Temperament Consortium

Practical Temperament Tools Suggestions from Social Developmental Research Conference Keynote Address By Jack Bates

This talk considered ways in which temperament concepts can be tools for understanding and promoting child development. 1) First, simply using the concepts themselves is a way of appreciating children's differences. The main dimensions of temperament include the reactivity concepts of negative emotionality (fear, anger) and positive emotionality (interest, approach, dominance) and the self-regulation concepts of impulsivity and executive control of attention (effortful control). Most specific scales fit into this framework. 2) With these constructs it becomes



possible to conceptually organize the complex realities of child-caregiver conflicts. Practitioners often use temperament in reframing a problem, e.g., from "out-to-get-me" to "difficult temperament," which can open new solutions. Longitudinal research allows a more specific formulation: Early fearfulness scales predict best to anxiety problems, while more general negative emotionality scales equally predict both anxiety and conduct problems, and self-regulation scales predict best to conduct problems. The literature is also suggesting that temperament measures can change, to a modest degree, as the result of parenting experiences, and that parenting can change as a function of child temperament. Finally, emerging research on temperament-by-parenting interactions suggest more advanced experiments on applications of temperament. For example, parents' efforts to be more positively involved and set more clear limits with children who are showing behavior problems work best for children who are more temperamentally impulsive. Recent advances also consider how fearful temperament interacts with impulsive temperament in amplifying child behavior problems in response to family stress, how growth in language predicts growth in self-regulation, and how impulsive temperament predicts a stronger link between sleep deficits and behavior problems. As work on temperament's role in development in interaction with qualities of environment proceeds and as temperament-informed interventions are empirically tested, temperament is becoming an increasingly promising set of concepts for practice.

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How Chess and Thomas Established Modern Temperament Theory: The Real Story As Told in Their Autobiography

By Charles M. Super

Every semester in my undergraduate class on Parenting and Parenthood, I introduce the section on temperament with the story I first heard, I thought, from Stella Chess. She and her husband Alexander Thomas were young psychiatrists living in New York in the early 1940s. They had one child, a daughter Joan. When the second child arrived, a son, they planned to follow the same easy bedtime routine with him that worked for Joan – the baby would fall asleep after feeding, and Stella would put the child gently in the crib and tip-toe out of the room. But with their son, when she slowly, slowly closed the door, the hinge would squeak, waking the baby, and she would have to start all over again. That squeak had never been a problem with Joan, Stella said, and from this observation the idea of innate differences was born. It was not an idea Alex and Stella's psychoanalytic training prepared them for, but once articulated, it seemed obvious. It is now a common saving among those in the field that "All parents believe in temperament after their second child is born."



It is an excellent story, capturing the essence of the theory and at the same time humanizing the process of natural science. Like so many excellent stories, however, it turns out to be a simplification. I recently learned of the more complicated version from a charming double autobiography by Stella Chess and Alexander Thomas (and Penny Colman) titled *Fifty years together: Researchers, psychiatrists, professors, and parents* (privately published, no date).

In the early years of their professional work, the young psychiatrists found the tenets of their psychoanalytic training constraining. Stella in particular was frustrated by parents who "were trying to give what they thought was a sophisticated discussion about how they [had] traumatized the child, how the child reacted, and what the child's motivation might be either for good or ill." But Stella found it "natural ... to pull out of their generalizations a sense of the child's individuality... Picking up on clues, I would, little by little, ask questions until I had gotten a sense of the child... In one case, after hearing about the problem of a child who wouldn't do his homework, I asked enough questions to elicit the additional information that the child was always on the go. He rushed out to play, was mischievous, and frequently broke things. Finally I asked the parents how many times does he jump up from the table during dinner. "Oh, about three times," the mother replied. Suddenly she stopped talking and looked at me. "How did you know?" she asked with a surprised look. To which I replied, "Well, you've been telling me. You've been describing a child who is much happier moving than sitting still. It seems logical that sitting still at the dinner table would be uncomfortable if it went on too long. Clearly he is a highly active child, a fact we have to take into account as we think about how we expect him to do things including his homework" (p. 61 f).

As Stella, the child psychiatrist, and Alex, working with adults, shared cases and experiences, they found many parallels. "The individual

differences in behavior that I was seeing in parent/child interactions," Stella writes, "Alex was seeing in husband/wife, husband/employer, or wife/employer interactions. And, instead of immediately moving to a motivational interpretation, Alex and I were listening for not only motivation, but also style of reacting or behaving" (p. 64f). After detailing several examples of parallel issues in mismatched styles of reaction. Stella summarizes: "The more experience Alex and I got the more we were convinced that something was missing in our psychoanalytic and clinical training... It was obvious from my clinical practice that there were some parents who seemed to be reasonably good who had children with noticeable problems. Other parents who seemed to be quite rotten had children who were sailing through life without any trouble. I was also discovering that my four children were very different... From the beginning of our puzzlement, Alex and I talked about rejecting psychoanalytic theories for ten years" (p. 73).

Alex recounts the epiphany: [O]ne evening in about 1952 we attended a monthly professional meeting for our local psychoanalytic group where each member took turns presenting an interesting case. It was Stella's turn. I listened carefully as she described the case involving a boy, Allen, with a serious behavior problem." (p. 73f) His issues centered on extreme reactions of withdrawal to even the slightest criticism, even though he was accomplished in both academics and athletics. As detailed in this long account, Allen, the child of very tall parents, was exceptionally tall for his age. After careful interviews with the parents and a play session with Allen, the cause was clear. From an early age Allen was criticized and blamed for thoughtless or aggressive behavior that might be typical for his age, but which other parents and teachers routinely interpreted as inappropriate for such a "big boy."

"Rejecting the stereotyped psychoanalytic theory that the parents, particularly the mother, was to blame," Alex goes on, "Stella emphasized that

Allen's problem wasn't their fault. She told them that some or even many children developed behavior problems because they had one or another special intrinsic characteristic that prevented the child from coping with the normal expectations of the family or community. Such a child could then fail to [meet] the adults' expectations, which could create excessive stress and self-mistrust and finally lead to behavior problems. ... As I listened to Stella's case history it was for me, with no exaggeration, a revelation. Stella's story had pointed out what was missing in our psychoanalytic and clinical training. If a child developed a behavior problem it might not always be the parents' fault... Expectations that were inappropriate for the child's specific traits would create stress and anxiety which could cause some kind of behavior problem. While I sat and considered the exciting implications of my revelation, the audience members were discussing Stella's case in all the standard ways – maybe the mother had rejected her son because of conflicts about the second child, ... etc. etc. Nonsense, I thought as I absorbed the impact of Stella's profound insight" (p. 76).

In the subsequent days, as the two of them roared through the theoretical and practical implications of the new idea, they developed plans to investigate the theory. "Now it's true that our first attempt to prove that children had individual differences was Pavlovian; a distinctly neurologic and biologic model. But we were using it as a way of trying to see individual differences in the ability of babies to be conditioned to different varieties of input like sight, sound, being picked up, and so forth. We started with Pavlovian approach because of my 'squeaky door' theory, which was based on my experience as a mother with Joan" (p. 77f).

Even the squeaky door theory, it turns out, is different from what I have been telling my students. Stella writes: "There was nothing unusual about Joan's behavior, she had individuality as I learned (we had not yet started our study) and, I must say, I learned a great deal from Joan. One of the things I learned was that some nights when Joan cried for

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food, and I woke up, she would stop crying as soon as she heard me moving around. Some nights, however, she would continue crying. All of this was before Joan was three months old. I set my mind to try to figure out what it was that made her stop crying. I finally realized that the door between my bedroom and the living room squeaked when I opened it and that Joan had become conditioned to the squeaking sound as meaning food was coming. On the nights the door remained wide open there was no squeak as I came through, and consequently she continued to cry. After realizing this I would jump out of bed, squeak the door, then put my robe on ...put the bottle in the bottle warmer, [change] Joan's diaper, [and we'd be ready].

Following the failure of their initial collaboration with a few young mothers to condition their new babies to the tinkle of a bell (how Pavlovian!), and remembering that each of their own four children was quieted in quite different ways as infants. Stella and Alex soon abandoned the Pavlovian model and moved to careful interviewing of young mothers – friends and friends of friends. With the assistance of Herbert Birch, they sifted out common themes from these detailed descriptions to arrive at the now famous nine dimensions. For a while they called the object of their investigation "primary reaction patterns" (Thomas, Chess, Birch, & Hertzig, 1960). Soon, however, Michael Rutter, who had an extended visit with the project while on a Nuffield Fellowship in 1961-62, suggested that what they were studying was "temperament" - and the rest, as they say, is history.

I haven't decided what to say next semester when we begin the section on temperament.

References

Thomas, A., Chess, S., Birch, H. G., & Hertzig, M. (1960). A longitudinal study of primary reactions patterns in children. Comprehensive Psychiatry, 1(2), 103-112.

by Rona Renner

The most typical reasons parents seek my services are because they have a child who hits, bites, fights, has tantrums, transition issues, or difficulty in childcare or school. Parents consult with me because they are yelling more than they ever dreamed they would, and find they're in conflict with their spouse or partner about how to discipline. Temperament is a useful tool to help couples understand more about their differences. Most of my clients have children from 2-7 years old. I use the temperament questionnaire at www.preventiveoz.org. Parents fill it out, send me the results, and then I meet with them for a 90minute appointment to review results and develop strategies. Parents fill out a general impressions temperament survey on themselves as well. I provide follow up appointments as needed, and sometimes do a school observation. At times I meet with the child and parents together. I use my temperament knowledge and clinical experience in combination with my intuitive and respectful style of coaching parents.

I was trained in temperament in 1991, at Kaiser Permanente, Richmond California, where I was working as a pediatric advice nurse. I offered



Is That Me Yelling?

Looking Through The Lens Of *Temperament: A* way for parents to understand their children and themselves, reduce power struggles, and yell less.

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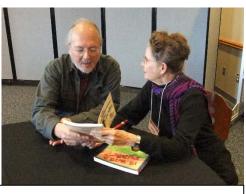
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individual temperament appointments, classes based on temperament and discipline, and classes for parents of children with ADHD. I co-wrote a temperament based parenting manual that was used in many Kaiser facilities. I now have a private practice in the S.F. Bay Area, and see clients in their home, in my office, via SKYPE, or by phone. I offer temperament trainings for parents, mental health professionals, and childcare providers. I also provide trainings based on my book.

Clinical uses of temperament in an outpatient psychology practice By Sean McDevitt

While the great majority of youngsters seen in clinical psychology practice meet the criteria for a DSM disorder, there is a substantial number of clients who do not. Although technically identified as "adjustment disorders" or V code cases without psychopathology, many of the subclinical cases do have genuine problems that will require assessment and intervention to maintain the well being of the child and family environment. I believe that the primary role of temperament in these subclinical problems is to find ways to restore and/or improve the goodness of fit. Secondarily, temperament can be a complication in cases where a youngster has been diagnosed with an established disorder such as ADHD, depression, anxiety or another traditional clinical problem. In either case, assessment of temperament and intervention with the child and family has proven to be a useful tool for clinicians.

The majority of children seen for temperament assessment and intervention are under the age of 8. Nearly all live at home and attend a neighborhood school. Standard assessment of temperament includes taking a history of previous and current behavior, direct observation of the child (preferably within the context of parent-child interaction), and use of a standardized temperament questionnaire. Detailing areas of poor fit is also necessary. Interventions include parent education about temperament, increasing awareness about the specific temperament profile of the youngster, and providing guidance about the types of changes in parenting style or environment that would be helpful in improving fit. In cases where there is an established diagnosis, temperament related intervention can be an adjunct to the use of the established treatments, usually psychotherapy and/or medication. Improvements in assessment of environmental strengths and weaknesses would be a valuable addition to the planning of intervention in these cases.



Helen Neville signs a copy of one of her books for Charlie Super

Books by Helen F. Neville:

Is this a phase? Child Development & Parent Strategies, Birth to 6 Years (Parenting Press, 2007).

Temperament Tools: Working with Your Child's Inborn Traits (Parenting Press, 2015)

My work is primarily by referral from busy pediatricians in a large Health Maintenance Organization. I work with a general pediatric population from 6 months to 6 years of age, with a wide array of cultural and socio-economic backgrounds. Common reasons for referral include sleep issues, tantrums, aggression, sibling rivalry, late potty training and preschool adjustment. Most of these children have an array of challenging

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temperament traits which may include high energy, high intensity, high or low sensitivity, high or low approach, low adaptability, and low frustration tolerance. My practice is unusual in that it is primarily by phone—parents appreciate talking to me while on a lunch break at work or at home while their child is napping. Kaiser appreciates that I cover 4 separate clinics.

To assess temperament, I use both clinical experience and the website <u>www.PreventiveOz.org</u>. (Efficacy of the Preventive Ounce for preschoolers was published in The Journal of Community Psychology in February, 2013).

Clinic costs could be decreased and clinical efficiency increased if parents more often completed temperament profiles *before* I talk with them. I find this work immensely gratifying. Hard-working, exasperated, worried, and overwhelmed parents tell me, "She has tantrums for no reason" or "He hits out of the blue." "I've tried everything and nothing helps." "I work in the juvenile justice system and I'm afraid my 2 year old will end up here." Temperament and development provide two essential lenses that take the mystery out of child behavior open the door to effective behavior management.



David Rettew shows his book, Child Temperament: New Thinking about the Boundary between Traits and Illness, 2013 (Norton).

Handbook of Temperament (2012),

Edited by Marcel Zentner & Rebecca Shiner (Guilford Press).

An overview, by Rebecca Shiner

Marcel Zentner and I decided to edit this comprehensive volume to offer researchers, students, and practitioners an integrative review of the state-of-the-art research on temperament. Although there had been several outstanding edited volumes on temperament prior to the publication of this handbook, none of them had yet addressed temperament across childhood, adolescence, and adulthood and across the many different levels of analysis (biological, psychological, environmental).

The study of temperament began to flourish in the 1980's, and in the intervening 30 years research has identified key features of early appearing temperament traits and has generated ever more refined tools to measure them. Most important, this work has demonstrated the pivotal role that child temperament plays in shaping later outcomes, including adolescent and adult personality and psychopathology, parent-child interactions, attachment, relationship with peers, health, and scholastic and occupational achievement. In recognition of these links, the field of temperament has moved beyond its initial focus on basic research into applied areas, such as prevention, education, and treatment. Our hope was to capture all of these exciting developments in a single volume, including important advances in understanding the biological foundations of temperament. In the Handbook, we attempted to foster integration of findings across development (with most chapters addressing temperament across developmental periods) and specialty areas.

The volume is organized in seven sections. Section 1 opens the book by addressing issues related to the meaning and structure of temperament. Section 2 expands this information on temperament structure through a set of chapters focusing in-depth on particular temperament traits. Section 3 then reviews self- and other-report, behavioral, and psychobiological methodologies for assessing

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temperament. Section 4 addresses the biological underpinnings of temperament from comparative, evolutionary, prenatal, genetic, and neurobiological perspectives. Chapters in Section 5 explore the interplay between context and temperament traits in shaping development from the early days of attachment through the adult development of personality; the contexts range from those more proximal to the individual (e.g., the parent-child relationship, peers) to broader contexts (e.g., culture). Section 6 brings together research initiatives that examine how temperament dispositions are involved in the emergence of clinically relevant outcomes such as resilience, psychopathology, and health. The last section offers reviews of innovative applications of temperament findings, in the context of the classroom, prevention programs, and therapy (Section 7).

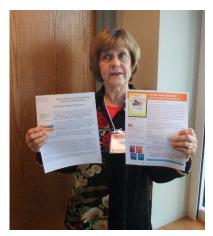
We are grateful to all of the authors who contributed their time and expertise to this volume, and we hope that it will be useful to anyone interested in learning more about this exciting field.

Temperament - from research to practice: Necessities for useful clinical research By William B. Carey

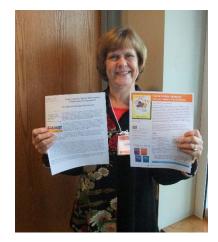
1. Objectives- to increase knowledge of: clinical presentations of temperament in parents' behavioral complaints; techniques of assessment of it and of determining abrasive interactions of it (poor fits) with caregivers; effective intervention strategies; and limitations of this approach. Result should be greater clinical effectiveness and professional accomplishment and satisfaction. Theory building and methodological investigations are also interesting but do little to enhance the practical use of temperament data to improve current parent-child relations and children's adjustments. Predictions of subsequent behavior and factor structures are of little clinical value. (continued...)



Sandee McLowry's INSIGHTS for...



High Maintenance Temperaments...



Works!

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- 2. Appropriate measurement techniques. Temperament traits assessed should be those documented to be clinically significant, observable, and ratable by parents and professionals, such as those elaborated by Chess and Thomas (low adaptability, negative mood, intensity, etc.). Interviewing usually an acceptable method of inquiry. Clusters of items put together by the computer, but not identified and verified by clinical observation, should be avoided, such as "surgency." The computer is not a clinician. Goodness or poorness of fit should be determined by simply asking the caregivers as to which traits they find hard to understand, tolerate, and manage. Parents differ in their response to such aversive traits or difficulty. It is inappropriate to rate the goodness of fit by calculating differences between the child's and the parents' temperament profiles or to produce a difficulty rating by adding the numerical scores of certain traits on a questionnaire without considering the parentchild interaction.
- 3. Appropriate outcome measures. The DSM is generally not useful because it is too adult, pathological and categorical in its orientation and not sufficiently contextual and developmental. DSM has oversold abnormal chemical CNS basis of behavioral variation. DSM-PC unfortunately a failure. Big 5 little clinical value for children. Positive outcomes not covered. Critiques of Angell, Whitaker, Francis, et.al. Scales like the BBAS more suitable. (See www.b-di.com) It covers a full range of normal function and increasing amounts of concern about malfunction: BASICS: Behavior in social competence, Achievements, Self-relations, Internal status, Coping skills, Symptoms of physiological function. This system includes behaviors currently regarded by some as aspects of temperament but more likely elements of adjustment outcome: executive functions, selfregulation, resilience, etc. Differentiating the two matters to the clinician because temperament is largely inborn, is less changeable, and generally needs to be

accommodated, while adjustment with its largely environmental input is later appearing and more amenable to change. Low adaptability is temperament; social alienation is a possible behavioral outcome resulting from inadequate management of it.



- 4. <u>Areas needing clinical research</u>- for clarity in understanding and management.
- ADHD the phenomenon in greatest need of clarification. The epidemic is growing.
- Physical- eating problems, obesity, colic, sleep disorders, elimination, sensory integration, failure to thrive, recurrent pains.
- Behavioral- Socialization, bullying, school performance, self-esteem, self-control, self-care, depression, anxiety, coping,
- Causative factors- prematurity, pregnancy complications like hypertension, diet, toxins, and personal, social, and natural stressors.
- 5. <u>Settings for research.</u> The real world, not just university labs. Pediatric practices, daycare centers, schools. Consider the Carey-McDevitt model. Talented, motivated psychology graduate student with interested, cooperative, experienced pediatric practitioner with captive population.
- 6. <u>Intervention techniques-</u> education, identification, intervention, Objective to decrease stress and reactive behaviors resulting from parents' reactions to aversive temperament. Purpose not to get rid of temperament. Both the parent and child can learn to live better with challenging traits. Use parents' ideas and strengths as much as possible.

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Welcome to OTC 2014!

By Alyssa Amen (Nebraska Center for Research on Children, Youth, Families, and Schools)

The pioneers of modern temperament research, psychiatrists Alexander Thomas and Stella Chess, identified nine traits present at birth that influenced children's development. Half a century later, temperament research continues to play a key role in unlocking children's behavioral diversity.

The University of Nebraska-Lincoln was center stage for recent temperament discussions as researchers, students and practitioners converged for the 20th Occasional Temperament Conference (OTC). The event drew participants from across the country and world, while also highlighting Nebraska's leading role in classroom temperament research.

CYFS affiliate Kathleen Moritz Rudasill hosted the two-day conference, which featured sequential symposiums, poster presentations and networking opportunities. The OTC is a central event for the 350-member Temperament Consortium, a worldwide group for those interested in temperament. Termed "occasional" due to its roughly biennial schedule, the conference merges research and application. Keynote speaker Jack Bates, professor of psychological and brain sciences at Indiana University, recognized Nebraska as "the hub" of temperament research in schools. UNL's temperament studies focus on children's academic success, engagement and relationship building in the classroom.

"It is an honor to be known as leaders in classroom temperament research by renowned researchers," Rudasill said. "Our research is focused on the ways that classrooms and schools can work *with* children's temperament to optimize outcomes and, in early childhood in particular, help establish a positive academic trajectory."



Smile! You're in Nebraska!

Rudasill, a UNL associate professor of educational psychology, organized an OTC symposium titled "Temperament in the classroom and school." Her interest in temperament research reflects personal experience. As a former teacher, she was interested in studying student-teacher relationships and was acutely aware that some children's personalities made it easier for them to form positive relationships and adjust to the demands of school.

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"In terms of understanding children's school success, temperament was one of the missing pieces

of the puzzle when I started graduate school, and it is still an area to find missing pieces," Rudasill said. "It is exciting to see the field of temperament expand and inform our understanding of children's behavior and success in the classroom."

Colleagues share her enthusiasm for new developments in temperament research, including Sara Harkness, professor of human development, pediatrics, and public health. Harkness is a crosscultural researcher who, in collaboration with Charles Super and others, is currently studying biological measures of stress in babies, comparing infants from the Netherlands and the United States. Her involvement with the OTC spans 20 years and she appreciates the group's common focus.

"We have a tradition of welcoming diverse approaches to temperament, but everyone is interested in the 'so what' questions," Harkness said. "We're seeing a trend in sophisticated research that combines biological with behavioral and contextual factors. These new approaches allow us to understand internal processes and gain a deeper perspective of temperament."

Temperament research has also garnered international interest. The 20th OTC included researchers and practitioners from Spain, Mexico and Poland. Psychologist Sean McDevitt, whose work includes the Carey Temperament Scales, envisions global partnerships as the bedrock for temperament study.

"We're planting seeds for professionals in many different countries," McDevitt said. "Our goal is continued collaboration in order to expand our research base. The OTC provides a key platform for us to meet and share insight."

The OTC experience: A graduate student's perspective By Molly Holmes

The University of Nebraska-Lincoln hosted the 20th Occasional Temperament Conference on November 8-9, 2014. As graduate students in education and human sciences, we really appreciated the opportunity to interact with distinguished scholars in such a welcoming setting. It was a chance for us to learn about current temperament research from the leaders in the field. We are graduate research assistants on the Toddler Development Study, a longitudinal study of how children's self-regulation development may be impacted by their sleep, which is a collaborative project between the University of Nebraska-Lincoln and Indiana University. It was especially exciting for us to hear Dr. Jack Bates' keynote talk on the fundamental concepts that surround our day-to-day research activities. Additionally, the poster session was a great forum for discussing our current research and potential future projects, and the conference dinner was a nice way to wind down and get to know fellow researchers more informally.

Reflections on OTC 2014 By Sean McDevitt

The 2014 OTC meeting held in Lincoln, NE was superb! A gathering of 60+ professionals in the areas of research, practice and education attended a preconference, 8 symposia, 15 posters and a keynote address by Jack Bates. Attendees came from as far away as Australia, Spain, Poland and Mexico City. Sandee McClowry and Helen Neville each received a Jan Kristal Memorial Award for application of temperament to benefit children. Kathy Rudasill, the organizer, along with a group of dedicated students, did a marvelous job of hosting the meeting and assisting with local arrangements. This conference will be remembered in particular because of her "Nebraska Nice! hospitality."

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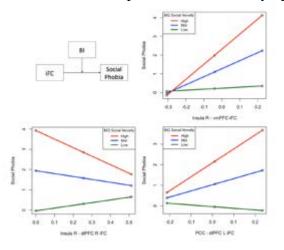
OTC 20114: THE PROGRAM

(Abstracts received by the Editor)

I: Symposium I: The biology of temperament: Biomarkers, moderators, and mediators (Chair: Kristin Buss)

Perez-Edgar, K., Guyer, A., Jarcho, J., Degnan,

K., Fox, N., & Nelson, E. (2014). *Temperament and parenting styles in early childhood differentially influence neural response to peer evaluation in adolescence.* There is a growing literature suggesting that behaviorally inhibited children show specific patterns of neural activity associated with threat and reward processing that may be associated with the later emergence of anxiety disorders. In this study, we examined patterns of intrinsic functional connectivity at rest in young children. We found that children at risk for anxiety show shifts in the default mode and salience networks that each predict increases in symptoms.



Kahle, S., Miller, J., Lopez, M., and Hastings, P.

(2014). Autonomic recovery as a component of effortful control. Dynamic patterns of preschooler's autonomic physiology were linked with emotion regulation. Children tended to show increases in sympathetic activation across a frustration induction, but children who ended this response more swiftly after the task was over (showed better recovery) were rated as having better emotion regulation and effortful control. It may be ending a "fight-or-flight" response that has particular relevance for the management of emotions and behavior.

Buss, K. A., Morales, S., Davis, E., Brooker, R., Philbrook, L., & Fu, X. (2014). Searching for biomarkers of dysregulated fear temperament. Evidence is accumulating for different subtypes of inhibited/fearful children. Our own work has identified a subtype of extremely fearful toddler whereby fear reactions are extreme in putatively low-threat situations (Buss, 2011; Buss et al., 2013). These children can be distinguished from other extremely fearful toddlers, most notably behaviorally inhibited children (Buss, 2011) and are at elevated risk for developing social anxiety symptoms (Buss et al., 2013). Evidence is also emerging for a distinct pattern of physiological responding including elevated basal and reactive cortisol, faster sympathetic cardiac preejection period (Buss et al., 2004), higher and static respiratory sinus arrhythmia (reflecting a failure to adaptively suppress vagal tone; Buss et al., 2014), and EEG/ERP neural markers that reflect dysregulation and vigilance (Brooker & Buss, 2014; Premo, Brooke & Buss, 2015).

Symposium II: Temperament in cultural contexts (Chair: Sam Putnam)

Mavridis, C.J., Rha, J.-H., Huitron, B., Moscardino, U., Harkness, S., & Super, C.M. (2014), *Maternal Temperament and Daily Mood: A Comparison in Four Cultures.* We examined relationships between mothers' self-reported temperament and ratings of daily mood, at two and six months postpartum, in four sites (Korea, Italy, the Netherlands, and the United States). While Rothbart's Negative Affect and Effortful Control scales are for the most part associated with negative and positive moods, respectively,

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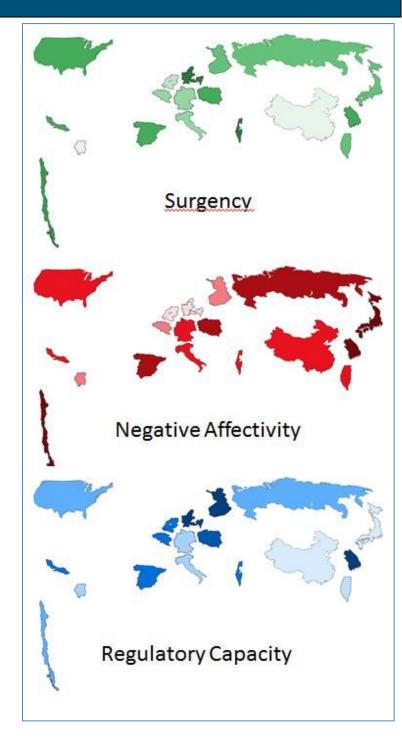
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Extraversion/Surgency and Orienting Sensitivity operated differently depending on the site. Korean mothers are distinct in the association between Extraversion/Surgency and negative moods at 2 months. U.S. mothers are unique in the association between Orienting/Sensitivity and negative moods at both times. The cultural distinctions could be at least partly explained by differences in daily routines, social settings and support.

Putnam, S., & Gartstein, M. A. (2014), *Cross-Cultural Comparisons of Surgency, Negative Affectivity and Regulation: Summary across Ages and Investigations.* The goal of these analyses was to consolidate cross-cultural data across multiple studies in order to investigate patterns of differences in relation to variables that have proven useful in other investigations of culture and individual differences. Data gathered across the lifespan from 18 different countries and reported in 17 separate studies were correlated with aggregate personality scores, cultural dimensions, and allelic frequency in populations.

Results suggested that global patterns of Surgency and Negative Affectivity were consistent with those previously reported for Extraversion and Neuroticism; that individuals from Individualist cultures tended to exhibit high Negativity, whereas more Masculine cultures were associated with low Regulatory Capacity; and low proportions of the A188G and MAOA uVNTR alleles were linked to higher ratings on Regulatory capacity, with low MAOA uVNTR proportion also linked to high Surgency. These findings are consistent with the concept of coevolution of persons in relation to their culture and norms of behavior therein.



Symposium III: Validity of parental reports of temperament: Can you build a science and clinical practice on parental perceptions? (Chair: Roy Martin)

Moran, L. & Lengua, L. (2014), Prediction of Adjustment from Maternal Reports and Observed Behavior. The study sought to clarify relations between mother-reported and observed temperament by establishing construct validity (whether measures of purportedly identical constructs relate to each other in the way we'd expect), criterion validity by examining how each of these assessment methods related to children's adjustment outcomes, and finally, exploring conditional factors, specifically family income, maternal education and maternal depression, to see if contexts of risk alter the relations between these measures. We found strong evidence for consistency across measures of children's effortful control, but less correspondence between mother-reported and observed emotion reactivity. Observed emotion reactivity, additionally, demonstrated more specificity in relation to children's adjustment than motherreported temperament. Finally, correspondence between mother-reported and observed measures of children's frustration reactivity, specifically, was impacted by both family income and maternal depression. These results highlight the importance of continued research using multi-method assessments of temperament to further clarify relations across methods, as well as emphasize the importance of considering factors that may reduce the validity of our assessment tools.

Prokasky, A., Rudasill, K. M., Tu, X., Frohn, S., Sirota, K. and Molfese, V. (2014). *Prediction of preschool language and attention skills from teacher and parent shyness ratings*. This presentation examined parent and teacher ratings of shyness as they differentially predicted children's vocabulary and attention skills in preschool. Multilevel models revealed that teacher ratings of total shyness were negatively related to receptive and expressive vocabulary and visual attention, while parent ratings were not related to any outcome. An exploratory factor analysis on the 13 shyness items from the Children's Behavior Questionnaire revealed two factors, named shyness and low sociability. Multilevel models were re-run using the two factors, and showed that parent-rated low sociability was positively associated with children's expressive vocabulary scores, and teacher rated low sociability was negatively related to visual attention scores. Findings indicate that parents and teachers view and rate children's shy behaviors differently.

Symposium IV: The interplay between temperament and adversity in development (Chair: Rebecca Shiner)

Schermerhorn, A., & Bates, J. (2014)

Temperament Moderates Associations between Exposure to Stress and Children's Externalizing Problems. (Schermerhorn, et al. Child Development, 2013, 84(5), 1579-1593) We investigated the interaction between a temperament profile (four groups determined by high vs. low selfregulation and fearfulness) and family stress in predicting externalizing problems at school in children from kindergarten through eighth grade (n=556). Temperament profile (high/low selfregulation and fearfulness) was tested as a moderator of the stress- externalizing association for various time periods. Results indicated that the combination of low self-regulation and high fearfulness strengthens the stress-externalizing association.

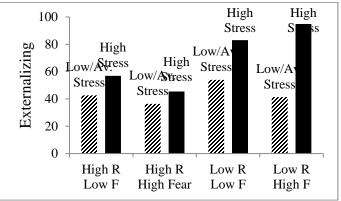


Figure caption: Mean externalizing scores summed across kindergarten through 8th grade. Low/Av. Stress = stress scores below 75th %ile. High stress = stress scores at or above 75th %ile. R = self-regulation. F = Fearfulness.

Moran, L. (2014), The Role of Children's Temperament in the Relation between Income Related Risk and Social-emotional Development. The study examined relations between income related risk and children's temperament and adjustment with specific focus on how risk may shape or alter dimensions of children's temperament over time and whether temperament may then mediate or moderate relations between risk and children's adjustment. We found that, in comparison to other children, those living in higher risk contexts demonstrated relatively higher frustration and lower effortful control, as well as comparatively worse adjustment outcomes, including higher internalizing and externalizing problems and lower social competence. Examining temperament as a mediator and moderator of the relation between risk and adjustment, we found minimal evidence suggesting that income related risk and temperament more frequently and consistently act as independent factors contributing to children's social-emotional development.

Shiner, R., & Masten, A. S. (2014), Children's Personality Traits Predict their Exposure to Adversity in Adolescence. The present study examined whether children's Big Five personality traits at age 10 predicted increases or decreases in their exposure to two types of adversity from childhood to adolescence: dependent (the likely result of the youth's own behavior) and independent (seemingly unrelated to the youth's own behavior and stemming from either the family or the community environments). The questions were addressed in the Project Competence normative, longitudinal sample (N=205). As expected, childhood traits predicted changes in dependent adversity (Neuroticism and Openness predicted increases, whereas Conscientiousness and Agreeableness predicted decreases). Surprisingly, childhood traits also predicted changes in family and community adversity exposure (Agreeableness predicted decreases in both, Openness predicted decreases in family adversity, Extraversion predicted increases and Conscientiousness predicted decreases in community adversity). The results

suggest that childhood traits may shape development in part by influencing the degree and kinds of adversity youth experience during their adolescent years.

Symposium V: Temperament from research to practice (Chairs: Sean McDevitt and Bill Carey)

Carey, W. B. Temperament- from research to practice: Necessities for useful clinical research (See above)

Teglasi, H. Infusing the principles of temperament into assessment, consultation, and intervention paradigms commonly implemented in schools.

- Client or patient population served: school aged children, their teachers and their parents.
- Techniques for assessing temperament: Interview and clinical judgment based on a confluence of data in a comprehensive evaluation.
- Ways of intervening to improve goodness of fit: Intervention is defined broadly as pertinent to assessment, case conferences, consultations, and direct work with individuals or groups. I tend to focus on the reciprocal nature of goodness of fit and determine where in the dynamic between individual and context would be best to intervene.
- Any specific techniques that you have found valuable: Although not a specific technique, I find it useful to conceptualize the role of temperament in the context of other factors such as cognition and personality to address the concerns raised in school settings.
- Any ideas or changes in the future that would increase your efficacy with clients: I think it is important to consider the goodness of fit from different perspectives. For instance, a potential target of intervention might be the congruence (goodness of fit) between the person's inner experiences (e.g., negative or positive emotionality, reactivity) and the self-image or the persona that the individual strives to maintain.

McGuire, P. Looking at Temperament compared to the Vanderbilt Checklist and the WRAML. This talk focused on a community based, sole practitioner, developmental behavioral pediatrics practice in Iowa. Children and adolescents are seen there for a variety of issues. They range in age from birth through early 20's.

I have used the Carey Temperament Scales since Bill and Sean made them available for the price of a postage stamp. Every new patient who comes into my practice has a temperament profile filled out to determine how it influences the reasons for the visit. Since the Vanderbilt DSM Checklist came out I have been comparing the traits to the checklist to see where temperament may be influencing beliefs regarding ADHD, ODD/CD and anxiousness/depressive symptoms. I have also used the Wide Range Assessment of Memory and Learning (WRAML) to look at processing issues which may lead to the same diagnostic concerns.

This presentation was a review of my findings including any tendency for temperament traits to be predictors of processing issues. I discussed how I use this information to inform families and schools regarding the "whys" of the behaviors that they are observing with recommendations and counseling to help work with the children more effectively. The outcome of these years of experience led me to now develop programs I market under "The Pediatric Profiler" for parents, schools, and mental health providers.

Martin, R.P., Halverson, C., & Slobodskaya, H.

(2014), *Toward a taxonomy of individual differences in behavior*. The child development literature, as well as the literature on personality development in children, does not currently provide a set of concepts that are accessible to parents and teachers which allow them to describe and understand the range of individual differences in child behavior. Thirty or more temperamental traits and hundreds of personality traits have been extensively studied and described. The meaning of these behavioral constructs is difficult for most caretakers to understand, and the relations among these variables

are only understood by a few specialists in the field. One approach toward a solution to this problem comes out of the person-center approach in which groups of children are isolated (referred to as classes or clusters) who have similar profiles of scores across a range of behavioral traits. This approach has the potential to lead to a taxonomy of individual differences in behavior that could be useful to researchers and more easily assimilated by nonprofessionals. Toward this goal, the latent class structure of the normative sample (n = 3000) of a measure of temperament and personality in childhood (Survey of Individual Differences of Children and Adolescents, Martin & Halverson, 2014) has been investigated. The goal was to describe typical or normal individual differences, so children with known behavioral or mental disorders were eliminated from the analysis. A ten-cluster solution was found to fit the data. Similar analyses of a Russian sample generally support this structure. The behavioral characteristics of these behavioral profiles are described.

Symposium VI: Temperament in the classroom and school (Chair: Kathleen Moritz Rudasill)

Berger, R.H., Valiente, C., Silva, K., VanSchyndel, S., Spinrad, T., Eisenberg, N., Southworth, J. &, Thompson, M. (2014). Effortful control and early academic adjustment: The moderating role of classroom chaos. We examined whether classroom chaos moderated the association between children's effortful control and their relationships with their teachers and their school attitudes. Our results consistently demonstrated that children with low effortful control had more optimal adjustment (i.e., more closeness, less conflict, more school liking, less avoidance) in low chaos classrooms. These findings support current efforts to improve classroom quality, as reducing classroom chaos may buffer the effects of individual temperamental characteristics, such as low effortful control, that may place children at-risk for nonoptimal adjustment in school.

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Wasserman, A., Crockett, L., Rudasill, K.M., Hoffman, L., & Kalutskaya, I. (2014), Early Temperament, Teacher–Child Conflict, and Children's Externalizing Behavior.

Early teacher-child relationships are foundational for children's learning and behavioral adjustment. However, few studies have examined the relations among early temperament, teacherchild relationships, and behavioral adjustment. We examined the effects of preschoolers' temperamental anger and effortful control on levels of teacher-child conflict and child externalizing behavior across grades K-6 using data from the NICHD SECCYD data set (N=1,038).

Results of multivariate growth curve modeling revealed that higher levels of child anger at 54 months predicted greater initial teacher-child conflict in Kindergarten, which predicted higher levels of externalizing behavior. Boys experienced higher initial levels of, and greater increases in, teacher-child conflict, but girls exhibited higher initial levels of externalizing when teacher-child conflict was controlled. Increases in teacher-child conflict from grades K-6 were associated with increases in externalizing behavior from K-6. When effortful control at 54 months was included in the model, effortful control inversely predicted teacherchild conflict in Kindergarten but anger was no longer a significant predictor. Cross-lagged withinperson paths between teacher-child conflict and externalizing behavior were positive and significant: children who experienced higher than predicted levels of teacher-child conflict in one year showed higher than predicted levels of externalizing concurrently and one year later.

These results suggest that although early anger is associated with teacher-child conflict in Kindergarten, effortful control is the crucial temperament variable influencing the quality of early teacher-child relationships. Moreover, experiencing higher than usual teacher-child conflict in one year appears to increase a child's level of externalizing behavior, setting the stage for future academic and social difficulties.

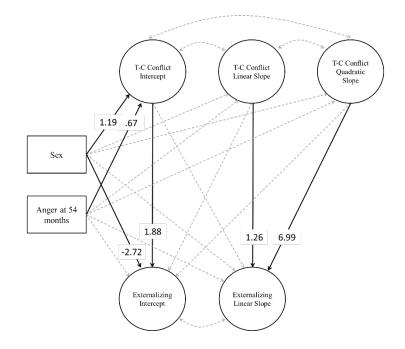


Figure 1. The between-person part of the model with the time-invariant predictors of sex and anger at 54 months (mean centered at 4.74). Solid lines indicate significant paths initial levels of externalizing behavior, after T-C conflict was controlled for. and dashed lines indicate non-significant paths; unstandardized estimates shown.

As seen in the figure, higher anger predicted greater T-C conflict, which in turn predicted higher levels of externalizing behavior. Increases in T-C conflict were related to increases in externalizing behavior and boys had higher initial levels of T-C conflict. Girls had higher

(continued ...)

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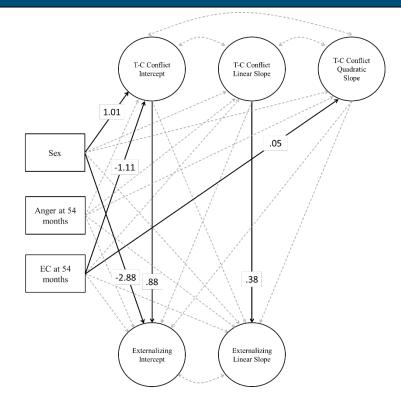


Figure 2. The between-person part of the model with the time-invariant predictors of sex and anger at 54 months (mean centered at 4.74), and effortful control (EC) at 54 months (mean centered at 4.60). Solid lines indicate significant paths and dashed lines indicate non-significant paths; unstandardized estimates shown.

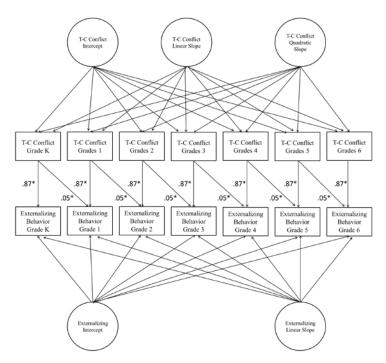


Figure 3. The within-person part of the model showing teacher-child (T-C) conflict (centered at 11) predicting externalizing behavior. All concurrent and cross lagged residual paths were significant; unstandardized estimates are shown. The residualized paths were constrained to be equal across time for ease of interpretation and because model fit did not get worse compared to when they were freely estimated.

Symposium VII: Developing, testing, and culturally adapting structured temperament-based interventions (Chair: Sandee McLowry; Moderator: Hedy Teglasi) Iverson, S. (2014), The development and piloting of a temperament-based intervention for infants. "Knowing your baby matters." "Knowing Your Baby Matters" is a temperament-based intervention currently in its pilot stages, focused on providing information to parents about their infant's temperament development. The development of the project included extensive consultation with parents and experts in the psychobiological model of temperament, as well as the collection of IBO-R data from nearly 1,700 families from various parts of the country. We were able to develop general information about temperament for families, as well as create unique personalized profiles to compare participating infants with other infants matched on demographic factors and temperament factors. Preliminary findings suggest that "Knowing Your Baby Matters" may be helpful in reducing certain types of parenting stress and increasing parenting mindfulness.

McLowry, S. (2014). *The differential effects of INSIGHTS on children with high maintenance temperaments.* This presentation reported on the differential effects of INSIGHTS on children with high maintenance temperaments characterized by high negative reactivity and motor activity, and low task persistence. After participating in a group randomized trial, children with high maintenance temperaments in INSIGHTS, compared to those in an attention control group, had lower levels of disruptive behavior and off-task behaviors and higher classroom engagement. The effects were partially mediated by improvements in their relationships with their teachers.

Koslowitz, R. (2014). Adapting INSIGHTS into children's temperament for Haredi Jewish culture using the Core Cultural Assumptions model. (See complete Power Point in the Appendix)

Symposium VIII: Clinical assessment and intervention (Chairs: Sean McDevitt and Bill Carey)

Carey, W. B. (2014), *Clinical applications of temperament: What I did, when, and why. What you can do.*

- Initiated clinical pediatric temperament research 1968. Showed that it could be done in practice and is important. About 10 temperament researchers in world. Previously beside Thomas & Chess only Pavlov, Gesell, but not well known. No specific training in psychology or test design, Inspiration of Thomas & Chess. Exciting adventure but little interest generated among pediatric colleagues.
- Constructed ITQ in 1968 by self, first of its kind, Then with Sean McDevitt et al- RITQ, BSQ, TTS, MCTQ, and EITQ. All while in solo pediatrics practice. Achieved greater age range and psychometric sophistication. Scales widely translated and used (and misused) around the world.

Early battles with establishment over value of "maternal perceptions of temperament" vs. brief observations by professionals.

 Studies by me and others of participation of temperament in clinical problems: colic, weight gain, injuries, sleep problems, toilet training, coping ("executive functions"), school underachievement, some developmental milestones, etc. Clinical value of temperament in understanding and present management of these and other issues. However, no clinical help evident from making predictions of possible later behavioral issues.

An algorithm to demonstrate when and where temperament determinations are useful in diagnosis process and management: a) as component of adjustment problem or b) as source of misperception of abnormality when no dysfunction.

- Demonstrated after 20 years that routine temperament screening in practice is not a good use of the clinician's time. Temperament is not pathology. Better to limit determinations of it to times when there is concern about the child's behavior or functioning, which must also be evaluated appropriately.
- 5. Developed BBAS (<u>www.b-di.com</u>) with McDevitt to have available a more suitable conceptualization of and scale for evaluating behavioral outcome, both positive and negative. DSM too pathology oriented, not sufficiently developmental or contextual, and not cognizant of normal variation.
- 6. Pointed out repeatedly problem of pathologizing of temperament by DSM. Aversive temperament is seldom a sign of CNS malfunction. Recently clinical temperament research has languished amid a wave of theories about neurotransmitters and chemical imbalances. Especially the vague diagnostic criteria for ADHD have led to too much pathologizing of normal temperament and failure to recognize contributory role of other factors like sleep deprivation and adjustment problems. The ADHD epidemic a serious diagnostic and social problem, which has provoked too little concern.
- 7. Education of health professionals in many places here and abroad about nature, importance, and management of temperament concerns. My present particular attention to pediatricians in training at the Children's Hospital of Philadelphia.
- 8. McDevitt and I started biennial OTC meetings in 1978. Let us continue.

Renner, R. (2014), Looking Through The Lens Of Temperament: A way for parents to understand their children and themselves, reduce power struggles, and yell less. (See above)

McDevitt, S. C. (2014), *Clinical uses of temperament in an outpatient psychology practice.* (*See above*)

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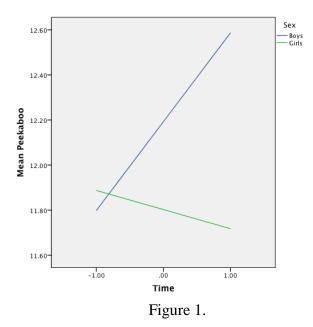
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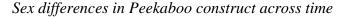
Helen F. Neville (2014), *Helping Parents Understand and Manage Temperament in Young Children.* (See above)

POSTERS

Erikson, N., Gartstein, M., A., & Beauchaine, T.P. (2014), *Gender differences in the temperament construct of surgency/extraversion.*

Gender differences in the temperament construct of surgency/extraversion have emerged across age groups, with significant and moderate differences favoring boys (see, e.g., Else-Quest, Shibley Hyde, Hill Goldsmith, &Van Hulle, 2006). However, comparatively little research has focused on gender differences in surgency/extraversion during infancy. This study addressed gender differences in infant temperament across the first year of life. Parents reported on their infants' temperament at 6, 8, 10, and 12 months, and temperament was evaluated through laboratory observations (Lab-TAB; Goldsmith & Rothbart, 1996). For this study, the surgency/extraversion factor of the Infant Behavior Questionnaire (IBQ-R; Gartstein & Rothbart, 2003) and a laboratory indicators derived from the "Peekaboo" episode were considered. Change in the parent-report and observational measures of infant surgency/extraversion across the first year of life were examined using multilevel modeling (MLM). Exploratory analyses were conducted regarding possible effects of infant sex on the development of infant temperament. Infant sex was significantly associated with intercepts for surgency/extraversion $(\beta_{02} = -2.23, p = .015)$, indicating that boys are higher in this construct compared to girls, averaged across time. There was also a significant effect of infant sex on the slope of the Peekaboo construct $(\beta_{12} = -.48, p = .033)$: males demonstrated an increase in surgency/extraversion across time, whereas females demonstrated an overall decrease.







A Happy Conversation at Poster Time

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Carmen González-Salinas¹, Noelia Sánchez-Pérez¹, Diana Martella², Flavia H. Santos³, Alejandro Castillo¹ & Luis J. Fuentes¹ (2014), Relations between Effortful Control and Executive Functions in Childhood. Effortful control (EC) and Executive Function (EF) provide two distinct frameworks for studying children' self-regulation abilities. Although they come from historically separated research fields, it has been suggested that these constructs share a clear conceptual and measurement overlap (Zhou, Chen, & Main, 2012). Nevertheless, exploration of the relations between EC and EF is rare. The aim of this work is to examine the overlapping between these two constructs in childhood by combining different measurement strategies. The sample was composed of 167 children (88 boys, 79 girls), aged 5 to 12 years (M = 8.56, S.D. = 1.74). Effortful Control was informed by parents through TMCQ (Simonds & Rothbart, 2006). Executive functions were measured through standard computerized cognitive tasks tapping Working memory (Digit span test), Shifting (DOTS task; Diamond et al., 2007), and Inhibition (Stop-signal and Go-no go tasks) components. Additionally, parental measures of executive functions were obtained via BRIEF (Gioia, Isquith, Guy, & Kenworthy, 2000). As exhibited in Table 1, results showed that among the computerized tasks, only the working memory task correlated positively to EC. In contrast, parents' reports of EC and executive functions showed a considerable overlapping. Our findings suggest that although EC and Executive Function share an important conceptual overlapping, the strength of associations is highly influenced by the measurement strategy selected and the operational definitions of the specific instruments used.

	Variables	1	2	3	4	5	6	7
1	Effortful	_						
	Control							
	(TMCQ)							
2	Metacognitio	65**	_					
	n (BRIEF)	*						
3	Behavioral	60**	.69	_				
	Regulation	*	***					
	(BRIEF)							
4	Forward	.12	06	14	_			
	Digits							
5	Backward	.29***	15	17	.54	_		
	Digits			*	***			
6	Go/No Go	.15	06	03	.04	.12	_	
	(% errors No							
	Go)							
7	Stop Signal	.03	.01	04	.21	.23	04	_
	(SSRT)				*	**		
8	DOTS	04	.02	.02	18	34	06	21
	(Difficulty				*	***		*
	Cost)							

Table 1. Correlations between Effortful Control and Executive Functions

* p < .05; ** p < .01; *** p < .001

Berger, R. H., Diaz, A., Silva, K., Valiente, C., Eisenberg, N., & Spinrad, T. (2014). *The*

consistency and timing of sleep relates to attentional control in early school-age children. We examined the concurrent association of children's sleep onset variability, duration variability, and wake times with their attentional control. Objective measures were used to assess children's sleep and attentional control. We found that attentional control was related to less sleep onset and duration variability and later wake times. In a follow-up analysis, we found that the association between wake time and attentional control was moderated by family income, where only the simple slope for low income children was significant. Children from low income families performed more optimally on the attentional control task when they woke up later. These results are an important first step in understanding how children's sleep maybe related to their ability to attend to specific tasks.

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Blanca Huitron, Carmen González, & John Worobey enjoy the poster session

Carmen González-Salinas, Noelia Sánchez-Pérez, Violeta Provencio, and Luis J. Fuentes (2014). *Effortful Control in Middle Childhood Predicts Individual Differences in Social Adjustment in Early Adolescence.* This work sought to study the predictive contribution of Effortful Control in middle childhood to individual differences in social adjustment in early adolescence, taking also into account the actual family climate.

The study consisted of a longitudinal design, with a sample composed of 142 families residing in the Region of Murcia, SE Spain. Children (61 boys, 81 girls) aged 6 to 9 years at the beginning of the study (Time 1: M = 7.44, S.D. = .69), and 10 to 13 vears at the end of it (Time 2: M = 11.06, S.D. = .77). Effortful Control was measured through TMCQ (parent-report form; Simonds & Rothbart, 2006; Spanish adaptation by Gonzalez-Salinas, 2013) at Time 1. Parents also informed about Positive Family Climate, reported via FES (Moos, Moos, & Trickelt, 1984; Spanish adaptation by Seisdedos et al., 1989) at Time 2. Indexes of social adjustment were obtained through Social Skills and Aggression (reversed) scales taken from BASC (Reynolds & Kamphaus, 2004; Spanish adaptation by Gonzalez et al., 2004). The BASC was filled out by parents and teachers at Time 2. As shown in

Table 1, Pearson correlations showed that Effortful Control, Positive Family Climate and children' social adjustment correlated positively. Regression analysis controlling for gender ($\beta = .34^{***}$) demonstrated that both Effortful Control ($\beta = .23^{**}$) and the actual family climate ($\beta = .35^{***}$) had a significant and independent contribution to the variance of children' social adjustment (F (3, 124) = 19.88, p < .001). These results show that children' self-regulation abilities, as reported by parents in middle childhood, contribute to socio-emotional adjustment in early adolescence, even when the quality of the actual family environment is taken into account.

Table 1. Correlations between the variables under study.

	Mean (S.D.)	Effortful Control	Family Positive Climate	Social Adjustment
Effortful	.00	-		
Control (T1)	(2.99)			
Positive Family	20.36	.30**	-	
Climate (T2)	(3.43)			
Social	01	.40***	.44***	-
Adjustment	(.72)			
(T2)				
Gender		.26**	.12	.32***
	*p < .	05; ** p < .0	· •	.001

References

- González, J., Fernández, S., Pérez, E., & Santamaría, P. (2004). Adaptación española de sistema de evaluación de la conducta en niños y adolescentes: BASC. Madrid: TEA Ediciones.
- González-Salinas, C. (2013). The structure of Spanish children's temperament: Mother's report. Oral communication in symposium by Roy Martin, the structure of temperament symposium, presented to the 19th Occasional Temperament Conference "Becoming Who We Are". Salt-Lake City, January, 11-13.
- Moos, R.H., Moos, B.S. & Trickett, E.J. (1984). The Social Climate Scales: Family, Work, Correctional Institutional and Classroom Environment Scales. Palo Alto California: Consulting Psychologist Press.
- Reynolds, C.R., & Kamphaus, R.W. (2004). Behavior Assessment System for Children (2nd Edition). Circle Pines, MN: American Guidance Service.
- Simonds, J., & Rothbart, M. K. (2006). Temperament in Middle Childhood Questionnaire. Downloaded in www.bowdoin.edu/~sputnam/rothbart-temperamentquestionnaires/.
- Seisdedos, N., Victoria de la Cruz, N. & Cordero, A. (1989). Escalas de Clima Social (FES). Madrid: TEA Ediciones, S.A.

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Noelia Sánchez-Pérez, Luis J. Fuentes, & Carmen González-Salinas (2014). Differential

Contribution of Temperament to Cognitive and Affective Empathy in Middle Childhood. This study examines the relations between temperament and empathy in middle childhood. More specifically, we were interested in studying the differential associations of temperament traits with Cognitive and Affective Empathy. The sample was composed of 142 children (68 boys, 74 girls) aged 9 to 12 years (M = 10.45, S.D. = .96). Parents informed of their children's temperament characteristics using the Temperament in Middle Childhood Questionnaire (TMCQ; Simonds & Rothbart, 2006). Cognitive and Affective empathies were measured through the Basic Empathy Scale (BES; Jolliffe & Farrington, 2006) by using a parent-report form developed in our research group (Sánchez-Pérez et al., 2014). As shown in Table 1, Pearson correlations at the level of the scales showed that Cognitive Empathy was positively associated with Affiliation, Attentional Focusing, Inhibitory Control, Low Intensity Pleasure, and Perceptual Sensitivity, and negatively associated with Impulsivity. Affective Empathy only showed a significant positive correlation to Affiliation and Fear. Multiple regression analyses at the level of the temperament factors were run including SES and gender as control variables. Regression analyses run at the level of the temperament factors showed that Affiliation ($\beta = .33^{***}$) and Effortful Control ($\beta =$.20*) had a significant and independent contribution to the variance of Cognitive Empathy (F (4,129) =8.22, p < .001), whereas only Affiliation ($\beta = .17^*$) significantly contributed to Affective Empathy (F (4,129) = 3.10, p = .018). These results suggest that although both empathy abilities are associated with affiliation tendencies, the affective empathy is uniquely related to a higher negative emotionality arousal (fear), while the cognitive empathy specifically involves temperamental self-regulation abilities.

Table 1. Means, standard deviations and correlations between temperamental dimensions, SES and empathy' skills.

	Mean (S.D.)	Cognitive	Affective
		Empathy	Empathy
Activity Level	3.93 (.75)	.12	.03
Assertiveness	3.29 (.61)	12	15
High Intensity	3.26 (.63)	.05	11
Pleasure			
Shyness	2.86 (.88)	02	.07
Anger	3.05 (.74)	15	00
Discomfort	2.68 (.62)	10	.04
Fear	2.57 (.72)	00	.18*
Sadness	2.67 (.62)	14	06
Soothability	3.33 (.63)	.15	.03
Inhibition	3.60 (.54)	.24**	.08
Control			
Impulsivity	2.76 (.66)	23**	09
Attentional	3.22 (.86)	.21*	.15
Focusing			
Activation	3.05 (.64)	.07	02
Control			
Perceptual	3.63 (.59)	.23**	.02
Sensitivity			
Affiliation	4.18 (.46)	.35***	.33***
Low Intensity	3.84 (.52)	.25**	.09
Pleasure			
SES	02 (.86)	.18*	.23**
Cognitive	4.03 (.50)	1	.61 ***
Empathy			
Affective	3.81 (.61)	.61***	1
Empathy			

* p < .05; ** p < .01; *** p < .001 References

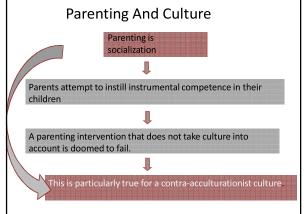
Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the Basic Empathy Scale. *Journal of Adolescence*, 29(4), 589-611. doi: 10.1016/j.adolescence.2005.08.010

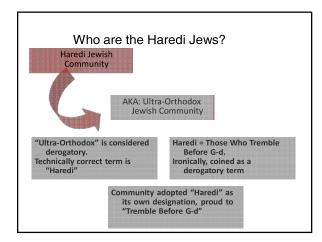
- Sánchez-Pérez, N., Fuentes, L.J., Jolliffe, D., & González-Salinas, C. (2014). Assessing children's empathy through a Spanish adaptation of the Basic Empathy Scale: parent's and child's report forms. Frontiers, 5: 1438. doi: 10.3389/fpsyg.2014.01438.
- Simonds, J., & Rothbart, M. K. (2006). Temperament in Middle Childhood Questionnaire.

APPENDIX that follows: Robin Koslowitz

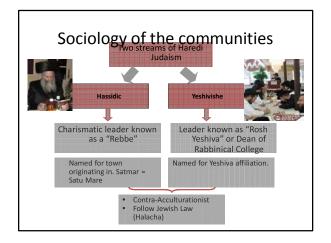
(2014). Adapting INSIGHTS into children's temperament for Haredi Jewish culture using the Core Cultural Assumptions model.





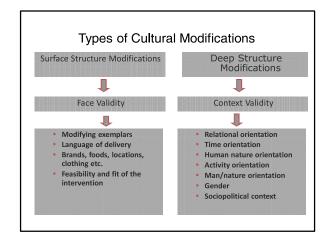


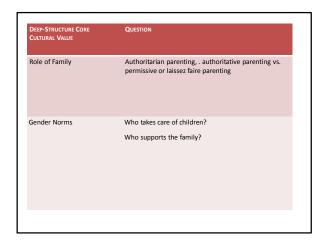












interdependent social relationships? What is emphasized in the culture: rights of the individual or of th group? What if someone does not fit in? Role religion plays in everyday life?	DEEP-STRUCTURE CORE CULTURAL VALUE	QUESTION
interdependent social relationships? What is emphasized in the culture: rights of the individual or of th group? What if someone does not fit in? Role religion plays in everyday life?	Relational Orientation	What is the nature of relationships?
group? What if someone does not fit in? Role religion plays in everyday life?		Are people equal and independent or integrate parts of hierarchal, interdependent social relationships?
Role religion plays in everyday life?		What is emphasized in the culture: rights of the individual or of the group?
		What if someone does not fit in?
Activity Orientation What is most important?		Role religion plays in everyday life?
	Activity Orientation	What is most important?

DEEP-STRUCTURE CORE CULTURAL VALUE	QUESTION
Construction of Human Nature	Does parent need to help child individuate or to become part of larger community? Are people essentially good, bad or neutral?
Time Orientation	Is the focus on the child's future or the needs of here and now?
	Does the culture focus on more than one time orientation?

