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WITHDRAWN AND INTRUSIVE DEPRESSED MOTHERS

by

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(From Division 7 Presidential Address, APA, 2000)

Withdrawn and Intrusive Depressed Mothers Have Different Effects on Their Infants. Withdrawn and intrusive behavior styles of depressed mothers were described several years ago by Tronick, Cohn and our research group (Tronick & Field, 1986), with the different style mothers showing different interaction behavior with their infants. These different style depressed mothers not only have different interaction styles with their infants and

significant others, but they also (as our data have indicated) have different physiological and biochemical profiles that are partially mirrored in their infants. Paralleling the rat model developed by Jay Weiss and his colleagues (Weiss et al., 1998), the intrusive mothers' depression may have less severe effects because those women have normal dopamine levels which have behavior activation effects. The withdrawn mothers, in contrast, may correspond to the Weiss model of more severe "depression" effects due to depleted dopamine and behavioral inactivation and anhedonia.

Incidence of Different Types of Depression Based on Different Interaction Behavior Styles. In our research, mothers were classified as depressed during the prenatal period based on a diagnosis of dysthymia on the Diagnostic Interview Schedule

(DIS) (or the DISC if they were adolescent mothers) (Robins et al, 1981; Shaffer et al, 1991). We elected to recruit chronically depressed pregnant women because we had conducted a study comparing chronically depressed women, prenatally depressed women and postpartum depressed women (Diego et al, 2001). The data from that study suggested that on behavioral, physiological and biochemical variables, both the chronically depressed mothers and their infants showed the most dysregulation. However, we were not able to classify them as intrusive or withdrawn until we could observe the mothers' interaction behavior with their infants at 3-months of age.

At the 3-6-month period the assessment that was conducted to classify these mothers as intrusive or withdrawn included videotaping the mothers and infants during face-to-face interactions (Jones et al, 2000). At the 3-month-period 41 % of the depressed mothers were identified as intrusive (having demonstrated rough physical contact including tickling, poking, tugging, using rapid staccato actions and tense or fake facial expressions), 38 % were identified as withdrawn (flat affect, rare touching, rare vocalizing, disengaged behavior, looking away from the infant) and 21 % were classified as good (non-intrusive/non-withdrawn mothers). The extremely withdrawn mothers behaved like statues with virtually no interaction with their infants. In contrast, the extremely intrusive mothers behaved like “wood-pecking, boxing machines” poking and “boxing” their infants' faces and jerking their hands such that the sessions needed to be interrupted and referrals made to protective services.

Different EEG Patterns In Withdrawn and Intrusive Depressed Mothers and Their Infants. EEG researchers have documented associations between approach emotions such as happy and anger and left frontal EEG activation and between withdrawal emotions such as sadness and right frontal EEG activation, and between adult depression and right frontal EEG activation explained by left frontal hypoactivation (Davidson & Fox, 1982, 1989; Henriques & Davidson, 1990). Our group has shown that depressed mothers have greater relative right frontal EEG activation explained by left

hypoactivation, and their infants have the same pattern when the infants are 3-months-old (Field et al, 1995), one-month-old (Jones et al., 1997) and even as early as one-week-old (Jones et al, 1998). In a longitudinal pilot study (Jones et al., 1997) depressed mothers and their infants consistently showed greater relative right frontal EEG activation explained by left frontal hypoactivation from one-month to three-months and 3-months to 3-years. Davidson (1998) suggests that the greater relative right frontal EEG activation is typically explained by left frontal hypoactivation. Recent pilot data suggest that the two different style depressed mothers have different EEG patterns. Withdrawn depressed mothers and their infants show greater relative right frontal EEG activation patterns, while the intrusive depressed mothers and infants show greater relative left frontal activation. Again, according to Davidson (1998) these patterns may reflect left frontal hypoactivation in the withdrawn mothers and right frontal hypoactivation in the intrusive mothers. That the infants of withdrawn mothers may be more affected is reflected in lower interaction ratings of the withdrawn mothers and their infants when the infants were 3-months-old, and the infants of withdrawn mothers having lower Bayley mental scale scores at one year.

Retrospective Analyses of Neonatal Data Show Differential Maternal Style Effects on the Newborns. We then looked retrospectively at the neonatal data on this sample to determine the differential behavior of the newborns of intrusive and withdrawn depressed mothers (Jones et al, 1997). Although the mothers from both groups had been diagnosed as dysthymic on the DIS (or DISC if they were adolescents), and had equivalently high BDI scores, withdrawn mothers had lower dopamine levels. In addition, the infants of the withdrawn mothers had lower Brazelton orientation and motor scores, along with higher Lester depression scores, and their dopamine levels were lower (like their mothers).

Depleted Dopamine in Withdrawn Mothers and Infants. The lower dopamine in the withdrawn mothers and their infants is perhaps not surprising given that they are less active (dopamine being an activating transmitter). Dopamine has been

considered a pivotal neurotransmitter in the model being investigated in children's psychiatric disorders by Rogeness et al. (1992). In that model, derived from an extensive data base on multiple disorders in children and adolescents, high norepinephrine, high dopamine and high serotonin levels are typically associated with normal, extraverted, high energy traits. Children, however, with elevated dopamine often have externalizing problems. In a follow-up study of our pilot sample to the preschool stage, the children of the intrusive mothers were showing externalizing problems (Jones et al, 2000), as might have been predicted by their neurotransmitter pattern. In the Rogeness et al (1992) model, elevated dopamine unchecked by serotonin may lead to impulsive behavior problems. In contrast, high norepinephrine accompanied by low dopamine is associated in the Rogeness et al (1992) model with anxious, inhibited, depressed behavior. Again, the neurotransmitter profile matched the internalizing problems of our sample of children of withdrawn mothers. Even as early as birth, the newborns of the withdrawn mothers in our study not only showed lower activity levels and less responsivity to social stimulation, but also greater relative right frontal EEG activation and lower dopamine levels, typically associated with inhibition and withdrawn behavior. In contrast, the newborns of intrusive mothers showed more active approach behavior, greater relative left frontal EEG activation and higher dopamine levels typically associated with active, aggressive behavior.

The rat model developed by Jay Weiss and his colleagues (Weiss, Bonsall, Demetrikopoulos, Emery, & West, 1998) has linked the noradrenergic and dopaminergic systems in depression. In this model, dopamine is implicated as much if not more so than norepinephrine in depression-related responses including low activity levels and anhedonic responses. Depressive symptomatology in that model has been traced to abnormal activity (hyperresponsivity) of the locus coeruleus neurons which then release galanin from the locus coeruleus access terminals, in turn inhibiting (hyperpolarizing) dopamine neurons in the ventral tegmentum to mediate depression-related changes. The depressed dopamine levels in the withdrawn mothers relative to the intrusive mothers suggest a

greater degree of depression, at least depression that dampens activity and hedonic levels. The pattern of depressed dopamine in their neonates might explain their depressed activity and lack of responsiveness to social stimulation on the Brazelton Neonatal Behavior Assessment as well as their greater relative right frontal EEG activation.

Infants of Intrusive Mothers Are More Exploratory and Have Better Developmental Scores at One Year. At one year, the infants' exploratory behavior and their performance on developmental assessments were investigated (Hart et al, 1999). At this time, the infants of the intrusive mothers were noted to be more exploratory than the infants of the withdrawn mothers during a teaching interaction (manipulating a jack-in-the-box). Also, at this time, the intrusive mothers were showing significantly lower depression scores than the withdrawn mothers (18 versus 27 on the Beck Depression Inventory), although they met the >16 BDI score criterion for depression. The infants of the intrusive mothers also showed superior performance on the Bayley mental scales. The infants of intrusive mothers' superior performance on the Bayley was significantly correlated with their exploratory behavior during the teaching interaction.

Across infancy and into early preschool the stability of these classifications and their corresponding biochemical and EEG profiles was noted in a longitudinal pilot study by our team (Jones et al, 1997). Unfortunately, the attrition rate was high for the "good" mothers, who would hopefully be maintained in a future sample because of the useful information they may provide on how depressed mothers, despite their depression, can engage in optimal behavior for their children's development.

Non-Empathy, Internalizing and Externalizing Problems at Preschool Age. At the preschool stage, in addition to recording EEG activity, the children's empathetic reactions to emotion-inducing situations and their ability to complete a learning task were examined (Jones et al, 2000). The children of the depressed mothers showed greater relative right frontal EEG activation, were slower in completing the teaching task and they spent more time asking for help. The depressed mothers stated their approval less often and spent less time helping their

child complete the task. The children of the depressed mothers also showed fewer empathetic responses to a crying infant as well as to their own mothers' simulated distress. The children showed two styles of non-empathy, one marked by aggressive nonempathy behavior, and the other marked by apathetic non-empathy behavior, behaviors that might be expected based on their mothers' classification as intrusive or withdrawn. In addition, the children of intrusive mothers were showing externalizing behaviors and the children of the withdrawn mothers were showing internalizing behaviors. The differences between the children's non-empathetic responding mirrored the differences noted in the earlier three month period when the intrusive mothers appeared to have angry reactions while the withdrawn mothers appeared to have more apathetic but more empathetic reactions. It should be reminded, however, that these findings need to be replicated with a more representative sample of depressed mothers, as this sample was limited to younger mothers from a lower socioeconomic status group.

Identification of Different Style Depressed Mothers in a New Sample by BIS/BAS. During the course of the previous studies we were able to explore various assessment procedures that might distinguish the intrusive and withdrawn depressed mothers prior to their interactions with their three-month-old infants so that they could be identified during pregnancy. Earlier we had only been able to distinguish the mothers' styles by their interaction behaviors with their 3-6-month old infants. However, in a comprehensive assessment study (Diego et al, 2001), we were able to document high correlations between the different interaction styles at 3-6months and their EEG patterns and scores on the Behavioral Inhibition Scale/Behavioral Activation Scale (BIS/BAS). As might have been expected, the mothers with high BIS (behavioral inhibition) scores were those showing withdrawn interaction behavior and greater relative right frontal EEG in contrast to those with high BAS (behavioral approach) scores showing greater relative left frontal EEG activation and intrusive interaction patterns.

Comparison of Depressed Withdrawn, Depressed Intrusive and Non-Depressed Groups on Prenatal and Neonatal Measures. With these new identification procedures (the EEG patterns and BIS/BAS scores), we expected we would be able to reliably identify chronically depressed women with these different styles during the early pregnancy period. A comparison between all 3 groups (depressed withdrawn, depressed intrusive and nondepressed), for prenatal and neonatal variables suggested that the intrusive and withdrawn depressed groups differed from the non-depressed group on several variables. However, the withdrawn group differed from both the intrusive group and the nondepressed group on the following: 1) lower BAS/BIS scores during pregnancy suggesting more withdrawal behavior; 2) lower dopamine levels during pregnancy; 3) elevated cortisol and norepinephrine levels in the withdrawn mothers postnatally; 4) elevated cortisol levels and lower dopamine and serotonin levels in the newborns of withdrawn mothers; 5) greater relative right frontal EEG explained by left hypoactivity in the newborns of withdrawn mothers; and 6) lower Brazelton scores including range of state, autonomic stability, withdrawal symptoms and excitability. In this study depression was stable for these groups from the prenatal to the postnatal period. Only 7% shifted out of the depressed group. Their data were, however, retained in the data analysis, making the group comparisons more conservative.

Confounding Risk Factors. It should be noted that in this program of studies, most of our samples were not only depressed but high-risk for other reasons including being low socioeconomic status and having associated problems such as prenatal exposure to malnutrition and drug exposure. Having recognized that these factors significantly confound the effects of maternal depression on fetal and infant development, future studies are needed on mothers who are experiencing depression but not experiencing the confounding and compounding effects of low socioeconomic status, related malnutrition and drug use effects. Thus, much of the data we review here needs to be considered in the context that depression was confounded and compounded by low SES, potential drug use, and its associated fetal malnutrition effects. Also, several

of the samples were cross-sectional as opposed to longitudinal because of compliance problems with the low SES, relatively uneducated samples of mothers.

Psychobiological Attunement Model Reconsidered. These data suggest a reconsideration of our "psychobiological attunement" model. In that model we had argued that the infants of depressed mothers experience dysregulation and that that dysregulation is later compounded by inadequate stimulation and arousal modulation from their mothers (Field, 1985, 1992, 1995, 1998; Field et al., 2001). Whether the mothers had a withdrawn (understimulating) or intrusive (overstimulating) interaction style, their stimulation was considered inadequate in that model. The more recent data showing better developmental outcomes for the infants of intrusive mothers (at least their better development scores at one year) raise questions about some of the assumptions of the original model.

The new data suggest that: 1) the excessive stimulation of the intrusive mothers, in particular their verbal stimulation, may be facilitating better cognitive development of their infants as compared to the infants of withdrawn mothers. The better cognitive development might also result from these infants being more active (higher dopamine levels) and having to actively respond to their mothers, as opposed to the infants of withdrawn mothers who can be inactive in response to their mothers' inactivity. The more actively responding infants might be processing more stimulation and in turn becoming more exploratory (as suggested by their greater exploratory behavior at one year), suggesting a more indirect pathway for the mothers' effect on the infants' development; and 2) the neonatal data showing more optimal Brazelton performance and less relative right frontal EEG activation in infants of intrusive mothers suggest that the infants of intrusive mothers may themselves be less dysregulated than the infants of withdrawn mothers as early as the neonatal period. This may not be surprising because their mothers had a more balanced (less depressed) neurotransmitter pattern (elevated dopamine) which in turn would affect fetal development and contribute to that pattern in their infants, and the infants themselves as early as

the newborn stage have a more balanced (less depressed) neurotransmitter pattern (elevated dopamine). Further data are needed, however, to determine whether these effects are robust at one year and whether, despite their cognitive advantage at one year, the children of intrusive mothers begin to show externalizing problems by preschool, as they did in our earlier study (Jones et al., 1998). Having elevated dopamine levels would predictably lead, according to the model of Rogeness et al. (1992), to intrusive, impulsive behavior.

These, then, are some of the ways that withdrawn depressed and intrusive depressed mothers and their infants appear to differ. The magnitude of the differences suggests the importance of their being investigated as separate groups rather than considering them as a homogeneous group of depressed mothers and their infants.

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Women's Mental Health Consortium (www.nimh.nih.gov/wmhc)

Maternal Depression Roundtable Summary

Prevention and Treatment of Depression in Pregnancy and the Postpartum Period

OVERVIEW

On January 31, 2001, the NIMH Division of Services and Intervention Research in collaboration with the NIMH Office of Women's Mental Health, convened a one day roundtable discussion on the current status and future directions of research on the prevention and treatment of depression in pregnancy and the postpartum period. The topics covered a wide area of research and public health issues, including assessment, intervention, service delivery systems, and preventive approaches. Opportunities for conducting pharmacologic research with pregnant women, as well as calls for maternal depression screening efforts during pregnancy and the postpartum period in underserved populations, were among several of the Federal initiatives highlighted to illustrate the need for more research.

MEETING SUMMARY

Nosology/Diagnosis. Most research studies use non-psychotic Major Depressive Disorder (MDD) and minor depression as standards for identifying women who are depressed during pregnancy and the postpartum period. Although the expert panel concurred that this appears to be a reasonable approach to diagnosis, bipolar disorder and psychosis were noted as separate diagnoses that require their own study with regard to assessment, risk factors, and intervention approaches. For MDD and minor depression, the use of broader and/or multiple definitions that address symptoms, functional impairment, subsyndromal states, and other diagnostic categories (e.g., anxiety disorders) were recommended. Although DSM-IV states postpartum depression occurs within 4 weeks after delivery, there is no clear research consensus in the field for how long after delivery the category of postpartum depression (PPD) applies. An identified area of needed research was to further study the course of depression. This is needed to differentiate

between depression with a postpartum-onset and major and/or minor depression that begins prior to pregnancy and continues during pregnancy and into the postpartum period. Whether there are differential and distinguishable risks, prognoses, symptoms, and treatment outcomes associated with MDD, minor depression, and PDD is unclear and needs to be further studied.

Approaches to Assessment. The current research standard is to use a structured interview to diagnose MDD, however, many self-report measures of depressive symptoms are also used. With regard to self-report measures, there was agreement that the Edinburgh Postnatal Depression Screening was a well-established, reliable, and valid measure that can be easily interpreted by primary physicians, pediatricians, and obstetricians. Besides maternal depressive symptoms, other key domains to assess suggested by the discussants included the mother's functional impairment in pregnancy and postpartum, the developmental abilities, language, and affect/behavior of the child, and aspects of the mother-child interaction. Issues involving the assessment of cost-effectiveness of universal screenings and treatments were discussed with a recommendation for the inclusion of an economist in the early stages of research efforts.

Psychopharmacological Interventions. Although there is more known about the use of antidepressants in pregnant and postpartum women than other medications prescribed during this period, the data are still limited and there are few randomized controlled trials. Safety has to be considered in the context of the risks related to the illness. While it is known that the child is exposed to antidepressants prenatally and through breastfeeding, there is limited information about the effects of antidepressant exposure on the children's outcomes. Similarly, little is known about the effects of maternal depression on fetal development. Animal models of psychopharmacologic and depression/stress effects on offspring, as well as a multidisciplinary, collaborative studies with longitudinal and multidimensional assessment of the children, are both needed to better understand both risks and benefits of pharmacologic interventions.

Psychosocial Interventions. The current evidence base for psychosocial interventions includes a number of efficacy trials conducted in the U.S., as well as a number of effectiveness studies being conducted in other countries. Within the U.S., there are positive outcomes for Interpersonal psychotherapy in the treatment of depression in women antenatally and postpartum. A relational, family-based approach to the treatment of maternal depression is likely an important complement to individual treatment with the mother. There were several gaps in research discussed. There is limited information on relapse rates of women whom have completed a psychosocial intervention. Additionally, there is almost no information on intervening with pregnant and postpartum women who have both depression and a co-morbid disorder, such as a personality disorder or an anxiety disorder, and the co-morbidity's effect on treatment outcomes. Finally, women's hormonal levels in pregnancy, the early postpartum period, and once their menstrual cycles resumes should be studied to understand the potential effects of hormonal changes on depression and relapse.

Prevention Approaches. Because of the potentially devastating and longstanding effects depression can have on a mother, her children, and their relationship, preventing maternal depression can alleviate distress, maladjustment, and other negative outcomes. Although prevention approaches hold much promise to improve the outcomes of both mother and offspring, the field is in the developing stages. The experts agreed that to best consider preventive approaches, further understanding of the cumulative risks of these mothers, children, the interaction of mother and child, and families is needed. The timing and course of the mother's depression may have differential effects on a child depending on a child's age and developmental period. Because preventive intervention efforts can require early, intensive, and ongoing efforts, understanding those at greatest risk, and the timing of greatest risk, is imperative. There have been few studies of prevention of depression in women, and there are no randomized controlled trials focusing on depression during pregnancy and the postpartum period. It was recommended that longitudinal studies are needed to address many crucial

questions about the course and effects of maternal depression, which in turn can inform approaches to preventive interventions with pregnant and postpartum women.

Intervention Service Delivery. The health care service system provides numerous opportunities to address, identify, and intervene with maternal depression. In primary care and pediatric settings, areas of provider difficulty in detecting and intervening with depression have been noted (i.e., interview style, lack of knowledge in mental health issues, and stigma). Options to increase knowledge have included psychoeducation, referral information, and practice guidelines, but a competing demands model suggests that asking providers to "do more" will be a significant challenge. Besides mental health and obstetrics/gynecology clinics and practices, pediatric well child check-ups, early child care centers, and early educational programs (i.e., Early Head Start) are other settings where women who have young children or are planning subsequent pregnancies may be targeted for prevention and treatment efforts. Two examples of depression screening within health care systems were described (neither are currently being evaluated). One is supported by the insurer who mails a self-report measure to postpartum women and provides referrals for those women who meet a certain threshold on the measure. A second is a mandated brief screening questionnaire that emphasizes emotional/depression, social support, and other risk factors for pregnant women, which is administered by prenatal care providers in Ontario.

Next Steps. In addition to the numerous research opportunities identified in the above topic summaries, the participants also highlighted the need for further networking among investigators with complementary research interests. For example, psychosocial intervention experts could benefit from collaboration with services researchers to develop and test multi-level intervention approaches embedded in service systems. Another example is the need for developmental psychology experts to collaborate with researchers interested in the short and long-term effects of pharmacotherapies, such as relapse, in offspring of

pregnant and lactating women. Encouraging new investigators in such collaborations is also necessary to "grow the field" to the point where this public health issue can be more effectively be addressed. To further address depression during pregnancy and the postpartum period as a public health problem, the inclusion of ethnically and SES-diverse women in these research efforts is critical.

PARTICIPANT LIST

Experts: Roseanne Clark, Ph.D, Univ. WI Med. School; Ricardo Muñoz, Ph.D., UCSF; Michael O'Hara, Ph.D., Univ. Iowa; Zachary Stowe, Ph.D., Emory Univ.; Donna Stewart, M.D., Univ. Health Network & Univ. Toronto; Edward Tronick, Ph.D., Children's Hospital, Boston; Katherine Wisner, M.D., Case Western Reserve Univ.; Lawrence Wissow, M.D., Johns Hopkins Univ.

Recorder: Huynh-Nhu Le, Ph.D., UCSF.

Federal Participants: Co-chairs from NIMH - Rhonda C. Boyd, Ph.D. and Jane L. Pearson, Ph.D.; Additional participating NIMH staff - Alison Bennett, Mary Blehar, Ph.D., Cheryl Boyce, Ph.D., Regina Dolan-Sewell, Ph.D., Junius Gonzalez, M.D., Della Hann, Ph.D., Kimberly Hoagwood, Ph.D., Serene Olin, Ph.D., Peter Schmidt, M.D., Ben Vitiello, M.D.; Invited staff from ACYF -Rachel Cohen, Ph.D., Brenda Jones Harden, Ph.D.

Congratulations to New Division 7 Officers

The newly-elected officers of Division 7 are:

President-Elect:	Nathan Fox
Secretary:	Arlene Walker-Andrews
Treasurer:	Joan Lucariello
Member-at-Large:	Jacob Gewirtz
Fellows Committee:	Robert Golinkoff and William Graziano

We congratulate the newly elected officers. We appreciate the willingness of these individuals and the other candidates to serve in this important capacity.

**APA Division 7
2001 Convention Program**

Friday, August 24, 2001

All sessions are in the Moscone Center – South Building
unless otherwise noted.

9:00 – 10:50 Room 226

Symposium: *Autobiographical Memory: Developmental and Cultural Perspectives*

Viorica Marian, Catherine A. Haden, Michelle Leichtman,
Robert W. Schrauf, David C. Rubin, Peter A. Ornstein

10:00 – 11:50 Room 305

Town Meeting: *Data Sharing--Who Needs It? (Co-sponsored with Division 5)*

Harris Cooper, Brian MacWhinney, Jack McArdle, Jennifer
James, Russell Church, Javed Aslam, Alice Eagley, Kurt Pawlik

11:00 – 11:50 Room 212

Invited Address, Daniel J. Povinelli: *Chimpanzees, Children, and the Evolution of the Human Capacity for Explanation.* John Flavell (Chair)

12:00 – 12:50 Room 238

Invited Address, Diana Baumrind: *Does Causally Relevant Research Support a Blanket Injunction Against the Use of Disciplinary Spanking?* Eleanor Maccoby (Chair)

1:00 – 1:50 Room 238

Invited Address, John Flavell: *Development of Children's Knowledge About the Mental World*

Lynn S. Liben (Chair)

1:00 – 2:50

Poster Session: Applied Psychology, Psychology in the Workplace, Evaluation, Measurement, and Statistics

2:00 – 2:50 Room 250

Boyd McCandless Award for an Early Career Contribution to Developmental Psychology: *The Infant as Armchair Psychologist: How Infants Make Sense of Intentional Action*
Amanda Woodward, Nora Newcombe (Chair)

5:00- 7:00 Exhibit Hall A

Focus on Science Social Hour

5:00 – 6:50

Poster Session: Individual Differences, Learning, Memory and Cognition, Neuropsychology, Comparative Psychopharmacology

Saturday, August 25, 2001

All sessions **before 3pm** are in the Mascone Center - South Bldg

8:00 – 9:50 Room 200

Symposium: *Life Through The Eyes of Children in Middle Childhood (Co-sponsored with Division 1)*

Lewis P. Lipsitt, Rosemarie Truglio, Susan Royer, George
McCraker, Michael Cohen, Faith Rogow

9:00 – 10:50 Room 270

Symposium: *Positive Developmental Pathways: A Tribute to Norman Garmezy as Mentor*

**Ann S. Masten, Dante Cicchetti, Margaret O'Dougherty
Wright, Jon Hubbard, Douglas Coatsworth, Arnold
Sameroff**

9:00-10:50

Poster Session: Psychopathology, Personal Relationships, Influences on Social Behavior

11-11:50 Room 306

Focus on Science Plenary Session, Frans de Wall.

The inevitability of evolutionary psychology and the limitations of adaptationism: lessons from the other primates.

12:00 – 12:50 Room 202/204/206

G. Stanley Hall Award for Distinguished Contribution to Developmental Psychology: Arnold Sameroff, *Dialectics of Development: Discontinuities in Psychological Adaptation*
Dante Cicchetti (Chair)

1:00 – 2:50 Room 232/234

Symposium: *Understanding Representations: Developmental, Educational and Cultural Perspectives*

Lynn S. Liben, Ellen Bialystok, Mary Gauvain, Kevin F. Miller,
David H. Uttal

1:00 – 2:50

Poster Session: *Motivation and Emotion, Social Cognition, Cultural & Environmental Determinants of Behavior, Gender*

3:00 – 3:50 **(Marriott Hotel, Yerba Buena Salon 4)**

Presidential Address, Judy DeLoache: *How Children Become Symbol Minded*

David H. Uttal (Chair)

4:00 – 4:50 **(Marriott Hotel, Yerba Buena Salon 4)**

Business Meeting, Award Presentations, and Discussion of DOTDEP

5:00 – 6:50 **(Marriott Hotel, Yerba Buena Salon 6)**

Social Hour (With Division 3, 20, and 21)

Sunday, August 26, 2001

All sessions are in the Moscone Center – South Building, except the “Social Hour”.

9:00 – 10:50 Room 276

Symposium: *Prenatal Depression Effects*

Tiffany M. Field, Regina Yando, Debra Bendell, Tannis MacBeth

11:00 – 11:50 Room 222

Urie Bronfenbrenner Award for Lifetime Contribution to Developmental Psychology in the Service of Science and Society: Jeanne Brooks-Gunn. *Children's Pathways Through Poverty: Implications for Parenting and Policy*
Ann S. Masten (Chair)

***All Poster Sessions will be held in Moscone Center, Exhibit Hall A. Look for the “Focus on Science” Sign.

12:00 – 1:50 Room 222

Symposium: *Negotiating Peer Interactions during Early Adolescence: Bullying, Harassment, and Jealousy*

Dorothy L. Espelage, Susan M. Swearer, Paulette Tam Cary, Rachel Henkel, Jeffrey G. Parker, Alisha R. Walker, Melissa K. Holt, Nan D. Stein

1:00 – 2:50 Room 272

Symposium: *Electronic Media and Children: Current Issues and Future Research (Co-sponsored with Division 46, Media Psychology)*

Dorothy Singer, Todd Tarpley, Kareri Subrahmanyam, Sandra Calvert, Jennifer Kotler, Brad Bushman, Neil Malamuth, Ricki Goldman-Segall

3:00 – 4:50 Room 300

Symposium: *Not Only About Child Care: Findings from the NICHD Study of Early Child Care and Youth Development*

NICHD Early Child Care Research Network, Roger Bakeman, Kathy Hirsh-Pasek, Susan Spieker, Celia Brownell, Sarah Friedman, Joseph J. Campos

5:00-6:50 **(Marriott Hotel, Yerba Buena Salon 13)**
Social Hour (With Division 1, 3, and 6)

New Look and New Features at the Division 7 (Developmental Psychology) Web Site

Please visit the site and the bookmark <http://www.apa.org/divisions/div7/> to see our updated Division 7 web site. In addition to a new "look," we have added a search function, "member finder," that allows you to search for and retrieve the email address and workplace location of Division 7 members.

Newsletter Moves to Electronic Distribution

The newsletter will not be mailed but only will be distributed via email notification online. Current and previous issues of the newsletter are available at:

<http://www.apa.org/divisions/div7/newsletter.html>

Division 7 Email Listserv

Sign up for the Division 7 email listserv! This is an excellent resource for facilitating communication between Division 7 members, distributing announcements (job postings, grant opportunities...) to developmental psychologists, and for posting questions/answers and discussion items of interest to Division 7 members. All members are strongly encouraged to subscribe themselves to the listserv by simply sending an email message to:

listserv@lists.apa.org

Leave the subject line blank and simply write the following on the first line of the body of the message:

"subscribe div7 (First Name) (Last Name)"

For example: subscribe div7 Adam Winsler

Division 7 Needs Your Email Address

We need your email address so we can let you know about future newsletter issues, the listserv, and the like, and to keep our Division 7 membership database complete. If you do not already receive occasional emails from Division 7 (i.e., div7 program at APA, newsletter notification), please take a few moments now to send a quick email message to awinsler@gmu.edu with your current email address and your full name (and your current mailing address and phone number(s) if handy). We promise we will not send you irrelevant stuff nor will we give out our email list to anyone. Thanks!

CALL FOR NOMINATION OF FELLOWS

It is time once more to nominate colleagues for the honor of Fellow of Division 7 of APA. The designation of Fellow in the Division of Developmental Psychology is awarded to those members of the Division who, in the judgment of their peers, have made a distinguished scientific or scholarly contribution to the field of developmental psychology. The contribution will ordinarily take the form of published papers or books documenting the candidate's empirical research, the development of theory or methods, or other scholarly pursuits. Please note that nominees may already be Fellows in other divisions of APA.

All nominees for Fellow must be members of APA Division 7. Any member of Division 7 may nominate someone for Fellow status, and self-nominations are accepted.

Please take a minute to think of colleagues who deserve being nominated as Division 7 Fellows. Send nominations (including nominees affiliation and addresses-regular and email) by December 1, 2001, to Linda Acredolo, Fellows Committee Chair, Dept. of Psychology, University of California, Davis, CA 95616-8686 lpacredolo@ucdavis.edu

INFORMATION about DOTDEP (Directors of Training in Developmental Psychology)

Summary of Premeeting at SRCD - Nearly 50 representatives from a wide variety of programs attended the DOTDEP session held in Minneapolis on April 19, 2001. The participants met primarily to share information about programs and to consider ways to facilitate graduate training. Workshop/discussion sessions focused on 1) understanding the goals and purposes of comprehensive exams and how they are implemented programmatically, 2) concerns related to designing and effectively carrying out applied and practicum experiences in developmental training, 3) procedures and practices for successfully preparing graduate students to teach developmental psychology, and 4) the issues that directors of developmental psychology will need to address in the new millennium.

Although many issues came up within each discussion group, a common theme was the need to have more effective mechanisms for obtaining various kinds of information. For example, one concrete suggestion was to develop some kind of registry that would help to identify undergraduates involved in developmental research who might be particularly suitable graduate student prospects and who could be contacted by various developmental programs to explore mutual interests. Another was to have greater access to information about the procedures and content of comprehensives (and other requirements, including curricula and course syllabi) that various training programs have adopted. Still another was to create a centralized source of information pertaining to applied developmental career paths in, for example, education, health fields, government, media- and technology-related organizations, museums, and other social agencies. Many other more specific ideas and recommendations were offered but another clear message from the evaluation completed by participants at the end of the meeting was the desire to continue such sessions in future years, not only to provide information exchange, but also to help design and institute strategies for improving training in developmental psychology.

Website/Electronic Brochure: After a great deal of time and effort by Lynn Liben to establish a detailed electronic brochure (similar to the last hard copy edition distributed by Division 7 a number of years ago), it has become evident that such a single web site sketching the various features of our many developmental training programs would be difficult to both create and to maintain. A more effective mechanism will be to have a listing of Graduate Developmental Training Programs (and a contact person) at the Division 7 web site, with each program linked to its own university-based web site. Thus to obtain more information, prospective graduate students can point their browser directly to those programs in which they are interested.

We are now about to proceed with implementation of this listing. If you would like to have your graduate program included, we are requesting the following information from an appropriate representative:

- ◆ school name;
- ◆ program name;
- ◆ department or college affiliation;
- ◆ web site URL to link to relevant developmental or departmental program information; and
- ◆ e-mail address for an appropriate contact person.

Any program concerned with graduate training in developmental psychology, whether located in a department of psychology, or a department or college of education, human development, pediatrics, or home economics, will be included if the above material is submitted.

**Please send the information to:
marvin.w.daehler@psych.umass.edu**

Future Directions for DOTDEP: Members of the Education and Training Committee of Division 7 will begin to direct their efforts to further consideration of various suggestions that came out of the premeeting of DOTDEP members at SRCD. In addition to some of the possibilities for information exchange described above, a listserve for Directors of Training in Developmental Psychology will be under consideration as will the agenda and goals for possible future meetings of DOTDEP. Anyone who has additional suggestions

or recommendations are encouraged to contact members of the Education and Training Committee listed in the DOTDEP page at the Division 7 APA web site.

ANNOUNCEMENTS

Convention Program Information Available on Child and Adolescent Psychology Sessions

The American Psychological Association's Working Group on Children's Mental Health has compiled a partial list of APA 2001 Convention sessions and activities that may be of interest to practitioners, researchers, educators, policy makers and students in the field of child and adolescent psychology. To receive an electronic or hard copy, please contact Trena King, Children, Youth, and Families Administrative Coordinator by telephone at 202-336-6045, by fax at 202-336-6040, or by email at tking@apa.org.

Call for Nominations to the Committee on Women in Psychology

The American Psychological Association's Committee on Women in Psychology (CWP) is seeking nominations for two new members to begin terms in January 2002. The committee functions as a catalyst by interacting with and making recommendations to the various parts of the APA's governing structure, the APA's membership, and the Society for the of Psychology of Women, as well as to other relevant groups. Additionally, the committee collects information and documentation concerning the status of women and develops the means by which the participation of women in roles and functions of the profession could be increased.

Committee members plan, develop, and coordinate various activities regarding the status of women. CWP's present strategic initiatives include translating research in women's health to practice, women and work, and women in psychology

careers. The committee is interested in persons with demonstrated interest and experience in women's issues to serve a 3-year term beginning in January 2002 and ending in December 2004. For this term, CWP seeks at least one member actively involved in research. To fulfill the committee's commitment to full diversity in representation, one of the slates should be filled by an openly identified lesbian psychologist. Letters of nomination should clearly describe the candidate's specific qualifications relative to these criteria.

Selected candidates will be required to attend two committee meetings a year in Washington, DC, with expenses reimbursed by the APA. Members also work on CWP priorities between meetings. If possible, members attend a CWP meeting at their own expense held during the APA Convention.

Nomination materials should include the nominee's qualifications, a letter from the nominee indicating willingness to serve on CWP and a current curriculum vita. Self-nominations are also encouraged. APA nominations are open to members who are retired or employed less than full time. Nominations and supporting materials should be sent by Sept. 1, 2001, to Stephanie Olmstead-Dean of the APA Women's Programs Office, 750 First Street, N.E., Washington, DC, 20002-4242.

The Washington Update

The latest version of the SRCDC Washington Update, a monthly bulletin provided by the SRCDC Office for Policy and Communications, is now online at: www.srcd.org/policywashupdate.html

The Washington Update provides up-to-date information and resources gathered from Congressional hearings, meetings with Executive Branch offices, coalition meetings, and other activities related to research and policies concerning children and families.

UPCOMING MEETINGS, SYMPOSIA, WORKSHOPS OF INTEREST

22-26 August 2001 - Xth European Conference on Developmental Psychology - Uppsala, Sweden

Contact: Scientific and Program Information - ECDP, Dept. of Psychology, Box 1225, SE-751 42 Uppsala, Sweden O: +46 18 471 22 02 F: +46 18 471 21 23 E: ECDP@psyk.uu.se
Registration - Uppsala Kongress & Konferens AB "ECDP", Dragarbrunnsgatan 35, SE-753 20 Uppsala, Sweden O: +46 18 15 00 60 F: +46 18 13 40 50 E: kongress@ukkab.se

28 August-1 September 2001 - European Conference for Research on Learning and Instruction - Freiburg, Switzerland
Contact: Dr. Ulrich Baetz, Univ. of Fribourg, EARLI 2001, Rue Gaucigny 2, CH-1700 Fribourg, Switzerland O: ++41-26-321 3175 F: ++41-26-322 3527
E: sales@FribourgTourism.ch E: www.earli2001.ch

11-13 September 2001 - 21st Annual Conference of the Society for Reproductive and Infant Psychology - University College, Oxford, UK
Contact: Maggie Redshaw/ Sandra Johnson, SRIP Conference, Dept. of Psychology, University of the West of England, St. Matthias Campus, Oldbury Court Road, Bristol BS16 2JP E: margaret.redshaw@uwe.ac.uk Submission deadline for posters: June 30, 2001

19-21 October 2001 - 2nd Biennial Conference of the Society for the Study of Human Development - Ann Arbor, Michigan
Contact: Deanna Migut, University of Michigan, Institute for Research on Women & Gender, 1246 Lane Hall, 204 S. State St., Ann Arbor, MI 48109-1290; SSHD, c/o Radcliffe Institute for Advanced Study, Murry Research Center, 10 Garden St., Cambridge, MA 02138 Web: www.radcliffe.edu/sshd

25-27 October 2001 - International Symposium on Time and Timing in Developmental Neurology - Graz, Austria
Contact: Mrs. Isolde Bachler, Symposium Secretariat, Dept. of Physiology, University of Graz, Harrachgasse 21, A-810 Graz, Austria O: +43 316 380 4289 F: +43 316 380 69 4289
E: isolde.bachler@kuni-graz.ac.at Peter Wolff, Harvard Medical School, Boston, MA or Christa Einspieler and Heinz Prechtel, University of Graz, Austria, Organizers and Scientific Committee O: +43 316 380 4266 F: +43 316 380 9630 E: christa.einspieler@kfunigraz.ac.at

7-10 November 2001 - 34th Annual Meeting of the International Society for Developmental Psychobiology - San Diego, California
Contact: April Ronca, Program Director
E: aronca@mail.arc.nasa.gov or George F. Michel, Conference Director, Psychology Dept., DePaul University, 2219 N. Kenmore Ave., Chicago, IL 60614-3504 O: (773) 325-4246 F: (773) 325-7888 E: gmiche1@condor.depaul.edu
Web: www.uiowa.edu/~isdpl/

5-7 April 2002 - Conference on Human Development - Charlotte, North Carolina

Contact: Jane Gaultney, Local arrangements, University of North Carolina, Charlotte; Rob Guttentag, Program, University of North Carolina, Greensboro
Web: www.uncg.edu/~regutten/CHD2002/

11-14 April 2002 - Society for Research in Adolescence - New Orleans, Louisiana
Contact: www.S-R-A.org

18-21 April 2002 - 13th Biennial International Conference on Infant Studies - Toronto, Canada
Contact: Mark Schmuckler E: marksch@banks.scr.utoronto.ca or Sandra Trehub E: sandra.trehub@utoronto.ca, Co-Chairs.
Additional info Web: www.isisweb.org/icis2002 Submission deadlines: Electronic, September 14, 2001; Mailed, receipt by August 31, 2001 (request application forms 4 weeks prior)

10-15 May 2002 - Association for Research in Vision and Ophthalmology (ARVO) - Fort Lauderdale, Florida
Contact: Janice M. Burke, Exec. Vice Pres., ARVO, 9650 Rockville Pike, Bethesda, MD 20814-3998 O: (301) 571-1844 F: (301) 571-8311 E: mem@arvo.arvo.org

26-29 June 2002 - Head Start's 6th National Research Conference: The First Eight Years, Pathways to the Future - Washington, D.C.
Presented by the Administration on Children, Youth and Families, U.S. Dept. of Health and Human Services, in collaboration with Columbia Univ. and SRCDC.
Contact: Dr. Faith Lamb-Parker, Columbia Univ., School of Public Health/CPEH, 60 Haven Ave. B-3, New York, NY 10032 O: (212) 305-4154 F: (212) 305-2015 E: flp1@columbia.edu Additional info E: hsrc@eainet.com
Submission deadline: June 15, 2001

16-19 July 2002 - 8th World Congress of the World Association for Infant Mental Health - Amsterdam, The Netherlands
Contact: WAIMH Central Office, Tina Houghton, Kellogg Center #27, Michigan State University, East Lansing, MI 48824-1022 O: (517) 432-3794 F: (517) 432-3694
E: waimh@msu.edu Web: www.msu.edu/user/waimh

2-6 August 2002 - 17th Biennial Meeting of the International Society for the Study of Behavioral Development - Ottawa, Canada
Contact: ISSBD, School of Psychology, University of Ottawa, 120 University St., Ottawa, Canada K1N 6N5 F: +1 613 562 5147 E: issbd@uottawa.ca Submission deadline: Paper and Poster Symposia, October 15, 2001; Posters, January 30, 2002

20-25 September 2002 - 9th International Child Neurology Congress and 7th Asian & Oceanian Congress of Child Neurology - Beijing, China
Contact: Yoshiyuki Suzuki, M.D., Pres., International Scientific Program Committee;
Xi-Ru Wu, M.D., Pres., Local Organizing Committee; Mr. Shaoyan Wu, CICCST/ICNC&AOCCN, 86 Xueyuan Nanlu, Beijing 100081, China F: 86-10-62180142
E: sywu@public3.bta.net.cn
Web: www.cocst.org.cn/icnc2002

EXECUTIVE COMMITTEE (Addresses, telephone numbers, and email are listed on the Division 7 website.)

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Past President (1-year term):	Tiffany Field (1999-00)
President-Elect (1-year term):	Nora S. Newcombe (2001-02)
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	Judith Smetana (1999-02)
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	Deborah Phillips (2000-03)
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Fellows Committee Chair (1-year term):	Linda Acredolo (2001-02)
Program Committee Chair (1-year term):	David Uttal (2000-01)
Membership Chair (3-year term):	Susanne A. Denham (1998-01)
Education & Training Chair (DOTDEP) (3-year term):	Lynn Liben (1999-02)
Historian (3-year term):	Thomas C. Dalton (2000-03)

NEWSLETTER EDITOR

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