorders treatment.

### **Learning Objectives:**

- Describe the relationships between self-compassion, fear of self-compassion, shame, and eating disorder symptoms at the time patients are admitted to treatment.
- Summarize the way in which self-compassion and fear of self-compassion interact to predict response to specialized eating disorders treatment.
- Assess the value of integrating interventions that target patients' fear of self-compassion, particularly among those with low baseline self-compassion.

### **Can Guided Self-Help for Perfectionism Improve Negative Affect and Psychopathology?**

*Anne O'Shea, BSc, Flinders University, Adelaide, Australia; Tracey Wade, PhD, FAED, Flinders University, Adelaide, Australia*

Previous research has demonstrated that treatments targeting perfectionism can be effective in improving negative affect, one of two major risk factors for the development of eating disorders (Fittig & Jacobi, 2010), and can also decrease symptoms associated with eating disorders, depression and anxiety. The aim of this ongoing research is to evaluate the efficacy of an eight session, guided self-help intervention for perfectionism using cognitive behavioural techniques to improve negative affect and the symptoms of eating disorders, anxiety and depression. Participants were assessed at five time points, creating a four week control and a four week information-only condition prior to the commencement of treatment, and three month follow up. Of the 31 participants to have completed the first three waves (baseline period), 13 participants (42%) reported symptoms consistent with an eating disorder diagnosis. All participants were above the community mean on at least one measure of perfectionism. In addition to the primary dependent variable, negative affect, symptoms of eating disorders, depression and anxiety, and quality of life were also assessed to determine the utility of the intervention. Analysis revealed significant improvements on all variables at follow up with large effect sizes on all measures from baseline to post-treatment. Further, of the 9 participants with an eating disorder diagnosis to complete the treatment, only 3 met criteria for a diagnosis at post-treatment.

### **Learning Objectives:**

- Explain the relationship between perfectionism and disordered eating.
- Describe the impact of perfectionism in treatment of eating disorders.
- Summarise a guided self-help program targeting perfectionism to improve eating disorder not otherwise specified.

### **Oxytocin: A Novel Treatment in Anorexia Nervosa?**

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Research continues to emerge demonstrating the value of intranasal oxytocin for improving emotion recognition, social anxiety, empathy, social learning skills and cognitive flexibility in humans. The present study examines the therapeutic potential of oxytocin treatment in reducing cognitive rigidity and social anxiety, important perpetuating factors, in Anorexia Nervosa. In a randomized, placebo-controlled trial, 60 female anorexia nervosa patients in a residential treatment program receive 36 international units per day of oxytocin or a placebo for 4 weeks. Tests of social anxiety, cognitive rigidity along with a number of other parameters concerning weight, motivation, staging, autistic spectrum and therapeutic alliance, are performed at baseline and at 4 weeks. Serum levels of oxytocin, ADH, cortisol, BDNF, osmolality and thyroid function tests will be measured and correlations examined including those with oxytocin and cognitive parameters. It is expected that at the completion of the trial, it will be possible to discern whether oxytocin during inpatient re-feeding affords additional benefit, helping sufferer's better engage in change-orientated therapy and recover more easily.

#### **Learning Objectives:**

- Assess the effectiveness of oxytocin treatment for anorexia nervosa.
- Discuss the limitations of measures of cognitive rigidity.
- Identify the perpetuating factors of AN and thus discuss treatment challenges.

#### **Testing a Disgust Conditioning Model of Anorexia Nervosa: Results from a Preliminary Trial**

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Anorexia nervosa (AN) is associated with severe medical and psychological comorbidity and poor treatment outcome. Fear conditioning has been implicated in food avoidance, a core pathological process in AN. However, anxiety-based treatments of AN have not produced significant changes in eating behavior. Neurobiological studies suggest dysregulation of the insula, which is uniquely associated with disgust, in the development of AN. Dysregulation of the reward system has also been implicated in AN; patients show increased brain activation to food, which may elicit a pleasurable response to "safety behavior" (i.e., food avoidance). We posit that disgust conditioning, which is less flexibly learned than fear, coupled with pleasure derived from "safety behavior," may explain pathological food avoidance. The study aimed to test a fear conditioning model of food avoidance in AN. 20 patients with AN and 20 healthy controls (HC) will participate in a reversal learning (a.k.a. competitive extinction) paradigm, and electromyography (EMG) measures of emotional response. In the first phase of the reversal learning paradigm, a neutral stimulus is paired with a food reward (CS+), i.e., M & Ms, and another neutral stimulus is not paired with a reward (CS-). In the "reversal phase," the contingencies are switched. We predicted that patients with AN would perform poorly in the "reversal" (i.e., extinction) phase and that AN patients would evidence disgust to the M & Ms and pleasure to the lack of M & Ms. 13 subjects (9 AN; 4 HC) have completed the study. Consistent with our hypotheses, AN patients evidence impairment in extinction. AN patients evidenced disgust to M & Ms ( $p < 0.05$ ) and pleasure to lack of M & Ms; HCs evidenced pleasure to M & Ms. Data from additional subjects will be collected. These results support a disgust-based model of AN. Further understanding of learning, disgust, and reward processes in AN are critical for improving treatments for this population.

#### **Learning Objectives:**

- Describe how disgust conditioning and altered brain reward processes may explain pathological food avoidance in patients with Anorexia Nervosa.
- Analyze results from a preliminary trial examining classical conditioning, disgust response, and reward process in patients with Anorexia Nervosa compared to Healthy Controls.
- Assess treatment implications of this study, namely how to target disgust response to food among patients with Anorexia Nervosa.

## **Treatment of Eating Disorders V**

### **Chair:**

#### **Treatment of Avoidant/Restrictive Food Intake Disorder in a Day Hospital Program for Young Patients With Eating Disorders**

*Rolyn Ornstein, MD, Penn State Hershey Children's Hospital, Hershey, PA, USA; Terri Nicely, BS, Penn State College of Medicine, Hershey, PA, USA; Susan Lane-Loney, PhD, Penn State Hershey Children's Hospital, Hershey, PA, USA; Emily Masciulli, LCSW-C, Penn State Hershey Children's Hospital, Hershey, PA, USA; Christopher Hollenbeck, PhD, Penn State College of Medicine, Hershey, PA, USA*

The DSM-5 is scheduled to be released in 2013. The proposed Avoidant/Restrictive Food Intake Disorder (ARFID) is a rearticulated and renamed condition to classify children who present with restricted nutritional intake leading to low body weight, but without body image distortion and fear of weight gain. Thus far, there is

no data on this patient population. We sought to compare treatment outcomes of patients with ARFID to those with anorexia nervosa (AN), bulimia nervosa (BN), and Feeding and Eating Disorder Not Elsewhere Classified (FEDNEC) in a day program for young patients with EDs. A retrospective chart review of 177 (92% female) patients 7-16 ( $13.5 \pm 2$ ) yrs of age admitted to the program from 2008-2012 was performed. The program primarily uses an exposure-response prevention treatment paradigm, with extensive family involvement. All patients were classified using the proposed DSM-5 criteria. Of the 173 included patients, 22.5% met criteria for ARFID, 53.8% for AN, 11.6% for BN, and 12.1% for FEDNEC. Children with ARFID spent fewer weeks in program than those with other EDs (7.4 vs. 11.0,  $p < 0.0001$ ) and had a significant increase in % median body weight (from 87.1 to 97.3%,  $p < 0.0001$ ), which was similar to the other groups in which weight gain was recommended. Additionally, all patients were found to have significant improvements in their ED behaviors and psychopathology over the course of treatment, as measured by scores on the Children's Eating Attitudes Test, Children's Depression Inventory, and Revised Children's Manifest Anxiety Scale (all  $p < 0.0001$ ). This is the first study to describe and compare treatment outcomes of children and adolescents with the proposed DSM-5 diagnosis ARFID to those with other EDs. This study demonstrates that patients with ARFID can be successfully treated in the same day program as patients with other EDs, with comparable improvements in weight and psychopathology in a shorter time period.

### **Learning Objectives:**

- Identify the criteria for the DSM-5 proposed diagnosis Avoidant/Restrictive Food Intake Disorder.
- Compare treatment outcomes of patients with ARFID to those with other eating disorders.
- Recognize that patients with ARFID can be successfully treated in a day hospital program alongside other young eating disorder patients.

### **The Use of Guided Self-Help Delivered on Mobile Technology in Anorexia Nervosa**

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Clinical observations suggest that outpatients with AN frequently report motivation to initiate change but difficulties in sustaining change in their home environments. As systematic reviews suggest that self-help programs may play an important role in the treatment of eating disorders (e.g., Perkins, Schmidt, & Williams, 2006; Wilson & Zandberg, 2012), strategies to support change and overcome behavioural rigidity in an ecologically-valid manner would likely promote treatment success. The present study examined the acceptability and benefit of a guided self-help intervention delivered via mobile technology in anorexia nervosa (AN). Women with AN ( $N=18$ ) completed a 3-week guided self-help intervention along with baseline and post-intervention self-report and behavioural assessments. The intervention included the use of video clips ("vodcasts") that reviewed a variety of ED-relevant themes, a manual and provided limited guidance. Participants completed standardized measures to assess eating psychopathology, depression and anxiety symptoms, cognitive flexibility, and readiness to change before and after the intervention, as well as daily monitoring forms. Results indicate that participants found the video clips acceptable and useful in increasing awareness. The vodcasts that described recovery stories and discussed the implications of detailed versus big picture thinking were both highly rated and used most frequently. Adherence was good (18/23 participants completed) and small increases in BMI ( $ES = .25$ ), significant improvements in eating disorder symptoms ( $ES \text{ range} = .4/.5$ ), mood symptoms ( $ES \text{ range} = .4/.7$ ), and cognitive flexibility ( $ES = .4$ ) were detected post-intervention. Given the advantages of a mobile guided self-help intervention in terms of access/availability and provision of flexible support, as well as the acceptability and symptomatic changes reported, present findings suggest that it may be a useful candidate for further investigation.

### **Learning Objectives:**

- Review the use of guided self-help in anorexia nervosa.
- Describe patients' feedback on the use of guided self-help in anorexia nervosa.
- Discuss clinical implications for the use of guided self-help in anorexia nervosa.

### **Recovery from Chronic Anorexia Nervosa: The Tipping Point for Change**

*Lisa Dawson, BA, The University of Sydney, Sydney, Australia; Paul Rhodes, PhD, The University of Sydney, Sydney, Australia; Stephen Touyz, PhD, FAED, The University of Sydney, Sydney, Australia*

Objective: To explore the process of recovery from the perspective of those who had fully recovered from chronic anorexia nervosa (AN). Method: Thirty participants who identified as recovered from chronic AN were assessed for recovery status using stringent criteria. Of those screened eight women who suffered from AN for between nine and forty-four years were assessed as being fully recovered for five or more years. These participants took part in in-depth interviews about their process of recovery. Data were analysed using the qualitative method, Narrative Inquiry. Results: Recovery was identified as a long and complex process that appeared to span four stages. During Stage one, motivation for change was low, due in part to a sense of hopelessness about the prospect of recovery. Participants had an external locus of control, perceived the treatment they were receiving

as unhelpful, and felt alienated from others. In Stage two, after years of living with the illness, participants experienced a turning point via the aligning of key factors in time, such as feeling more connected to others and a sense of 'hitting rock bottom'. At this tipping point, locus of control became internal to motivate change. This tipping point acted as a mechanism for change, allowing the women to activate recovery-oriented skills in Stage three. The final phase, Stage four, was characterised by reflection and self-acceptance. Discussion: Results provide a framework for understanding the complex process of recovery and emphasise the factors that constituted the "tipping point" for change. Findings also suggest that full recovery from chronic AN is possible, emphasising the importance of maintaining hope for both patient and clinician. Future directions for research are discussed as well as implications for attitudes and beliefs about recovery from chronic AN.

### **Learning Objectives:**

- Analyze research practices for assessing recovery from anorexia nervosa.
- Identify factors associated with recovery from chronic anorexia nervosa.
- Reflect upon the role of hope in recovery from AN.

### **Evolution of Energy Expenditure in Adolescents with Anorexia Nervosa and the Clinical Application**

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The inanition state and weight loss of patient with anorexia nervosa (AN) results in metabolic responses aimed to the maintenance of vital functions and survival state. Many reports describe difficulties for weight gain during refeeding due to metabolic alterations. Studies reports hypometabolic state in the starvation phase, the aim of this study is to determine how much longer this state prevails. Indirect calorimetry (CI) and anthropometry measures performed in hospitalized female patients with AN in a specialist treatment unit for eating disorders (N=190, age 15.07yr) in the first week (T<sub>0</sub>), the subsequent measures performed one month (T<sub>1</sub>), six months (T<sub>6</sub>) and one year (T<sub>12</sub>) after the hospitalization following an strict feeding protocol and interdisciplinary therapeutic interventions. The metabolic index (MI) calculated in all patients, to compare in percentage the REE measured by CI with the estimated by theoretical predictive equation. The MI in T<sub>0</sub> was 71.16% reflecting a hypometabolic state with a Body Mass Index (BMI) Kg/m<sup>2</sup> (15.91). In the refeeding T<sub>1</sub> MI was (79.63%) that still considers a hypometabolic state with a BMI (17.11) showed a significant improvement of 8.2% (P=0.001). REE in the T<sub>6</sub> the MI was (77.13%) with a BMI (17.83), this data show a maintenance of the hypometabolic state and a significant difference with the T<sub>0</sub> but not from T<sub>1</sub>. In T<sub>12</sub> MI was (77.44%) with a BMI (18.45) show no significant difference from the T<sub>0</sub> and T<sub>6</sub> with T<sub>12</sub>. We conclude that hypometabolic state continues despite of the improvement of the nutritional condition according to the Z score of the BMI for age. So there is the need for a relative high-energy intake to maintain the course of the nutritional rehabilitation and a close nutritional motorization. Determine objectives according to the nutritional and psychological state of the patient and the use of CI provides objective information that can be used to design, implement and evaluate the efficacy of the management of AN

### **Learning Objectives:**

- To describe the evolution metabolic state of anorexia nervosa patients to establish interventions according to the state and clinical response of the patients.
- To demonstrate the need of a continued nutritional care to maintain the recovery process.
- To validate the use of a high energy diet to maintain the recovery process or the objectives accomplished.

### **Testing of a Metacognitive Control-Related Maintenance Model of Anorexia Nervosa**

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The need for consideration of novel maintenance factors in cognitive theory of anorexia nervosa (AN) and a better understanding of maintenance mechanisms underlying the disorder is highlighted by the lack of evidence of treatment efficacy. Fairburn, Shafran, and Cooper (1999) proposed a maintenance model of AN constructed around the individual's need for control. Interestingly, recent studies suggest that higher level control-related dysfunctional metacognitions (i.e., the need to control thoughts and negative beliefs about the uncontrollability/danger of thoughts) are also associated with AN (Cooper, Grocutt, Deepak, & Bailey, 2007; McDermott & Rushford, 2011). Empirical evidence for maintenance models of AN is limited. Purpose of study: To test a higher level metacognitive maintenance model of AN adapted from Fairburn et al.'s (1999) cognitive model, centered on control-related dysfunctional metacognitions, in female AN patients (*n* = 110) and a non-

eating disordered community sample ( $n = 132$ ). Method: Data were collected through self-report measures. Path analyses were conducted to test the relationship of drive for thinness to perfectionism, low self-esteem, the need to control thoughts, and negative beliefs about the uncontrollability/danger of thoughts. Summary findings: In the AN patients, but not controls, predicted direct and indirect pathways were confirmed ( $p < .05$ ), the outcome variable of drive for thinness demonstrated a strong amount of variance explained by the endogenous variables ( $R^2 = .36$ ), and overall fit of the model was excellent. The results provide preliminary empirical evidence for metacognitive control-related mechanisms in maintaining AN, and give an indication of the strength of relationships between metacognitive control-related factors and the main AN symptom of drive for thinness. Findings suggest control-related dysfunctional metacognitions should be a target of AN treatment.

### **Learning Objectives:**

- Identify the metacognitive level control-related variables associated with anorexia nervosa.
- Recognise the link between Fairburn, Shafran & Cooper's (1999) cognitive maintenance model of anorexia nervosa and the metacognitive model proposed in the present study.
- Describe the mechanism through which perfectionism, low self-esteem, and metacognitive level control-related factors maintain anorexia nervosa.

### **Cognitive Remediation Treatment for Anorexia Nervosa: Results of a Feasibility Randomized Clinical Trial**

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There are limited data supporting specific treatments for patients with anorexia nervosa (AN). Randomized Clinical Trials (RCTs) are characterized by high attrition, especially for adult patients, limiting the feasibility of conducting and interpreting existing studies. High dropout rates may be related to the inflexible and obsessional cognitive style of AN patients. To address this possibility, the current study evaluated the use of a brief course of Cognitive Remediation Therapy (CRT) for AN compared to Cognitive Behavioral Therapy (CBT) on participant attrition rates and cognitive functioning in treatment. Forty-six participants (mean age of 22.7 years and mean duration of AN of 6.4 years) were randomized to receive 8 sessions of either CRT or CBT over 2 months. At the conclusion of the initial randomization period both groups were treated with 16 sessions of CBT over 4 months. The primary outcome was treatment retention during the initial 2 months of treatment. Secondary outcomes were changes in cognitive functioning, weight, and psychopathology. Independent assessments were conducted at baseline, 2 months (after session 8 of randomized treatments) and at the end of treatment (6 months). During the CRT vs CBT treatment phase attrition was significantly lower and improvements in specific cognitive inefficiencies associated with AN were significantly greater in the CRT group than with CBT. No differences between groups in weight or eating related psychopathology were found at any assessment point. These results suggest that CRT may be a useful treatment for AN to help address treatment dropout. Further studies on the potential role of CRT in AN are warranted.

### **Learning Objectives:**

- To review the rationale for examining cognitive remediation therapy for anorexia nervosa.
- To discuss the methods utilized in a feasibility study utilizing cognitive remediation treatment in anorexia nervosa.

To discuss the results and significance of the findings of improvements in attrition rates and cognitive improvements in a study of cognitive remediation treatment for anorexia nervosa.