

Obesity SIG Newsletter

Summer 2019

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A WORD FROM OUR CHAIR

Greetings!

I hope everyone is having an enjoyable and active summer. It was great to see so many of you attend our Obesity SIG meeting at SPPAC back in April. I would like to take this opportunity to formally thank Adelle Cadieux for her service and leadership as she transitions into the role of Past Chair. As I mentioned at the meeting, I am invested in creating opportunities for mentoring and networking. If you are planning to attend the APA annual convention in Chicago in August and would like to get together, please send me an email (bsalline@med.umich.edu) with availability and interest. I am committed to continuing to make participation in our Obesity SIG a meaningful experience. Ideas for collaborative projects are always welcome.

Enjoy the summer and I hope to see some of you in August!

Bethany

Join the Obesity SIG

Our mission is to promote the health and well-being of youth with overweight and obesity and their families by fostering the provision of evidence-based assessment and treatment methods utilizing the principles of psychology. The SIG provides a forum for communication and collaboration in both clinical and research realms, in order to further the field's knowledge of developmental and contextual factors contributing to the etiology of obesity, course and outcome of pediatric obesity, assessment and treatment of behavioral and emotional comorbidities, and obesity prevention initiatives. We also aim to provide education, training and mentoring of psychologists in the care of youth with overweight and obesity and advocacy for public policy. For more information, go to our SPP webpage or our SIG website.

<u>https://societyofpediatricpsychology.org/obesity_sig</u> <u>https://obesitysig.weebly.com/</u>

SPPAC 2019: OBESITY SIG POSTER PRESENTATION AWARD

During the SPPAC 2019 Obesity SIG Business meeting, 4 students/trainees were invited to present their research. It was a great pleasure to hear the research that our student/trainees are doing! The obesity SIG would like to thank the students and congratulate them on the great work!

Poster Presentation Winner: Kathryn Prendergast



Kathryn Prendergast (University of Alabama at Birmingham), Caroline Keller (University of Alabama at Birmingham), Shima Dowla (University of Alabama at Birmingham) and Marissa Gowey (University of Alabama at Birmingham). *Identifying potential biomarkers of cognitive dysfunction in pediatric obesity: associations between cognitive function, fasting glucose, and cortisol*.

Abstract

Introduction: Executive function (EF) deficits lead to poorer treatment outcomes in adherence and weight loss, and untreated pediatric obesity leads to both EF impairments and risk of chronic disease. Thus, EF deficits in children with obesity

may be associated with signals of risk for Metabolic Syndrome (MetS), a precursor to CVD and Type 2 Diabetes. Fasting glucose is among screening recommendations for children with BMI >85th percentile for early detection of MetS, and elevated cortisol tends to accompany this presentation. Both have been found to be elevated in obesity, but neither have been examined in association with EF in pediatric obesity. This represents an opportunity to identify potential biomarker targets that could help improve treatment outcomes and chronic disease prevention. Thus, the present study aims to explore associations between EF and blood serum fasting glucose and cortisol.

Methods: Treatment-seeking children aged 8-12 years with BMI>95th percentile were recruited from a pediatric weight management clinic and attended baseline assessments for a family-based behavioral intervention program for pediatric obesity. Demographics and medical history were assessed via parent questionnaire. Height and weight were measured by research staff and converted to zBMI. Child performance-based EF was assessed via the NIH Toolbox Cognitive Battery iPad application. Blood draws, assays, and Dual-energy X-ray Absorptiometry (DXA; measuring adiposity) were conducted by trained research personnel. Pearson's correlations were conducted to explore associations between EF (NIH Toolbox Cognitive Battery, fully corrected T-scores) and serum cortisol and fasting glucose.

Results: Children (n=12) were primarily female (76.5%) and African American (64.7%). Correlation coefficients between fasting glucose and cognitive tests were highly variable (r= -0.006 to -0.672) with moderate to strong associations shown for Inhibitory Control (r=-0.50), Oral Reading Recognition (r=-0.57), Processing Speed (r= -0.41), and Picture Vocab (r=-0.414). Associations between cortisol and cognitive tests were weak (r= -0.02 to -.15). Episodic memory was positively associated with both glucose (r= 0.58) and cortisol (r=0.27).

Conclusions: Signals of higher fasting glucose in association with poorer cognitive function were identified in a small sample of children with obesity. Thus, fasting glucose may be a candidate biomarker of cognitive dysfunction in obesity that warrants further research, with potential long-term implications for improving pediatric obesity treatment.

SPPAC 2019: OBESITY SIG POSTER AWARDS

Poster Award Winner: Caroline West



Caroline West (Kent State University), Elizabeth Ruzicka (Kent State University), Clarissa Shields (Kent State University), Katherine Darling (Kent State University) and Amy Sato (Kent State University). *Examining Associations Between Food Insecurity and Binge Eating in Adolescence.*

Abstract.

Introduction: Binge eating is highly prevalent (10-15%) among adolescents and affects those in varying socioeconomic classes (SES). Binge eating, involving a feeling of loss of control (LOC) over eating, has been linked to adverse medical and psychosocial outcomes, including depressed mood, obesity, and excess

weight gain. As food insecurity disproportionately affects those from a low SES background, it is important to examine the associations between food insecurity and binge eating behaviors. We hypothesized that 1) food insecurity would strengthen the association between the household income-to-needs ratio and episodes of LOC eating and that 2) higher levels of food insecurity would be associated with higher levels of two types of LOC eating, objective binge episodes (OBEs) and subjective binge episodes (SBEs), in adolescents.

Methods: Adolescents ages 12-17 (N=60; M age=13.88[SD=1.80] years; 53.3% female; 81.7% white) and their parents (N=60; 95.0% female; 85.0% white) participated in a larger laboratory-based study examining adolescent obesity risk. Adolescents completed the Eating Disorders Examination-Questionnaire (α =.94) to assess for self-reported episodes of LOC, including both OBEs and SBEs. Parents completed the Core Food Security Module (α =.87) to assess household food insecurity and reported total annual income and household size to calculate income-to-needs ratio (M=3.33; SD=2.25). Families were classified as low-income if their income-to-needs ratio fell below 200% of the 2014 federal poverty threshold (33.3% low-income).

Results: Our results showed that parent-reported food insecurity significantly moderated the association between income-to-needs and the number of adolescent-reported LOC eating episodes F(1,56)=11.99, p<.01, with 12% of variance explained. Simple slopes test revealed that higher levels of food insecurity (less food secure) and lower levels of income-to-needs are associated with higher LOC eating episodes, B=-.98, t(56)=-2.95, p<.01. Further, when looking at type of LOC episode, we found that food insecurity was significantly positively associated with both OBEs (r=.62, p<.001) and SBEs (r=.41, p<.01).

Conclusions: This study found that higher food insecurity may strengthen the positive association between income-to-needs in the household and LOC eating behaviors among adolescents. Moreover, food insecurity may be positively associated with two specific types of LOC eating, OBEs and SBEs. Thus, it is imperative to address concerns of limited or uncertain food access in adolescence as this experience of food insecurity may strengthen the risk for maladaptive eating behaviors in response to low SES. Future research should focus on longitudinal trends to establish the temporal nature of binge eating in the context of food insecurity and pediatric obesity.

SPPAC 2019: OBESITY SIG POSTER AWARDS

Poster Award Winner: Rebecca Kamody



Rebecca Kamody (Yale School of Medicine) and Christy Olezeski (Yale School of Medicine). *Towards an Understanding of Weight Related Disparities Among Transgender and Gender Nonconforming (TGNC) Youth.*

Abstract.

Introduction: Research in TGNC youth is in its nascency. Due to gender dysphoria and associated body image concerns, weight-related behaviors are often impacted; however, weight inequities among TGNC youth is critically understudied.

Methods: TGNC youth and parents participate in ongoing research as part of their visits to the Yale Gender Program. To date, 34 youth (M = 14.56 years, SD = 1.97; range 10-17) have consented, with collection ongoing. Height/weight were obtained, BMI percentiles calculated, BMI classification determined, and the Utrecht Gender Dysphoria scale completed. Natal sex was used to calculate BMI percentiles, given that initial weight was obtained prior to medical interventions (i.e., hormone therapy).

Results: Among participants, 27 were natal-female (89% trans-male; 11% non-binary) and 7 natal-male (100% trans-female). BMI percentiles suggest that among trans-males, 1 was underweight (4%), 16 healthy-weight (67%), 3 overweight (13%), and 4 obese (16%). Among trans-females, 1 was underweight (14%), 5 healthy-weight (72%), and 1 obese (14%). Among non-binary youth, 1 was underweight (33%), 1 healthy-weight (33%), and 1 obese (33%). Based on the chi-square statistic, BMI classification did not significantly differ based on natal sex nor gender identity; however, BMI percentile was significantly lower (t = 2.63; p < .05) among natal-males (M = 26.00; SD = 31.69) compared to natal-females (M = 60.59; SD = 30.89). Gender dysphoria was not significantly correlated with BMI.

Conclusions: Trends in weight disparities among TGNC youth are critically understudied; inclusion of non-binary youth in the research literature is notably absent. TGNC youth are at increased risk for problematic weight-related behaviors. Theoretical hypotheses for weight trends exist, such as underweight trans-males suppressing menses, and overweight/obese trans-males hiding curves. Before further exploring such hypotheses, however, these trends must first be established. Though preliminary findings, waiting to disseminate findings until more robust results are available may deter research progress.

SPPAC 2019: OBESITY SIG POSTER AWARDS

Poster Award Winner: Carolyn Bates



Carolyn Bates (Children's Mercy Kansas City), Meredith Dreyer Gillette (Children's Mercy Kansas City), Amy Papa (Children's Mercy Kansas City), Julie Vandal (Children's Mercy Kansas City) and Sarah Hampl (Children's Mercy Kansas City). *Measuring Clinical Weight Loss in Young Children with Severe Obesity: Comparison of Outcomes using zBMI, Modified zBMI, and Percent of 95th Percentile*

Abstract

Introduction: Young children with obesity are at risk for negative health consequences throughout life, emphasizing the need for

effective weight management strategies (Biro & Wein, 2010). However, there is a lack of consensus regarding the best metric for assessing weight change among children with severe obesity (Freedman et al., 2016). Body mass index z-score (zBMI), modified (MzBMI), and percent of 95th percentile (%95thpercentile) have each been proposed as appropriate measurements for change in extreme values of weight (Dietz, 2017), but few studies have considered how these metrics may interact with age (Chambers et al., 2017). The current study utilizes several measurement strategies to examine weight change outcomes from a clinical pediatric weight management program among young children with obesity based on age group and obesity severity.

Method: Families of 153 children took part in a 6-week family-based behavioral weight management treatment program and participated in 6-month follow-up measures. Children were 23% Caucasian, 29% African American and 41% Hispanic, and were 2-9 years old (M age = 6.94, 61% female). Height and weight were measured and calculated as zBMI, MzBMI, and %95thpercentile based on age and gender norms (CDC, 2000). Repeated measures analyses of variance were run to examine differences in weight change outcomes based on measurement strategy, and age and baseline obesity class were explored as moderators.

Results: Approximately 68% of participants presented with severe obesity (class 2 or greater) at baseline. Younger children (i.e., under 6 years of age) recorded higher zBMI at baseline than older children (t(50)=5.84, p<.001). On average, participants experienced a significant reduction in weight over time as measured by change in zBMI (F(1.3,194)=32.86, p<.001), MzBMI (F(1.4,213)=16.81, p<.001), and %95thpercentile (F(1.5,223)=6.87, p<.01). Age group emerged as a significant moderator of weight change only in models that tested zBMI as an outcome (F(2,151)=6.66, p<.05). Specifically, children younger than 6 years of age experienced a more significant weight change over time when weight was measured using zBMI. Obesity class did not emerge as a significant moderator of weight change in models using zBMI. MzBMI, or %95thpercentile as an outcome.

Conclusions: While all BMI measurements yielded statistically significant results over time, different magnitudes and patterns of change emerged based on measurement strategy. Given that clinically meaningful definitions of change only exist for zBMI, it is



SUMMARY OF ACTIVTIES

essential to identify similar metrics for other measures (MzBMI, %95thpercentile) to evaluate longitudinal health outcomes of obesity, especially in young children.



SIG Business Meeting:

- Highlighted student research
- Transition to new leadership

Stroll with a Mentor:

- Student/Trainees paired with mentors in obesity
- Discuss obesity training, research, and treatment

Morning Physical Activity:

- Friday morning yoga
- Saturday morning cardio

APA Annual Convention Chicago, IL August 8-11, 2019

Pediatric Obesity and Obesity Programing: Workshops and Seminars

Continue Education Workshops: Additional Fees

Thursday 8 AM - 3:50 PM Acceptance-Based Approaches for Weight and Body Image Concerns

Friday 6 PM - 8:50 PM CBT for Weight Loss and Maintenance

Symposiums:

Thursday 8-8:50 AM McCormick Place, Level 1–West Building, Room W183c Program Development Successes and Trials—Bumps in the Road on Interdisciplinary Pediatric Teams

• Pediatric Weight Management Program Development and Psychosocial Screening: Implementation and Results. Jason Boye, PhD, and Megan Cohen, PhD, Nemours/A.I. DuPont Hospital for Children, Wilmington, DE.

Thursday 9-9:50 AM McCormick Place, Level 1–West Building, Room W176a Assessing Youth Prior to Medical Procedures—Examples From Bariatric, Transplant, and Gender Clinics

• Melissa Santos, PhD, Connecticut Children's Medical Center, Hartford, CT. The Role of a Psychologist on a Surgical Team: Bariatric Surgery

Thursday 12-1:50 PM McCormick Place, Level 1–West Building, Room W186b Psychosocial Functioning Among Transgender Children and Adolescents

• Weight Management Behavior Among Transgender Youth. N. Christine Moser, PhD, Children's Mercy Kansas City, Overland Park, KS; and Anna M. Egan, PhD, Children's Mercy Kansas City, Kansas City, MO.

Saturday 4-5:50 PM McCormick Place, Level 1–West Building, Room W176a Navigating Interprofessional Collaborations and Conversations

- Medical Neglect in Pediatric Weight Management: Case Series of Interprofessional Decision Making. Adelle Cadieux, PsyD, Helen DeVos Children's Hospital, Grand Rapids, MI.
- Increasing Retention in Youth Following Bariatric Surgery: Finding Collaborative Solutions. Melissa Santos, PhD, Connecticut Children's Medical Center, Hartford, CT.
- Balancing Family and Provider Treatment Preferences: A Collaborative Sleep
 Intervention. Bethany J. Sallinen Gaffka, PhD, University of Michigan, Michigan

APA Annual Convention Chicago, IL August 8-11, 2019

Pediatric Obesity and Obesity Programing: Poster Sessions

Poster Sessions:

Poster Session 1: Thursday 9-9:50 AM McCormick Place, Level 3–West Building, Hall F

 Predicting Disordered Eating in Overweight College Males: Negative Affect and Body Dissatisfaction. Will P. Archuleta, BS, Carlie C. McGregor, MS, and Patricia L. Kaminski, PhD, University of North Texas (I-9)

Poster Session: Showcasing Graduate Student Research Thursday 11-11:50 AM McCormick Place, Level 3–West Building, Hall F

• The Effects of Parent-Child Interaction Therapy on Childhood Obesity. Shanique T. Yee, MS, and Thomas Kennedy, PhD, Nova Southeastern University (T-5)

Poster Session: II—Access to Education and Mental Health Opportunities for Diverse Youth Friday 10-10:50 AM McCormick Place, Level 3–West Building, Hall F

• A Fat Gap in Intersectional Social Justice Work: Weight Bias and Body Diversity in Schools. Stephanie M. Campbell, MS, University of Wisconsin–Madison (C-11)

Poster Session: Cutting Edge Research From Emerging Psychological Scientists Friday 12-12:50 PM McCormick Place, Level 3–West Building, Hall F

• Teaching Effective Parenting Skills to Parents of Children with Overweight and Obesity Using Remote, "Bug-in-the-Ear" Video Coaching at Mealtimes. Brittney C Evans, MS, and Evan M Forman, PhD, Drexel University (W-3)

Poster Session: I Saturday 11-11:50 AM McCormick Place, Level 3–West Building, Hall F

• Self-Compassion, Internalized Weight Stigma, Physical Activity, and Well-Being in Emerging Adults. Krista Tice, BS, Michael P. Craven, MA, Katie L. Kivisto, PhD, and Erin M. Fekete, PhD, University of Indianapolis (J-1)

Poster Session: II Saturday 11-11:50 AM McCormick Place, Level 3–West Building, Hall F Exploring the Impact of Weight Bias in the Judicial System. Lauren R. Pupko, MS, MA, and Jessica Gil, MS, Nova Southeastern University (L-8)

Poster Session: II Saturday 12-12:50 PM McCormick Place, Level 3–West Building, Hall F

- Forsaking the Body to Protect the Mind: Emotional Eating and Race as Factors in Predicting Obesity. Kim E. Joseph, PhD, MS, and Kelly Schmitt, PhD, Keiser University (B-2)
- Sexual Victimization Predicts Unhealthy Weight Management Among First Year College Women. Larissa A. McGarrity, PhD, MS, University of Utah; Robyn L.

MEET YOUR SIG EXECUTIVE BOARD

CHAIR: Bethany Gaffka, PhD

CHAIR-ELECT: Jason Boye, PhD

SECRETARY: Meredith Dreyer Gillette, PhD

STUDENT MEMBER AT LARGE: Libby Ruzicka, MA

PAST CHAIR: Adelle Cadieux, PsyD

MEET YOUR SIG SUBCOMMITTEE CHAIRS

Advocacy: OPEN Assessment & Measurements chair: Jocelyn Carter Bariatric Surgery: Eileen Chavis Clinical Issues chair: Melissa Santos Membership chair: Mary Beth McCullough Membership Engagement co-chairs: Eli Getzoff & Marilyn Stern Newsletter chair: Adelle Cadieux Research co-chairs: Meredith Dreyer Gillette & Cathy Stough SPPAC Physical Activity chair: Wendy Ward Technology chair: Jason Boye Website Development co-chairs: Jason Boye & Mary Beth McCullough

STUDENT/TRAINEE CORNER

I am delighted and honored to accept the role of Student/Trainee Member for the Pediatric Obesity Special Interest Group. I am a fifth-year graduate student in the Clinical Psychology PhD program at Kent State University, working under the mentorship of Dr. Amy Sato. My research interests include investigating familial and environmental factors that influence the development of obesity in children and adolescents and reduction of health disparities in pediatric obesity.

I am grateful to our previous student member, Brittany Lancaster, for her hard work and dedication to the role. My goal is to continue fostering student engagement and involvement in the SIG. Every year at SPPAC I am encouraged by the commitment to healthy habits through the opportunities for physical activity provided by the SIG. I look forward to continuing our successful annual Stroll with a Mentor, in addition to exploring other options for members of all levels to interact with each other.

Thank you for the opportunity to serves as your Student/Trainee Member. I look forward to serving over the next two years and encourage you to contact me at <u>ebollin1@kent.edu</u>, with any questions, comments, or ideas. I look forward to seeing you at SPPAC 2020!

Libby Ruzicka, M.A.

OBESITY SIG WEBINARS



Other Topics:

- 🗸 Stigma
- Prader Willi
- Program Development and Evaluation Body Image
- ✓ Food Insecurity
- ✓ Culture
- ✓ Picky Eating
- ✓ Atypical eating considerations
- ✓ Prevention
- ✓ Obesity in Under 5



We Heard You!

Thank you to all who completed our online survey! The Obesity SIG is excited to be bringing you webinars on topics important to you. Stay tuned for a save the date!

Want to submit a topic or volunteer you or your colleague as a speaker?

Contact Melissa

(<u>msantos@connecticutchildrens.org</u>) and Adelle (Adelle.Cadieux@spectrumhealth.org)

OBESITY SIG MILESTONES:

SIG celebrates 10 years in 2020

SPPAC Physical Activities have been offered for 5 years in 2020

SIG has 5 past chairs

SIG subcommittees have grown to 11