

The Importance of Psychological Research at NICHD

November 25, 2014



Nancy Eisenberg

Many psychological scientists who have conducted research for some time have a home or favorite funding agency. Mine is the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). Although NICHD supports considerable medical research, for decades it has been a strong funder of basic psychological research relevant to human development, broadly defined. I got my first R01 (major individual principal investigator) grant and my first Research Scientist Development award (also a grant) at NICHD. The first review panel I served on was housed at NICHD (in the old days, review panels tended to be within NIH institutes, rather than reviewing grants across institutes). When the National Institute of Mental Health (NIMH), which used to fund large proportions of developmental, social, and personality research, decided to no longer support research on normal samples (unless, perhaps, the work was highly biological/neural) or research examining externalizing, internalizing, and related symptoms rather than diagnosed mental illnesses, many of us who had been funded by NIMH flocked to NICHD. NICHD funds a broad array of topics and approaches and has been very supportive of young scholars and scholars from diverse disciplines and subdisciplines of psychology.

Our field is very lucky that Dr. Alan Guttmacher, a pediatrician and geneticist who became director of NICHD in 2009, has an understanding and appreciation of the contributions that psychological science has made, and can make in the future, to an understanding of human development and the promotion of healthy development. When Dr. Guttmacher assumed the leadership of NICHD, he had a series of meetings to chart the future directions of NICHD and included many psychologists in the discussions. Under his leadership, NICHD continues to be a major source of support and direction for quality psychological research. Thus, I was very pleased when Dr. Guttmacher agreed to write a presidential column for the Observer.

-Nancy Eisenberg



Many thoughtful people draw a distinction between “biomedical” and “psychological” research. While I understand the basis for this distinction, I think it does a disservice. Psychological research is a key component of biomedical research. Human well-being, health, and disease are shaped by the complex interweaving of biological, environmental (using that term quite broadly, encompassing everything from the built environment to culture), and psychological factors. Biomedical research, at its best, not only examines each of these factors, but attempts to explore that complex interweaving of them.

Thus, it is unsurprising that the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) views psychological research as critical to achieving its mission. For instance, NICHD works to enable all children to have the chance to achieve their full potential for healthy and productive lives, free from disease or disability. Psychological research helps us reach this goal by providing an understanding of children’s typical and atypical journeys across the developmental trajectory.

Psychological science plays a large part in understanding early childhood development and in informing efforts to optimize it. Researchers in NICHD’s intramural program study a variety of family situations to understand how sociodemographic factors influence development. For example, NICHD researchers study biological families and adoptive families to understand factors that influence the parent–child relationships that develop in each. Understanding similarities and differences between these situations helps practitioners understand the long-term effects of adoption on child development. This work is important because the findings can help professionals understand what might put a family at risk or provide a protective factor against risk and enhance interventions that improve family relationships.

NICHD’s extramural Child Development and Behavior Branch develops scientific initiatives and supports research and research training relevant to the psychological, psychobiological, language, behavioral, and educational development and health of children. For example, NICHD-supported researchers study at-risk populations to understand how health disparities and socioeconomic factors influence how different populations cope with stress. Researchers also study the long-term effects of adversity due to discrimination or socioeconomic factors to understand how stress plays a role in the development of chronic diseases such as heart disease and type 2 diabetes, while also looking at biomarkers of metabolic syndrome and pro-inflammatory tendencies, which are linked to chronic

diseases of aging. Such research provides an important understanding of the relationship among stress, coping, and health.

NICHD's Pediatric Trauma and Critical Illness Branch supports research and research training in pediatric trauma, injury, and critical illness. Throughout the course of development, children may experience any number of traumatic events — including child abuse or neglect, separation due to a parent's military service, or natural disasters. Psychological research helps us to understand how traumatic experiences affect children's psychosocial states, including how these stressful experiences during childhood may have effects on lifelong health. Studying these areas can also offer insight about protective factors or coping mechanisms that contribute to resiliency — an area of health and well-being that is too often overlooked.

Obesity is an obvious example of how biological, environmental, and psychological factors all play key roles in well-being, health, and disease — and, therefore, that research into each of these factors is crucial. Reversing the obesity epidemic will require better understanding of biology, environment, and psychology. Research focused on one factor can improve research into another. For instance, research at NIH's clinical center in Bethesda, Maryland, which examines the roles of genes and the environment in obesity, can inform psychological research, with the end goal of utilizing all three factors to design effective interventions to tackle this national epidemic.

NICHD researchers have made progress in the area of teenage driving, through research that has identified a number of the underlying causes of risk for drivers, including teenage passengers and smartphone use and other distractions. We now understand the effectiveness of parental supervision and involvement, including setting limits on driving privileges that can reduce risky behaviors when their teens are behind the wheel. Research like this promises to bridge the divide between basic and applied population health science to create safer driving experiences for teenage drivers.

The understanding and insight gained from psychological science is extremely important to achieving the NICHD mission. The examples cited here are a very small sampling of the ways that psychological research has always been, and will continue to be, at the heart of what NICHD is about.