as life unfolds

research on children and childhood

AT CASE WESTERN RESERVE UNIVERSITY
As Life Unfolds features research of faculty across the Case campus who are working to expand the knowledge base related to children’s social and behavioral development. The number and variety of research efforts presented here are indications of Case’s fertile academic environment. Ours is a culture that nurtures rigorous intellectual inquiry and encourages the growth of community outreach endeavors.

As pleased as we are to present As Life Unfolds, we are already looking forward to the next edition. Research is evolutionary; each new discovery challenges our ideas and expands our understanding. As questions are answered, new questions arise. The Schubert Center embraces growth and transformation. The children are, indeed, our future. As our research flourishes, so may their lives.

Richard A. Settersten, Jr.  CO-DIRECTOR (2001-2006)
our beginnings

In 1959, the Mental Development Center (MDC) was founded at Case Western Reserve University. This interdisciplinary clinical facility was the first university-based center for mental retardation and developmental disabilities in the United States. Dr. Jane Kessler, Professor of Psychology, was the MDC’s first director. Over the years, the MDC served hundreds of children and families in northeast Ohio.

In 1994, after the MDC branched off from Case Western Reserve University, the Schubert Center for Child Development was established and named for Cleveland philanthropists Leland and Helen Schubert to honor their tireless support of the MDC and of child welfare, social justice, and education. In 1997, the Schubert Center for Child Development was designated as a unit of Case Western Reserve University’s College of Arts and Sciences. Dr. Donald Freedheim, Professor of Psychology and one of the original staff members of the MDC, was appointed as the first director. Dr. Jill E. Korbin (Professor of Anthropology and Associate Dean of the College of Arts and Sciences) joined Dr. Freedheim as the co-director in 2000, and then assumed the directorship in 2001. Dr. Richard Settersten (Professor of Sociology) joined the Schubert Center as associate director in 2000, and between 2002-2006, Dr. Korbin and Dr. Settersten served as co-directors. In 2006, Professor Korbin assumed the directorship.

Building on a strong foundation locally, the Schubert Center for Child Studies (renamed in 2006) has expanded its scope to include national and international projects and programs. The Center is part of a larger consortium of university-based child policy centers, and has multiple international ties. The Center promotes research and educational initiatives that pursue important new frontiers in the study of children and childhood worldwide. Its mission statement has been revised to reflect these areas of expansion.

our mission

The Schubert Center for Child Studies (SCCS) supports multidisciplinary research and education on children and childhood at Case Western Reserve University. Initiatives of the Schubert Center for Child Studies promote understandings of child development from infancy through adolescence, and in local, national, and international contexts. The primary goals of the Schubert Center for Child Studies are to:

- support basic and applied research on children and childhood
- promote interdisciplinary connections for research, education, and policy at Case Western Reserve University and in the community
- disseminate new research findings through conferences, lectures, newsletters, and website

The Schubert Center for Child Studies emphasizes the need to understand how child development is:

- shaped by everyday settings, including families, peer and friendship groups, schools, and neighborhoods
- affected by local, national, and international policies
- conditioned by history and culture
- understood within the context of the larger life course

“This publication demonstrates the continued fulfillment of the original mission of the Schubert Center for Child Studies: to encourage research and disseminate information, and to serve as liaison with the community regarding child and adolescent health and welfare.”

FOUNDING DIRECTOR DONALD FREEDHEIM

“... applies the research findings highlighted in this publication to the benefit of children and families is an enduring goal.”

PROFESSOR EMERITUS JANE KESSLER

“... The Schubert Center for Child Studies continues to address the challenge of working among, engaging in, and sharing with the community.”

FOUNDING DIRECTOR DONALD FREEDHEIM

“... the need to understand how child development.”

PROFESSOR EMERITUS JANE KESSLER
BONDING AND NURTURING... PARENT-CHILD INTERACTION DURING CHILDBIRTH AND THE EARLIEST STAGES OF INFANCY HAS A POWERFUL INFLUENCE ON A CHILD’S SUBSEQUENT PHYSICAL, MENTAL, AND EMOTIONAL DEVELOPMENT. WHAT CAN PARENTS AND HEALTH CARE PROFESSIONALS DO TO SUPPORT THE LABOR AND DELIVERY EXPERIENCE? HOW CAN PREMATURE INFANTS BE HELPED TO MEET THE SERIOUS CHALLENGES THEY FACE?

MATERNAL PERCEPTIONS
Six Weeks After Birth of Baby

<table>
<thead>
<tr>
<th>PERCEPTIONS OF BABY</th>
<th>Control Group</th>
<th>Doula-Supported Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cries less than others</td>
<td>17%</td>
<td>35%</td>
</tr>
<tr>
<td>Special</td>
<td>71%</td>
<td>91%</td>
</tr>
<tr>
<td>Easy to manage</td>
<td>27%</td>
<td>65%</td>
</tr>
<tr>
<td>Clever</td>
<td>47%</td>
<td>78%</td>
</tr>
<tr>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td>91%</td>
<td>91%</td>
</tr>
<tr>
<td>Regarded baby as a separate, sociable person by six weeks</td>
<td>80%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERCEPTIONS OF SELF</th>
<th>Control Group</th>
<th>Doula-Supported Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feels close to baby</td>
<td>80%</td>
<td>97%</td>
</tr>
<tr>
<td>Pleased to have baby</td>
<td>65%</td>
<td>97%</td>
</tr>
<tr>
<td>Communicates well</td>
<td>68%</td>
<td>91%</td>
</tr>
<tr>
<td>Becoming a mother was easy</td>
<td>11%</td>
<td>49%</td>
</tr>
<tr>
<td>Managing well</td>
<td>65%</td>
<td>91%</td>
</tr>
<tr>
<td>Can look after baby better than anyone else</td>
<td>51%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Establishing roots

That’s Professor JOHN KENNELL’s advice. Doula is a Greek word that has come to mean a woman who helps other women. It has further evolved to mean a woman experienced in childbirth who provides continuous physical, emotional, and informational support to the mother before, during, and after childbirth. Through years of extensive study, Dr. Kennell’s research on the effects of labor support by a doula has involved families in the United States and Guatemala.

The benefits of doula-supported labor and delivery to the mother are noteworthy. With the continuous support of a doula, there were reductions as follows: Cesarean deliveries decreased by 50%, use of forceps by 40%, requests for epidural analgesia by 60%, need for pain medication by 30%, oxytocin use by 40%, and a 25% decrease in labor length. In addition to the physical benefits, doula-supported labor produces dramatic emotional benefits for the mother. What does this all mean for the baby?

In Dr. Kennell’s first study of doula support in Guatemala, mothers and babies in a support group and a control group were observed in a standardized setting immediately after leaving the delivery room. The doula-supported mothers showed more affectionate interaction with their infants, with significantly more smiling, talking, and stroking than the mothers who did not have a doula. In a study in Johannesburg, investigators observed the physiological health of similar groups of mothers and babies at two months of age, and verified similar results based on the mother’s physical contact, visual attention, and affectionate behavior toward the infant.

Secure attachment begins very early in a child’s life, and involves parent-infant bonding. Bonding refers to parents’ emotional investment in their child. When parents are well bonded, the infant is powerfully influenced by their emotional investment. Secure attachment has positive effects later in life, as relationships with parents, siblings, friends, and teachers develop. This is in contrast to the difficulties of one-year-olds who are insecurely attached. As Dr. Kennell states in The Doula Book, “The apparent effects of the doula support on the mother render her more responsive, attentive, and sensitive to the unique needs of the baby, and are highly likely to result in positive parent-child relationships until adulthood.”
WHY ARE DR. LUDINGTON AND OTHERS SEEING SUCH PHENOMENAL RESULTS WITH BABIES IN KANGAROO CARE? WHAT IS HAPPENING TO THE BABY AND THE PARENTS DURING THIS TIME? Here are some examples:

Benefits of Kangaroo Care

**Benefits for the Baby**
- Stable heart rate (no bradycardia)
- More regular breathing (75 percent decrease in apneic episodes)
- Improved or stable oxygen saturation levels
- No cold stress
- Longer periods of uninterrupted sleep
- More rapid weight gain
- More rapid brain development
- Decreased crying
- Longer periods of alertness
- More successful breastfeeding outcomes
- Earlier hospital discharge

**Benefits for the Parents**
- "Closure" over having a baby in NICU
- Feeling close to their babies (earlier bonding)
- Having confidence that they can care for their baby, even better than hospital staff
- Feeling in control
- Significantly decreased stress
- Better involvement in the care of the baby

According to Dr. Ludington, during the last six weeks of pregnancy, fetuses sleep twenty to twenty-two hours per day. In a typical Neonatal Intensive Care Unit (NICU), however, they spend less than four hours total in deep, unaroused quiet sleep. With Kangaroo Care, the infant typically snuggles in deep, unaroused quiet sleep. With Kangaroo Care, the baby is placed in an upright position on the parent’s bare chest, clad only in a diaper, for two to three hours per day. The baby’s head is turned to the side so that its ear is against the parent’s heart. Monitoring of vital signs is continued, if necessary, while infants in the Kangaroo Care position are kept warm through close contact with their parent’s skin. The father or mother essentially becomes a human incubator for the premature infant.

With Kangaroo Care, also known as skin-to-skin care, the baby is placed in an upright position on the parent’s bare chest, clad only in a diaper, for two to three hours per day. The baby’s head is turned to the side so that its ear is against the parent’s heart. Monitoring of vital signs is continued, if necessary, while infants in the Kangaroo Care position are kept warm through close contact with their parent’s skin.

### Street Law Program

The national Street Law Program began at Georgetown Law Center in the early 1970s as an innovative project to provide law-related information to young people that would help them in their everyday lives. The program has evolved and taken on different forms at many law schools nationwide, and now also involves many bar associations and practicing attorneys.

Street Law education addresses general aspects of the law in areas such as criminal and juvenile justice; consumer, family, employment, and housing law; and individual liberties and civil rights law. Students and practicing attorneys primarily coordinate with high school social studies teachers to teach high school students about the law. Information presented is intended to enhance high school students’ understanding of citizenship and their legal rights and responsibilities, as well as to enhance their success in their daily lives “on the street.”

Over the years, students from Case’s Law School have assisted high school teachers and students at various local schools in Cleveland and East Cleveland. Most recently, Case has partnered with Shaw High School, which has its own Street Law class and curriculum. Case law students and Shaw teachers have coordinated teaching general aspects of the law, and Case students have also helped prepare high school student teams to participate in local Mock Trial competitions. Efforts are currently underway to coordinate Case’s program with that at Cleveland State University and with the Cleveland Bar Association’s efforts to further the interest in and effectiveness of the Street Law Program.
Children do not learn at the same rate or in the same manner; genetic, environmental, and cultural influences all contribute to the learning process. What factors weigh most heavily in what and how children learn? How do children absorb and react to various stimuli? How can children with impaired learning skills be assisted?

Brain injuries are a major threat to teens. Currently, 5.3 million Americans are living with the effects of a traumatic brain injury (TBI), with adolescents suffering brain injury most frequently. Most teens receive their injuries from auto accidents that tend to injure either the frontal lobe of the brain used for self-control, moral judgments, and abstract thoughts or the temporal lobe where comprehension of language and word meanings take place. Recovering social language skills is an important hurdle that teens with brain injuries need to overcome.

Professor Angela Ciccia is exploring the area of social information processing, or social cognition. Her current research focuses on the differences in the social cognitive skills of typically developing adolescents and adolescents who have survived a severe TBI. Obviously, a teen-ager who has been injured in a serious accident needs immediate and, perhaps, sustained medical treatment. In addition, an injury often produces a social impairment characterized by the inability to interact with others in an appropriate manner.

Disintegration of word meanings and social cues is common for teens with head injuries, and inappropriate communication skills such as touching or laughing at the wrong time, or lack of understanding “teen talk” all have long-range consequences. Parents and peers of teens who have suffered a TBI often report that the teen exhibits a “new personality” after the accident. Occasionally, the teen himself is aware of new behavior, but is unable to control or change it. This behavior may include dangerous risk-taking, delinquency, and a lack of self-restraint. As a result, the teen may lose friends, alienate family members, and frustrate teachers. Teens may also be easily manipulated by others, and unable to discern motives and consequences. The goal of Dr. Ciccia’s work is to understand how the brain functions in order to design the most effective intervention for restoring the skills necessary for the teen’s continued social development.

Dr. Ciccia uses functional magnetic resonance imaging (fMRI) to identify the underlying functional neuroanatomy involved in social cognitive processing. An MRI shows only physical structure, but an fMRI also shows what part of the brain is firing during communications in social situations, and how communication is disbursing and being processed by the brain. The images will enable researchers to gather information about how the brain works for adolescents during communication. This will help create a more complete theoretical foundation for understanding social cognition, and answer questions such as: How does the brain function differently after an injury? What areas of the brain are affected? How are those areas used? In addition to improving clinical paradigms for the treatment of teens that have social cognitive impairments as a result of a TBI, this theoretical foundation may ultimately be applied to other populations with similar challenges such as autism and language learning disability.
IT SOUNDS SIMPLE ENOUGH and is, for most children, a very natural thing to do. Professor SANDRA RUSS takes old-fashioned make believe play seriously, and has spent several years researching children’s play. In her book, Play in Child Development and Psychotherapy, she introduces the idea of actively teaching children how to play as a way to help them cope with stresses, express emotions, practice self-control, and learn creative problem-solving. She and her colleagues have also developed the Affect in Play Scale, a test that uses puppets and wood blocks to assess the range of emotions and creativity a child employs in his or her play.

Effectively used in children from first to third grade, the Affect in Play Scale consists of a task and rating tool. A five-minute “test” of an individual child involved in pretend play is videotaped, then scored and coded in 11 categories. Researchers are looking at the emotional component of play, particularly the amount and range of emotion exhibited by the child. They are also considering the child’s comfort level as he/she plays in a natural environment. This research may also be used as part of studies to answer questions about how the play of autistic, anxious, ADHD, and depressed children varies. Since negative emotion expressed in play may relate to pathology, the Affect in Play Scale shows promise as a diagnostic and interventional tool.

According to Professor Russ, studying and using play in child development and child psychotherapy has evolved from beliefs that, like adults who “work” out their problems, children play out theirs. Her longitudinal studies with a group of children over more than a decade have shown that “good” players—those children who express a wide range of emotions and use creativity in play—continue to use their play skills in redefined and more mature ways to their benefit into their high school years. Through her studies, Dr. Russ also has found that the ability to be a good player is independent of a child’s intelligence. She speculates that this ability is instead dependent on the child’s family influences, the parents’ verbal skills, and the overall environment.

Professor Russ has learned that play is not a simple matter. She states, “Pretend play involves myriad processes and behaviors that change from moment to moment.” Understanding how children play can aid in child development as well as serving as a tool in psychotherapy. In spite of a world where computer games, television, and planned activities and classes monopolize children’s lives, Russ states that play remains an important and natural part of childhood. Her work continues to provide therapists, psychologists, educators, and parents with information about the importance of play in children’s lives.

Historically, intelligence has been defined as how much a person knows. Professor JOSEPH FAGAN believes that intelligence is more accurately defined as how well a person processes information. His theory: As information is processed, the mind changes, that change is called knowledge. How well a person processes depends on his or her genetic makeup and on environmental factors that have affected his brain. Also, the culture by which a person is surrounded provides information. Therefore, what we “know” is a result of how well we process and what our culture teaches us.

Processing can be measured during infancy, which allows us to predict how much a child will know at a later age. A child who was a good processor as an infant knows more than one who was a poor processor. A simple measurement of information processing, the Fagan Test of Infant Intelligence, involves a screening device that has been proven valid in predicting later mental retardation. The measurement is based on an infant’s attention to novelty. An infant as young as six months may be tested on his ability to recognize pictures. Recognition is tested by presenting the baby with a picture to study, then pairing the familiar picture with a new one. Preference for the new over the previously exposed picture indicates that the baby can recognize one as familiar. The degree to which babies distribute their visual attention to new and previously exposed pictures relates to later performance on standard tests of intelligence. The Fagan Test of Infant Intelligence—now used in over 300 research centers around the world—assesses infants at risk for later cognitive deficit, thus providing an opportunity for early intervention.

Another aspect of Professor Fagan’s theory examines racial differences in IQ. From about the age of three, Whites on average outscore their African-American counterparts on IQ tests. Different cultural groups have different life experiences, which can influence IQ scores. Data obtained from Dr. Fagan’s research support the view that cultural differences in providing information may account for racial difference in IQ. He maintains that both intellectual ability and access to information contribute to overall knowledge. The assumption that intelligence is processing should lead researchers to examine the culture rather than genetics for the origins of racial differences in IQ.
The 2003 “Nation’s Report Card” indicated that 37% of fourth graders and 26% of eighth graders failed to achieve the most basic levels of reading comprehension proficiency. Why do some children learn to read almost effortlessly, while others find the mastery of this skill so difficult?

The primary goal of the Western Reserve Reading Project (WRRP) is to better understand how environmental and genetic influences contribute to the development of reading and mathematical ability. This study is a collaborative multi-site project led by Dr. Stephen Petrill, a faculty member at Penn State who received his Ph.D. from Case in the mid 90s. The Principal Investigator at Case is Professor LEE ANNE THOMPSON, who has recruited over 350 same-sex twin pairs in the Greater Cleveland area to participate in this longitudinal study.

Twin pairs provide a valuable window on the interplay of genetic and environmental influences on development. All of the twin pairs in the WRRP are raised in the same home; however, identical twins share 100% of their genes, while fraternal twins share 50% of their genes. By comparing the similarities and differences within twin pairs across identical and fraternal twins, information on the independent contributions of genetic and environmental influences can be obtained. The twins are tested for the first time in either kindergarten or first grade, and are then followed at yearly intervals for three years.

Early results from the first wave of data collected suggest that while genetic influences impact all of the skills necessary for reading acquisition, measured aspects of the environment are also influential. For example, twins from homes where parents are involved in their children’s schoolwork and create an organized and calm home environment are more proficient readers. Children whose mothers exhibit more warmth toward them show higher levels of task persistence, a behavior that contributes to higher academic achievement.

The WRRP is unique for several reasons. First, because it is a twin study, it is possible to assess the independent contributions of genetic and environmental influences on reading and mathematical ability. Second, the WRRP is one of the first longitudinal twin studies to focus on the acquisition of these skills. Previous twin studies have not assessed these abilities until well into the elementary school years after they become largely automatic. Factors that influence skill acquisition and development may be very different from those that influence well-established abilities. Finally, the study’s assessment battery includes a wide variety of measures that capture aspects of the home and school environment that may influence reading and mathematical skill. For example, researchers collect videotaped parent/child interactions, parent and teacher reports, and objective measures of the quality of the schools the twins attend.

Professor Thompson and others working on the WRRP are confident that the results of this study will provide needed information on the specific action of genetic and environmental influences on early reading and math skill development that set the stage for later academic success. The results may have important implications for the design and application of intervention approaches for children who, in the early grades, struggle to acquire these important foundational skills.

It is estimated that communication disorders (including speech, language, and hearing disorders) affect one out of every ten people in the United States. More than one million of the students served in the public schools’ special education programs in the 2000-2001 school year were categorized as having a speech or language impairment. This estimate does not include children who have speech/language problems secondary to other conditions such as deafness. Professor STACY WILLIAMS’ research objectives focus on integrating technology into the field of speech-language pathology by providing clients and higher education students with multimedia tools to make them more successful and efficient.

A child with a speech-language disability (SLD) is generally aided through intensive individual/group speech therapy. However, the skills acquired in therapy do not always generalize. Dr. Williams’ latest project involves the design and implementation of an immersive virtual reality (IVR) simulator. Virtual reality is a combination of high-end computing, human-computer interfaces, graphics, sensor technology, and networking that allows the user to become immersed in and interact in real-time with an artificial two-dimensional environment representing real situations.

The IVR simulator resembles an Imax theater, and the movies that play on its 180-degree screens are completely interactive. Working with the simulator, a child learns to generalize and apply the skills gained through therapy to a variety of real-life environments. These simulated environments can be customized and filmed on the Case campus in conjunction with Instructional Technology and Academic Computing and the Cleveland Hearing and Speech Center will include a fast food restaurant, a party/social event, a school event, a grocery department/convenience store setting, and a personal interview.

Immersive virtual reality simulations are effective in other fields today. Professionals such as pilots, military personnel, and law enforcement officers are often trained through simulation, and Dr. Williams believes that this virtual reality experience can be effective in improving the communication skills of children with SLD. And what could be more real to a child than McDonald’s? The first virtual reality setting will depict a typical McDonald’s restaurant, and the child will practice ordering a meal. The key measure of success of the child’s progress will be the amount of therapeutic carryover and degree of his/her immersion in the experience. This immersion level will be determined by biometrics attached to the body that measure physical indicators such as heart rate and skin temperature.

In addition to assisting patients, the IVR simulator will be used as an efficient and effective method for teaching clinical decision-making skills to graduate students as they train for “real life” situations. These students can practice their information-gathering and counseling skills as they prepare to complete their practicum experiences. They will gain skill and confidence, which will be transmitted to the children they work with within their professional careers. Filming of “virtual patients” to interact with the students will include children with a variety of SLDs such as autism, articulation disorders, traumatic brain injury, cerebral palsy, Down’s syndrome, and expressive/receptive language disorders.

Case is the first US institution to employ this exciting new therapeutic intervention. Preliminary international research indicates that IVR simulation is effective in treating SLD, and Dr. Williams and her collaborators intend to prove that point.
Professor KATHLEEN WELLS’ research has focused on how the public child welfare system in Cuyahoga County has functioned under conditions of welfare reform.

Her research is a collaborative project of Case’s Mandel School of Applied Social Sciences (MSASS) and the Department of Children and Family Services (DCFS), and the context for the research project is Cuyahoga County. With funding from national and local foundations and the Ohio Department of Mental Health, this work has continued for several years and has resulted in an extensive report and a policy brief entitled, The Impact of Welfare Reform on the Child Welfare System in Cuyahoga County, Ohio, 1995-2001.

Ohio’s welfare program has one of the country’s shortest time limits (cash assistance is limited to 36 months rather than the 60 allowed under federal law), and emphasizes moving welfare recipients to work. Also, the time between placement of children in foster care and filing the petition to terminate parental rights is 12 months rather than the 15 allowed under federal law. It was, therefore, assumed that if welfare reform is going to have negative effects on child welfare families, those effects could be detected in Cuyahoga County.

Professor Wells’ research points to the vulnerabilities of families involved with or at risk of involvement with the child welfare system. It indicates the importance of family income to the reunification of children in foster care, and the concrete needs of such families in one historical, social, economic, and policy context. Her findings suggest that families are less likely to be reunified after welfare reform than before.

BACKGROUND

Nearly ten years ago, the Personal Responsibility and Work Opportunity Reconciliation Act changed the way in which welfare is provided in the United States. This act was designed to promote paid employment among those who had previously relied on cash assistance by restricting access to such assistance and requiring work in order to receive aid.

While the legislation was being debated, child welfare advocates raised the concern that it would negatively affect families already involved or at risk of involvement in the child welfare system. This concern grew from the recognition that a majority of child welfare families had severe, complex, and chronic problems that would make it difficult for them to obtain paid employment. Of particular concern was that reform would result in economic impoverishment of the families, increasing numbers of children placed in foster care, and decreasing rates at which such children returned home.

Between January 1995 and August 2001, there were increases in the number of children with substantiated reports of child abuse and neglect, in the number of children with substantiated reports referred to protective services, and in the number of children with such reports referred to foster care services. When the three cohorts of foster children (one pre- and two post-welfare reform) are compared, children who entered care after reform are reunified more slowly within 12 months after their placement than are children who entered care before reform.

Both before and after welfare reform, family income has a strong relationship to the speed with which children are returned home.

Children whose mothers lose a significant amount of cash assistance after their children’s placements are reunified more slowly than are children whose mothers received cash assistance and did not lose such assistance.

Mothers with children in foster care are economically impoverished. Over half have incomes that fall below the extreme poverty level, and about half have a least one significant material hardship such as food insufficiency.

Three quarters of mothers expected their children to return home, but stated they needed concrete material assistance pertaining to, for example, housing and transportation in order for reunification to occur.
Professor Brian Gran is interested in learning more about rights children possess and how a social policy innovation—the children’s ombudsperson—can enforce and enhance children’s rights at the local, national, and international levels. He is currently conducting cross-national research on children’s ombudspersons and children’s rights. Dr. Gran and his colleagues are seeking to determine why children’s ombudspersons’ offices are established, and how they use their legal powers to mend gaps between the public and private sectors into which children sometimes fall.

We typically expect parents to protect children, but when a parent harms a child, who is responsible for the child’s interests? Professor Gran’s research asks whether children’s ombudspersons can protect children from falling into public-private gaps in social protection and safety net policies. As independent institutions charged with monitoring and sometimes enforcing children’s rights, children’s ombudspersons are often characterized as children’s champions. This research examines whether children’s ombudspersons can use rights to mend public-private gaps facing children and young people.

Offices of children’s ombudspersons have not been systematically studied with regard to their backgrounds, characteristics, legal powers, relationships with public and private authorities, or their effectiveness in enforcing the United Nations Convention on the Rights of the Child (UNCRC). The Children’s Rights Index, which is based on the UNCRC, is a measure of children’s rights in approximately 190 countries. It is anticipated that this endeavor will be useful to other academic researchers as well as policy makers and non-profit organizations concerned with children’s rights.

• PROJECT BRIDGE, a comprehensive study designed to compare the effectiveness of two treatment programs that help parents address the social, emotional, and behavioral problems of young children.

The Center on Interventions for Children and Families (CICF), under the direction of Professor Gerald Mahoney, is a research and training center focused on developing and disseminating evidence-based interdisciplinary treatment models that promote the developmental, social, and emotional well-being of young children.

These treatment models include interventions designed to improve parenting/caregiving skills, promote family stability, and enhance social and community supports of families. Current projects include:

• THE EARLY INTERVENTION GRADUATE TRAINING PROGRAM, a practice-based program that provides experiences in the most up-to-date procedures for providing intervention services to young children with developmental challenges and their families.

• THE PARTNERS PROJECT, which involves the development of a Prevention, Assessment, Referral and Transition model that is used by public and private adoption agencies with young adopted children and their parents.

• PROJECT BRIDGE, a comprehensive study designed to compare the effectiveness of two treatment programs that help parents address the social, emotional, and behavioral problems of young children.
exposure to violence

For the past several years, Professor MARK SINGER has been conducting numerous research studies that deal with exposure to violence as a contributor to children’s psychological trauma (including depression, anxiety, dissociation, and posttraumatic stress). With colleagues at Kent State University and Case Western Reserve University, Dr. Singer has examined the relative contributions of exposure to violence (at home, school, and in the community), parental monitoring (the degree to which parents are aware of their child’s daily activities and friends), and television-viewing habits to children’s self-reported violent behavior.

Dr. Singer’s research findings underscore the significant effects of exposure to violence and the importance of parental monitoring, and emphasize the need to identify and provide services to youth who are exposed to violence. Dr. Singer’s work has been central in the development of several significant programs, including the Children Who Witness Violence Program in Cuyahoga County, Ohio.

Dr. Crampton is an active member of the Department of Children and Family Services (DCFS) Disproportionality Task Force, a group established in 2003. The task force is exploring the reasons why more reports are made to the DCFS about African-American children than about Caucasian children, and why African-American children are far more likely to be placed in foster care than other children. For example, 74 percent of children under the care of the county are African-American, yet African-American children make up only 31 percent of the county’s children.

A study by Dr. WILLIAM SABOL, Professor CLAUDIA COULTON, and ENGEL POLOUSKY at the Mandel School of Applied Social Science’s Center on Urban Poverty and Social Change estimates that nearly one-third of all children in Cuyahoga County will be investigated by DCFS by their tenth birthday and, as shown above, that there are dramatic racial disparities in child abuse and neglect investigations. Building on this study, Drs. Crampton and Coulton found that almost nine percent of Cuyahoga County’s children will be placed in foster care at least once before they turn ten years old; racial disparities in rates of foster care placement are even more pronounced than in rates of investigations.

Dr. Crampton’s primary research interest concerns the evaluation of child welfare programs and, specifically, the use of family meetings in cases of child maltreatment. Research conducted by Professors Claudia Coulton and Jill Korbin demonstrates that confirmed child abuse/neglect investigations are less frequent in neighborhoods where people are engaged in each other’s lives, therefore, Dr. Crampton promotes social work interventions that encourage the involvement of extended family and neighbors in the lives of at-risk families. He believes that neighborhood and family involvement can be more effective than governmental intervention and, through the Disproportionality Task Force, helps enlist the support of community members and agencies in assisting children.

% CHILD POPULATION  AFRICAN AMERICAN  CAUCASIAN

investigated  50%  17%  4%
placed in foster care  21%  4%  4%

In the fall of 2005, Professor DAVID CRAMPTON wrote an editorial for the Cleveland Plain Dealer about the disproportionate number of African American children in Cuyahoga County’s foster care system. The editorial caught the attention of the Cuyahoga County Commissioners, social workers at local nonprofit agencies serving families and youth, and representatives from Cleveland’s juvenile court system. The attention helped convince the Commissioners to dedicate $750,000 from the 2005 county budget to develop projects that will address this issue.

Dr. Crampton’s evaluation report indicates that INVEST IN CHILDREN is:

- reaching the vast majority of children in Cuyahoga County (over 116,000 under age six, approximately 76% of the children born in the county)
- strengthening families through home visiting services such as Welcome Home and Early Start
- increasing the percentage of children with health insurance, and improving use of their preventive health care services
- expanding childcare and working to improve its quality
- increasing and improving childcare available to children with special needs, and promoting early identification of these children.

The work performed by Dr. Coulton and the evaluation team points out the need to continue tailoring services to the circumstances of families with young children while emphasizing the importance of quality.
has been exploring cultural practices vary. What one group considers child welfare and public systems an idiosyncratic departure from a culture’s research when evaluating the “big picture” is that some neighborhoods influence child maltreatment are the family of origin. The processes and mechanisms by which neighborhoods may weaken or strengthen the effects of individual risk factors such as violence in families and societies. Nevertheless, child abuse and neglect have occurred throughout history and across cultures. In collaboration with Dr. Claudia Coulton, Dr. Korbin’s studies have ranged from neighborhood impacts and influences to the challenge of creating definitions of child maltreatment that are understood and accepted at the international level.

While not strictly a microcosm of the culture, neighborhoods and communities are the immediate day-to-day context in which children and families function, and are an important influence on the causes and consequences of child maltreatment. Child maltreatment report rates vary across neighborhoods in ways that cannot be explained solely by socioeconomic factors or cultural variability. These rates have been associated with:

- neighborhood demographic composition
- economic disadvantage and residential mobility
- resident perceptions of the quality of their neighborhoods and social fabric

Neighborhood conditions may weaken or strengthen the effects of individual risk factors such as violence in the family of origin. The processes and mechanisms by which neighborhoods influence child maltreatment are complicated. For example, a point to be considered when evaluating the “big picture” is that some neighborhoods may be more likely to recognize and report child maltreatment than others.

Based on reports to child protection agencies, between 800,000 and one million children in the United States are identified each year as abused or neglected. Every day, three to five children die from fatal maltreatment. Between one-half and two-thirds of child maltreatment cases result from neglect. Homicide by parents is a leading cause of trauma-related death for children under four years of age.

Establishing cross-cultural definitions of child maltreatment has been complex and challenging. Such definitions are critical because they influence case identification and knowledge about child maltreatment. Just as there is no absolute standard for effective child rearing that would be considered valid cross-culturally, there has been difficulty in establishing a universal definition of abusive or neglectful child rearing. Defining child maltreatment cross-culturally involves issues of human universals, cultural relativity, and human rights. Three definitional levels have been suggested for culturally informed definitions of child maltreatment.

First, cultural practices vary. What one group considers abusive, another group may consider within the range of normal behavior. This acknowledges that there is not currently a universally accepted standard for optimal or for deficient childrearing.

Second, an idiocentric departure from a culture’s standards draws attention to those individuals who violate acceptable behavior. Third, societal-level child maltreatment may be confused with culturally acceptable behaviors. Societal neglect refers to the level of harm or deprivation that a large political body (such as a nation) is willing to tolerate for its children. For example, a country might have a high rate of poverty that could be confused with familial neglect.

In addition to her work in the area of child maltreatment, Dr. Korbin has also conducted significant research with women who have been incarcerated for the deaths of their children.

Dr. Bettinger recently completed a study of the long-term effects of vouchers on the academic performance of secondary school students in Colombia. That country’s PACES program (Programa de Ampliacion de Cobertura de la Educacion Secundaria) is one of the largest voucher initiatives ever implemented. Between 1991 and 1997, PACES awarded nearly 125,000 vouchers to low-income high school students. Since vouchers were renewable annually conditional on satisfactory academic progress, the program provided incentives for students to work harder, and also widened their schooling options. The fact that the vouchers were awarded by lottery facilitated the research study by providing a natural comparison group of students who did not win that lottery. Dr. Bettinger’s team was also able to access administrative data on college entrance examinations that allowed them to estimate the impact of vouchers on high school graduation rates and scholastic achievement.

Test scores and graduation rates are certainly important measures of success for an educational intervention such as a voucher program. However, Professor Bettinger is also exploring non-academic behavior, specifically, the effect of a voucher program on altruism. A school’s role in socialization may increase altruism by teaching pupils to share and help others in the classroom, school, and community, and many schools claim to include charity or altruism in their curriculum.

Dr. Bettinger designed a research project using data from the Children’s Scholarship Fund (CSF) of Toledo, Ohio. CSF offers four-year renewable, private school scholarships to economically disadvantaged 9-8th grade students. At the conclusion of the study, Dr. Bettinger made the following observations:

- students who won vouchers in the lottery were more altruistic toward charitable organizations than those who did not, voucher winners gave over 20 percent more than non-winners to charitable organizations.
- the increased altruism did not extend to greater generosity toward peers.
- there was no apparent correlation between parents’ altruism and their children’s.
- test scores and altruism are not correlated.

In addition to the research projects detailed above, Dr. Bettinger is examining student outcomes in higher education. He is studying the effects of adjunct teaching faculty, remediation, and class size on college students’ academic performance, and how financial aid affects students’ persistence and academic success.

REACHING TO ACHIEVE

What effects do incentives have on children’s behavior? What sorts of incentives actually motivate children and adolescents to modify their behavior or perform at a higher level? Professor Eric Bettinger has been exploring these questions in groups of children from kindergarten through high school, internationally as well as locally.

The National Bureau of Economic Research, Inc. produced a working paper of Dr. Bettinger’s research results with the following highlights:

- Earlier study results showed a 10 percentage point increase in 8th grade completion rates among voucher winners, as well as gains on standardized tests.
- The empirical results point to an increase in high school graduation rates of 5-7 percentage points, relative to a base rate of 25-30 percent.
- Lottery winners who received vouchers were substantially more likely to score in the top quartile on the national university entrance exam, suggesting that the program probably improved learning not only by increasing financial incentives, but also by expanding school choice.
- All of the estimation methods used point toward a substantial gain in both high school graduation rate and achievement as a result of the voucher program. The size and persistence of this impact suggests PACES was a cost-effective intervention.
without proper diagnosis and treatment, bipolar disorder, attention-deficit/hyperactivity disorder (ADHD), depression, and other psychological disturbances affect children’s cognitive and social development. How can doctors or therapists distinguish between these mental disorders? What measures can be taken to ensure that children and their families receive proper care and support in dealing with mental illness?

Striving for balance

The treatment of children

and adolescents with psychiatric illnesses is the research focus of Professor Robert Findling. He is particularly interested in working with populations that may be underserved, such as children with profound aggression (including those with autistic disorder), bipolar disorder, attention-deficit/hyperactivity disorder (ADHD), and psychotic illnesses. He also works with children who are at-risk due to a genetic predisposition to these conditions. Dr. Findling directs the Discovery and Wellness Center for Children, which strives to constantly improve assessment procedures, preventative interventions, and therapeutic innovations.

There are challenges in accurately identifying pediatric bipolar disorder (PBD) in children. Many of these difficulties stem from the overlap of the symptoms of PBD with conditions such as ADHD, depression, and conduct disorders. Bipolar disorder is characterized by mood episodes that can alternate from severe highs (mania) to lows (depression) within hours or days, or even months and years. The manic phase of this illness can lead to symptoms that interfere with a child’s developmentally appropriate functioning at home and school, and with peers.

The National Institute of Mental Health (NIMH) recently awarded a significant grant to Dr. Findling to study manic symptoms in children. This project, entitled “Longitudinal Assessment of Manic Symptoms” (LAMS), will identify and recruit children between the ages of six and twelve years who are suffering from symptoms of mania. Once these children are identified from the outpatient clinics at University Hospitals of Cleveland, they will be assessed every six months. The LAMS project will carefully investigate elevated symptoms of mania in children and adolescents with the purpose of developing valid and reliable evidence-based criteria for pediatric bipolar illness. The proposed research will also clarify current controversies regarding the differential diagnosis between bipolar spectrum disorders and ADHD in children.

Case/University Hospitals of Cleveland is the coordinating site for this study; other collaborators include the University of Cincinnati, the Ohio State University, and the University of Pittsburgh. Approximately 165 outpatient children and adolescents will be enrolled at each site for a total study cohort of 660 subjects.

In a separate but related effort, the National Institute of Child Health and Human Development, part of the NIMH, recently awarded Dr. Findling a $17.5 million contract to support a comprehensive study of lithium in treating children and adolescents with mania. Lithium, a mood stabilizer, works through the synthesis and reuptake of chemical messengers that nerves use to communicate with each other. Lithium is historically the most widely used and effective treatment for adults with bipolar disorder, but its efficacy and safety in youth have not been established.

The Collaborative Lithium Trials is a series of two related, multi-phased protocols that will examine lithium in terms of dosing strategies, efficacy, safety, use as a maintenance therapy, and its long-term effects. In order to successfully complete this research, a multisite strategy is being employed. Case is the primary site, and eight other institutions have sub-contracts for the project.
focus

In collaboration with Dr. Michael Manos at the Cleveland Clinic, Professor ELIZABETH SHORT has designed a study to identify the behavioral assets and problems of children newly diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD), and to determine whether developmental and subtype differences exist in these assets and problems.

Dr. Short's study sample was comprised of 518 children ranging in age from 4 to 15 years who had been newly diagnosed with ADHD. Two subtypes were examined: inattentive and hyperactive/combined. Inattentive children are characterized as those who have trouble following directions. Children diagnosed with the hyperactive/combined subtype have problems with both inattention and hyperactivity.

One of the most important findings from this research study was that behavioral assets and problems both varied by age and subtype. Children with ADHD have different problems at different ages, and those problems manifest in different ways.

The clinical implications of these findings are that children who possess a greater number of assets have fewer behavioral problems. Dr. Short and her collaborators stress the importance of assessing both assets and problems in children diagnosed with ADHD. The children at greatest risk are those whose strengths have not been identified and developed. It is necessary for these children, and their parents and teachers, to channel the children's strengths toward a productive outcome. Once these behavioral assets are identified, clinicians and parents can assist children with ADHD to capitalize on their strengths in order to minimize their weaknesses.

facilitate

What is the interplay between established medical and social welfare systems and the vulnerable populations they serve? Professor SARAH HORWITZ's early research explored the impact these formal systems have on the clinical course and functional outcomes of at-risk children. In a study designed to challenge previous findings, Dr. Horwitz and her colleagues documented the fact that pediatricians do recognize psychosocial problems in children. She is now focusing her research activities on the following questions:

Which children are identified by a pediatrician as being at risk? • How effective are the treatments provided for these children? • What are the barriers to effective pediatric mental health intervention? • How able are families to access services for mental health problems?

With colleagues across the country, Dr. Horwitz recently investigated barriers to the identification and management of children's mental health problems in a national sample of pediatricians. They found that physicians reported multiple barriers, which fell into three areas: those pertaining to the physicians themselves (e.g., inadequate training); those related to broad systems issues (e.g., inadequate reimbursement); and those reflecting local services challenges (e.g., too few mental health providers to serve children)

The goal of Dr. Horwitz's work is systems change that will facilitate the rapid identification and treatment of children's mental health problems.
CHRONIC ILLNESS CAN RESULT FROM ADVERSE PRENATAL CONDITIONS AS WELL AS MEDICAL PROBLEMS THAT OCCUR IN CHILDHOOD. HOW DOES CHRONIC ILLNESS AFFECT THE DEVELOPMENT OF CHILDREN? WHAT ARE THE MOST ETHICAL AND EFFECTIVE WAYS TO SUPPORT CHILDREN WITH SERIOUS ILLNESSES AND THEIR FAMILIES?

Professor DENNIS DROTAR's clinical and research efforts are focused on the quality of life issues for children with chronic health conditions. Some of these conditions are apparent in infancy, and others develop throughout childhood and into the adolescent years. Taken together, it has been estimated that diseases such as pediatric asthma, diabetes, cystic fibrosis, and pediatric cancer affect between 15-25 percent of the youth population in the United States.

Dr. Drotar works with children affected by chronic illness and with their families. He emphasizes the importance of positive interaction between the child’s medical team and others who contribute significantly to the child’s illness management and recovery. He devises interventions consisting of several components—educational, behavioral, skill development—that help parents/caregivers and siblings understand and support the child. These interventions take into account issues such as:

- how to reduce the personal cost of chronic illness to the family and economic cost to society
- how to recognize and address underachievement due to illness-related depression, anxiety and/or stress
- how to identify and alleviate potential family conflicts regarding medications prescribed to reduce symptoms
- how to insure adherence to a medical regimen

Dr. Drotar is currently working on projects involving children with pediatric cancer and pediatric asthma. He is co-director of the Center for Survivors of Pediatric Cancer, which is funded by the Lance Armstrong Foundation. Treatments for pediatric cancer may have significant risks beyond the cure itself. Consequently, in addition to developing, designing, and evaluating new treatments for children and adolescents recovering from cancer, the Center is committed to closely examining the associated quality of life issues for these children and their families.

Dr. Drotar’s research efforts also involve a leadership role in the Center for Chronic Conditions of Childhood at Rainbow Babies and Children’s Hospital, where he is working on issues related to pediatric asthma. A disproportionate number of children with pediatric asthma are African-American, and may also be economically disadvantaged. The recent pilot program of an intervention created by Dr. Drotar was successful in addressing the barriers that may affect the successful management of this condition, including financial constraints, unrealistic expectations of the child’s ability to monitor and carry out his/her own regimen, and a variety of severe stresses that limit a family’s ability to organize and execute a plan.

The intervention was designed for two purposes: [1] to bring families together to examine these barriers, and [2] to engage families in finding a solution. This intervention, which requires five to six sessions, involves approximately 130 families and an interdisciplinary team of pulmonologists, nurses, and other professionals. Outcome measures include data on emergency room visits, frequency and length of hospitalizations, and overall quality of life.

At a recent parent focus group held at the Center for Survivors of Pediatric Cancer, participants expressed the following needs for themselves:

- anticipatory guidance concerning the goals of survivorship (e.g., managing the child/adolescent’s needs as a healthy child)
- emotional support from staff and other families (support group)
- a comprehensive survivorship plan (medical, psychological, and financial)
- advocacy for financial needs (an understanding of available services, resources)

Other needs and goals identified for the Center include:

- training and education
- physician training in communication concerning cancer survivors
- education of teachers, school personnel developing a plan to respond to the needs assessment
- creating a focus group for adolescent/young adult survivors of pediatric cancer
 Advances in neonatal medicine have resulted in the increased survival of infants at lower and lower birth weight and gestational age. Medical success stories highlight the power of medical technology to save many of the tiniest infants at birth. However, serious questions remain about how these infants will develop and whether they will have normal, productive lives. Professor MAUREEN HACK has devoted many years to research on the long-term developmental outcomes of very low birth weight infants.

Low birth weight children can be born at term or before term, and have varying degrees of social and medical risk. Because VLBW children are not a homogeneous group, they have a broad spectrum of growth, health, and developmental outcomes. While the majority of VLBW children have normal outcomes, as a group they generally have higher rates of subnormal growth, illnesses, and neurodevelopmental problems. These problems increase as the child’s birth weight decreases; the smaller and less mature the baby, the more significant the problems. With the exception of a small minority of VLBW children with mental retardation and/or cerebral palsy, the developmental challenges for most VLBW infants include mild problems in cognition, attention, and neuromotor functioning.

Dr. Hack and her colleagues have conducted long-term follow-up studies of children born in the 1960s. These studies indicate that the adverse consequences of being born VLBW are still apparent in adolescence and beyond. The researchers compared a group of 242 VLBW infants born between 1977 and 1979 with 233 controls from the same population who had normal birth weights. They assessed the level of education, cognitive and academic achievement, and rates of chronic illness and risk-taking behavior in VLBW infants at age 8, and again at age 20 years. They adjusted the outcomes for sex and sociodemographic status.

The results show that fewer VLBW young adults than normal birth weight young adults had graduated from high school (74% vs. 83%). VLBW participants had a lower mean IQ (87 vs. 92), the rate of the high risk, non-exposed group requiring home placement, and maternal use of drugs in addition to cocaine, especially alcohol, marijuana, and tobacco.

This research project is one of the first to document the negative effects of prenatal cocaine exposure on cognitive development in a scientifically rigorous manner. It is unique because it has measures of both the mothers’ self report of their drug use prenatally, as well as infant meconium, which provides a physical measure of the amount of drugs exposure. The project also controls for many more factors in the environment than prior studies, and the team uses newly standardized versions of the major infancy and child development tests. The team was able to maintain more than 90 percent of the participants during the study through four years of age.

Though research has proved that prenatal cocaine exposure is associated with specific cognitive impairments and a lower likelihood of IQ above the normative average, it has also revealed that the home environment can make a difference for better outcomes for some children. Dr. Singer and her colleagues have assessed the effects of prenatal cocaine exposure and the quality of the caregiving environment on cognitive outcomes. They conclude: “These findings indicate that prenatal cocaine exposure is associated with an increased risk for specific cognitive impairments and a lower likelihood of above average IQ at 4 years of age. In addition, our findings underscore the beneficial effects of environmental intervention in the prevention of mental retardation for cocaine-exposed children. Drug treatment and education for this population of pregnant women, along with intensive intervention for their offspring, are essential to help maximize the future well-being of these families.”

At school age, the research has found cocaine exposure to be related to:

- specific problems in visual-spatial skills and perceptual reasoning
- differences in brain development on magnetic resonance imaging in the area of the corpus callosum and parietal lobes
- greater likelihood of experiencing attentional problems and oppositional behavioral problems

In one study, Dr. Singer’s research team followed 415 cocaine-exposed infants born at MetroHealth Medical Center in Cleveland to determine how prenatal cocaine exposure affects child development. In the early stages of the study, these infants were compared to non-exposed infants on cognitive and motor development until age 2. The researchers found that the rate of mental retardation in cocaine-exposed children at age 2 (15.7% vs. 7.1% in the non-exposed group) is 4.89 times higher than expected in the general population. And the percentage of children with mild delays (37.6% in the exposed group compared with 20.9% in the non-exposed group) required intervention was almost double the rate of the high risk, non-cocaine group. Researchers speculate it is likely that these children will continue to have learning problems and an increased need for special educational services at school age.
How effectively do clinicians communicate with young patients and their families who do not speak English? When working through an interpreter, how clearly do they explain the benefits and risks of participating in clinical trials? How well do these patients and families listen to what doctors and other health care professionals tell them, and how much information do they really understand?

These are questions that concern Professor CHRISTIAN SIMON as he studies the issue of language barriers to informed consent at the pediatric level.

Language barriers may be a complicating factor in a pediatric research environment, and Dr. Simon is exploring what happens when a seriously ill child and family are not fluent in English. They enter a clinical setting, hear a diagnosis, and are invited or encouraged to participate in a clinical trial. For non-English speaking families in this process, an interpreter should be present; it is unwise to rely on children to interpret for their parents. However, interpreting is cumbersome and may add to the stress of both family and clinician. When a child is very ill, there is a sense of urgency in all associated activities. Conversations regarding informed consent to participate in a clinical trial are time consuming; via an interpreter, these conversations are even longer.

There appears to be a negative impact for non-English speakers compared with those who speak English. Dr. Simon has learned that less information is given to and understood by Hispanic families than to Caucasian and African-American families. This situation is likely exacerbated by the language barrier between the clinician and the Spanish-speaking family. What is it about language interpretation that leads to these outcomes?

Working with 23 families, Dr. Simon has discovered a way to measure the accuracy of information delivered by interpreters. He found that, on average, 74% of the conversation was accurately interpreted (ranging from 47-98%). The lowest accuracy occurred when clinicians dominated the conversation, and the highest occurred when clinicians allowed the interpreters to intercede often. More interaction between clinician and interpreter produced a better result for children and their families.

Dr. Simon’s research is designed to promote the rights of non-English speaking children, particularly those suffering from serious illness. Being certain that children and their families fully understand the implications of informed consent—the child might be receiving more aggressive treatment, might have to come to the hospital more often, might remain in treatment longer—is the goal of his work as he explores ways to improve the process.
Redline and her research team have been studying a large cohort of children over time to determine the relationship of sleep to other health indicators. Six hundred of these children, now ages 16 to 19, are being evaluated on their sleep, diet, physical activity, behavior, and metabolic assessment. This study will determine how sleep patterns in children influence obesity, metabolic syndromes, and other health problems. Dr. Redline’s other pediatric studies have shown an increase in behavioral problems in children who snore, and that cognitive impairments are most evident in children who snore and were born prematurely.

... AND GOOD NIGHT

There are few pediatric health issues that are more common or have a more significant impact on health and well being than childhood sleep disorders. Child sleep disorders include a broad range of symptoms: abnormal breathing (sleep apnea), strange behaviors at night (sleep walking or night terrors), sleeping too much (narcolepsy), trouble sleeping (insomnia), sleeping at the wrong times such as at school or work (circadian rhythm disturbances), and simply not getting enough sleep to be at one’s best.

As Medical Director for Pediatric Sleep Services at University Hospitals, Professor CAROL ROSEN’s research focuses on a multi-disciplinary approach to children’s sleep disorders: understanding the physiology of the problem, deciding on the most efficient technology to measure it, and helping the child and family find the best combination of medical therapies and behavioral changes. Approximately 25% of parents in the United States are concerned with their children’s sleep patterns, and it is clear that families are affected by a child’s sleeping habits. America’s children are sleeping less than experts recommend, and more than two-thirds experience frequent sleep problems, according to the 2004 Sleep in America poll. Children’s poor sleep habits also take a toll on parents/caregivers, some of whom lose an estimated 200 hours of sleep a year due to their child’s nighttime awakenings.

Although many sleep problems arise from physical disorders and genetic traits, family functioning, life style choices, and environmental factors have strong influences on the severity and outcome of these problems. Children with ADHD, autism, and other conditions have a variety of sleep-related problems. Learning and practicing healthy sleep habits can make a major difference in their lives.

Researchers in the multi-disciplinary pediatric sleep clinic at Rainbow Babies & Children’s Hospital are currently creating a diagnostic test for sleep apnea. In addition, they are exploring the effects of hypnotic drugs—specifically, the prescribed dosage for children compared to adults—to determine what is both safe and effective.

Dr. Rosen is also interested in circadian rhythm disturbance, which occurs as a child reaches adolescence. Teenagers are especially vulnerable to sleep problems because they experience a biological shift in their sleep/wake schedule, have many late-night social and school pressures, and need to adjust to early school start times, all of which conspire to leave them short on sleep. A significant portion of the moodiness attributed to adolescence may actually be explained by insufficient sleep. When teens and parents understand these biological and psychosocial stressors, they can take action to prevent insufficient sleep and its consequences.
NEVER leave yourself!

Professor EILEEN ANDERSON-FYE is interested in the effects of rapid cultural change on adolescent mental health. One of her research areas focuses on body image and eating disorders. Cultural change may result from globalization (for example, the impact of Western television, the Internet, and heavy media exposure with significant American influence).

Andrés, Belize, located on the eastern coast of Central America, for over a decade. San Andrés is a community with many risk factors associated with the cross-cultural development of eating disorders. Yet after five years of intensive fieldwork, the conclusion was that San Andrés was actually a "negative case" in that Belizean girls seemed relatively unaffected by Western messages about body image that often lead to eating disorders. Over the course of her research, there did not appear to be clinically relevant eating disorders in the community, and health care providers reported being unaware of eating disorders.

Why is this community not following patterns found elsewhere? For extended periods of time over several years, Dr. Anderson-Fye lived in San Andrés among the girls and their families, participated in community life, and took part in high school life on a daily basis. She attended quinceañas (a coming-of-age ceremony for 15-year-olds), wedding preparations, beauty pageants, and even sleepovers. All of the 80 girls enrolled in the school participated in some aspect of her research. Additionally, ethnographic interviews were conducted with boys, the girls' families, educators, town officials, medical personnel, and various other community members to add a more complete picture of young women's lives, and eating and body image issues in particular.

One of the key reasons that girls in San Andrés, Belize are atypical relative to their counterparts in other cultures is a culturally based psychological attitude of self-protection and self-care prevalent in the community that translates as "Never Leave Yourself." This attitude mediates the transnational message that the ideal female body needs to be ultra-thin. The concept of not leaving the self guides decision-making situations ranging from major turning points such as sexual activity to small daily choices such as whether to nap or do homework at a given time. The young women reported learning this principle early in life from their mothers, grandmothers, aunts, older cousins, and other important women in their lives.

Eating disordered symptoms are rare among high school girls in San Andrés. In general, few of them attempted to control or change their bodies in any way. Body shape and adornment were more important than size or other features. While some girls may have dabbled in food control, exercised in order to lose weight, or attempted other weight-loss behaviors learned from United States media or local sources, very few appeared to sustain these behaviors. Extreme concern or distress over body size was also rare. The "Never Leave Yourself" ethno-psychology of self-care and self-protection seems to buffer many girls from body anxiety.

What is the origin of this distinctly American phenomenon? One of Professor RENEE SENTILLES' current projects, "American Tomboys, 1830-1920," investigates the race, class, and gender issues that led to the emergence of the American Tomboy in our national culture. Dr. Sentilles maintains that the tomboy may be the most celebrated American heroine of the late Victorian period. Her study of this rebellious cultural fabrication sheds light on constructions of whiteness, changing political roles for adult women, and connections between conceptions of sexuality and childhood.

Tomboys—girls who behave boisterously, exhibit boyish behavior, and dress like boys—became popular after the Civil War. They have been contrasted with "fashionable" girls, who lived in adherence to family values and genteel, proper ideals. The tomboy embodies the rural simplicity of the natural world, and is characterized in literary works by beloved heroines such as Jo in "Little Women" and Laura in "Little House on the Prairie."

During the period studied by Professor Sentilles, long-standing religious beliefs and the societal changes brought about by urbanization came into conflict. Until that time, it was generally accepted that a man's role was in the public world and a woman's role was essentially private and directed toward home and family. As females entered the urban scene, cultural and social tensions became apparent, and formal religion became a less influential factor in the maturation process.

More than actually wanting to be a boy, what the classic tomboy craves is a boy's independence. Dr. Sentilles' research on the American icon of the tomboy focuses on the era of its emergence and development, and examines how popular culture of the time articulated male and female gender roles. How the phenomenon came about and how it has evolved is a matter of continuing interest to social historians, cultural scholars, and those interested in child behavior.
Pediatric obesity is a national concern. The goal of “Healthy Kids/Healthy Weight” is the focus of Professor Leslie Heinberg’s clinical research. She and her collaborators are creating a behaviorally based intervention that involves not only children who are overweight but their families as well.

When a child is referred to Healthy Kids/Healthy Weight by a pediatrician, a thorough evaluation is the first step toward developing a healthier lifestyle. That evaluation is performed by an interdisciplinary team of physician, psychologist, dietician, and exercise physiologist. In addition to the child’s physical condition, the evaluation includes an assessment of lifestyle factors that often contribute to weight, and a determination regarding motivation. Is the child personally motivated to lose weight, or is the family’s concern the overlying motivation? How can the information gathered in an intake evaluation be best used to assist the child and family in developing a healthy diet?

Dr. Heinberg has participated in evaluating nearly 150 children in two age groups (ages 7-12 and 13-18). To ensure working with a diverse population, these children have been referred by pediatricians at Rainbow Babies and Children’s Hospital and other clinics and private practices in the Greater Cleveland community. To date, only one of the children referred has demonstrated a medical condition that would account for being overweight.

In addition to the goal of improving children’s physical condition, the intervention provides Dr. Heinberg and her team with information about the social implications of obesity. As a child ages, his/her self-concept becomes more focused. The later elementary and middle school years present heightened awareness and consequences of physical appearance. Factors such as teasing and bullying by classmates, hoarding food, self-esteem, and body image are all assessed and addressed as a treatment plan is developed.

Other components of the intervention are dietary change, physical activity, and parental modeling. Boredom often contributes to overeating, and lack of regular exercise contributes to obesity. Children involved in Dr. Heinberg’s research are required to keep a record of “global screen time,” which is time spent in front of a computer or television set. Attention is also paid to whether a child’s caregiver exhibits similar physical and/or emotional symptoms. For example, is there a tendency for a child whose mother has depressive symptoms to also become depressed? How does body weight affect this tendency?

The immediate goal of Dr. Heinberg’s work is to affect lifestyle changes that will promote good health for children and families; these changes involve diet and exercise. A farther-reaching goal is to establish “best practices” that are empirically research-based and a model for other institutions. There is a need to better understand the psychosocial world of children who are seriously overweight, and to use this understanding to guide them to good health.
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