IMFAR

INTERNATIONAL MEETING FOR AUTISM RESEARCH

Annual Meeting of the International Society for Autism Research (INSAR)

May 13-16, 2015

Grand America Hotel | Salt Lake City, Utah, USA

International Meeting for Autism Research

www.autism-insar.org

ABSTRACT BOOK

behaviors were associated with parenting stress for both mothers and fathers of younger (≤11 years) children. For parents of older children, autism symptom severity correlated only with paternal parenting stress.
Conclusions:
Parenting a child with ASD is associated with higher levels of stress than parenting a TD child, but our results illustrated that parents do not experience higher levels of anxiety and depressive symptoms. Importantly, though, since both mothers and fathers of children with ASD experience heightened parenting stress, it is crucial to support both parents when treating children with ASD. Our results suggest that the child variables contributing to parenting stress change throughout child development and may be different for mothers and fathers as children get older. These findings also underscore the importance of addressing comorbid externalizing behaviors when treating younger children with ASD as these behaviors lead to stress for parents.

31 **122.031** Mealtime Structure in Families with Children with ASD

K. K. Ausderau[1] *and E. Laird*[2]*, (1)University of Wisconsin - Madison, Madison, WI, (2)Common Threads, McFarland, WI*

Background: Feeding challenges are highly prevalent among children with autism spectrum disorders (ASD) with up to 89% reported to have feeding difficulties impacting development, health, and social interactions, specifically parent–child relationships. These feeding difficulties create tension and disruption around mealtimes and have been shown to significantly increase parental stress within and outside feeding experiences.
Objectives: The purpose of this study was to examine how parents of children with ASD structure their mealtime routines using a grounded theory approach.
Methods: Families (n=16), primarily mothers, with a child with ASD, ages 2-8 years, participated in 2-3 semi-structured interviews, each lasting 1 to 2 hours in the home environment. Audio-recorded interviews and field notes were transcribed verbatim and used for data analysis. A grounded theory approach was used, including initial identification of codes and themes to organize data. Axial coding was used to draw connections among the concepts and categories that built on identified themes. Lastly, selective coding was used to describe the central phenomena of the data and develop a theory on family mealtime construction. In-depth interviewing, triangulation, and member-checking (i.e., verifying and clarifying information with participants at follow-up interviews) were used to establish scientific rigor in the qualitative data.
Results: Family construction of mealtimes are a dynamic and adaptive process that involved the interplay of five themes: Values (guiding principles and beliefs shaped by family culture, traditions, religion, and personal experiences), Balancing Demands (what parents prioritize with regards to feeding and mealtime in the context of their busy lives and family schedules), Parent Strategies (strategies individual parents implement with their children in varying mealtimes contexts that are guided by their values and realities of their daily schedules), Mealtime Happenings (actual mealtime process), and Adaptability (interactions and adaptations that occur based on child behaviors and context). Themes were used to construct a grounded theory to describe the process of how parents with children with ASD structure their mealtime routines. Figure 1 shows the relationship and interaction among the themes that describes the elaborate mealtime construction that arises in response to a child's feeding disorder. Many factors influence how parents of children with ASD attempt to structure their mealtime routines and consequently the actuality of the family mealtime experience, including parental values, balancing family demands, and the individual responses of the child to implemented parental strategies. In the described model, parent strategies were often the mediator between how the child behaviorally responded in mealtime contexts and the parent's attempt to balance family demands and values. Due to the complexity of mealtime construction in the presence of having a child with ASD and feeding challenges, parents were required to have constant adaptability to create "successful" family mealtimes.
Conclusions: Five distinct themes were identified and used to create a model of family mealtime construction using a ground theory approach. The explicit identification of mealtime routines will lead to targeted family-centered interventions that can be based on individualized family goals, values, and behaviors that can improve child eating and mealtime behaviors while decreasing parental stress.

32 **122.032** Mental Stress in Parents of Autistic Children: A Pilot Study of the Related Psychological Dimensions

S. Melli[1]*, C. Zarbo*[2]*, A. Compare*[2] *and* ***E. Grossi***[1]*, (1)Autism Research Unit, Villa Santa Maria Institute, Tavernerio, Italy, (2)Human and Social Science Department, Bergamo University, Bergamo, Italy*

Background: Parental mental stress is clinically common in families of autistic children and adversely affects the care of the child. Moreover, parents of autistic children frequently experience feelings of guilt, maladaptive coping styles, lack of ability to forgive himself and the partner, and low mindfullness ability. However, is unclear which of these dimensions is predominant in these families and if it their associations are symmetrical in presence of high or low values.
Objectives: The aims of this pilot study are: 1) to evaluate the most predominant dimensions in parents of autistic children and to establish the hierarchy of their relationship; 2) to evaluate if psychological dimensions works in different way when they are high or low; 3) to establish if

psychological dimensions in parents of autistic children are related to the severity of the Autism Spectrum Disorder (ASD).
Methods: Demographic and psychological information about mental stress, feelings of guilt, ability to forgive, mindfullness ability and coping styles were collected through clinical interviews and self-report questionnaires in 28 parents (mean age 43.5 yrs; 22 mothers; 6 fathers) of autistic children (mean age: 12.2 yrs; 3 females; 25 males). Severity of the ASD was assessed through Autism Diagnostic Observation Schedule (ADOS). Artificial Neural Networks (Auto-CM system) were applied to highlight the associations among variables under study. Auto-CM is fourth generation Artificial Neural Network developed at Semeion Research Institute (Rome) and successfully applied in many complex chronic degenerative diseases, able to find out consistent trends and associations among variables creating a semantic connectivity map. The matrix of connections, visualized through minimum spanning tree filter, takes into account nonlinear associations among variables and captures connection schemes among clusters.
Results: Predominant dimensions in parents of autistic children were low feelings of guilt for himself and the partner, high levels of forgiveness of himself and the partner, and low levels of maladaptive coping responses. These three main dimensions are strictly related among themselves. While high parental mental stress was strictly related to high parental distress subscales, high maladaptive coping styles, and low self-forgiveness ability, conversely, low mental stress appeared to be marginal in relation to the other psychological dimensions. This behavior is typical of complex nonlinear systems. The severity of the ASD was not related to parental psychological dimensions. The ADOS scores, both low and high, were in fact marginal in the connectivity map in relation to the other dimensions.
Conclusions: The interplay of psychological factors related to parental stress is complex. Understanding these relationships is the starting point to activate and enhance parental resources essential to the wellbeing of both children and caregivers. Due to the complexity of these relationships and the lack of symmetry between associations of the same dimension when high or low, the approach with advanced neural networks is essential for the analysis of the patterns of relationships.

33 **122.033** Modeling Depressive Symptom Trajectories Among Mothers of Children with ASD from Diagnosis to Age 9

A. Zaidman-Zait[1], *E. K. Duku*[2], *P. Mirenda*[3], *T. A. Bennett*[2], *P. Szatmari*[4], *S. E. Bryson*[5], *E. J. Fombonne*[6], *I. M. Smith*[5], *T. Vaillancourt*[7], *C. Waddell*[8], *L. Zwaigenbaum*[9], *S. Georgiades*[10], *M. Elsabbagh*[11] *and A. Thompson*[2], *(1)Tel-Aviv University, Tel-Aviv, Israel, (2)Offord Centre for Child Studies & McMaster University, Hamilton, ON, Canada, (3)University of British Columbia, Vancouver, BC, Canada, (4)University of Toronto, Toronto, ON, Canada, (5)Dalhousie University / IWK Health Centre, Halifax, NS, Canada, (6)Oregon Health & Science University, Portland, OR, (7)University of Ottawa, Ottawa, ON, Canada, (8)Faculty of Health Sciences, Simon Fraser University, Vancouver, BC, Canada, (9)University of Alberta, Edmonton, AB, Canada, (10)McMaster University, Hamilton, ON, Canada, (11)Department of Psychiatry, McGill University, Montreal, QC, Canada*

Background: Elevated levels of depressive symptoms among mothers of children with ASD have been well documented (Davis & Carter, 2008; Montes & Halterman, 2007). However, few studies have examined mothers' depression longitudinally, and most have considered these mothers as a homogeneous group when examining their depressive symptoms. Although several studies suggest some degree of stability in maternal depression over time (e.g., Carter et al., 2009), none have considered the potential heterogeneity of developmental trajectories of maternal depression. Overall sample means and correlations may mask the presence of subgroups of mothers whose depression follows distinct patterns.
Objectives: The purpose of this study was two-fold: 1) to identify subgroups of mothers with different depression trajectories from the time of child diagnosis (between age 2-4) to age 8.5-9, in a large inception cohort of young children with ASD; and 2) to explore the associations between trajectory membership and key parent/family variables.
Methods: Data were drawn from the Canadian Pathways in ASD study and included the mothers of 284 children with ASD. At the time of initial data collection, which occurred within 4 months of diagnosis, the children's mean age was 40.33 months (SD=9.3). Mothers completed the Symptom Checklist-90-R (Derogatis, 1994) to assess their depressive symptoms at four time points: within 4 months of diagnosis, 24 months post-diagnosis, when the children were 7.5-8 years old, and when the children were 8.5-9 years old. In addition, at diagnosis, mothers completed a demographic survey, the General Functioning subscale of the McMaster Family Assessment Device (Byles, Byrne, Boyle, & Offord, 1988), and the Social Support survey (NLSCY, 2008-2009). Severity of children's ASD symptoms was assessed using the Autism Diagnostic Observation Schedule (Gotham, Pickles, & Lord, 2009). A semi-parametric, group-based analytical strategy in SAS, PROC TRAJ (Jones, Nagin, & Roeder, 2001), was used to examine individual differences in developmental trajectories.
Results: Three distinct trajectory groups provided the best fit to the maternal depression data over time. Group 1 (65.2% of the sample) had the lowest mean depression scores at diagnosis and a stable trajectory. Group 2 (27.3%) had moderate mean depression scores at diagnosis and a declining trajectory. Group 3 (7.4%) had the highest mean depression score at diagnosis and an inclining trajectory. Both family social support and family functioning distinguished between the