
A Research Perspective on Findings from Bridging the Gap

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Bridging the Gap, Healthy Eating Research, and Active Living Research are the primary national research programs funded by the Robert Wood Johnson Foundation (RWJF) to identify environmental and policy strategies with promise to reverse the childhood obesity epidemic by 2015. These programs are designed to provide complementary information that can be used by policymakers and practitioners to improve youth dietary and physical activity behaviors, to prevent childhood obesity. All three programs examine policy and environmental factors with an emphasis on low-income populations and communities of color at highest risk for childhood obesity, but they use different methods. Bridging the Gap conducts national studies using original data collection integrated with archival databases, and both Healthy Eating Research and Active Living Research support a variety of investigator-initiated studies and policy analyses aimed at understanding and reversing childhood obesity among children aged 3–18, including “rapid response” studies of “natural experiments” that are taking place in schools, preschools, parks, and communities. All three programs share a common goal of building the evidence base to identify environmental and policy influences and strategies that have the greatest potential to increase physical activity and improve healthy eating to reverse childhood obesity, and to communicate these findings effectively to inform policy debates, public health action, and advocacy. The purpose of this commentary is to highlight some of the contributions of Bridging the Gap’s results to advancing science and to illustrate the areas of collaboration among RWJF’s three research programs.

A seminal contribution of Bridging the Gap is the ability to explore trends in physical activity and dietary behaviors over time, based on questions in the nationally representative Monitoring the Future Study of 8th, 10th, and 12th graders, and to explore national trends in school food and physical activity policies and envi-

ronments over the past several years. These data, which supplement the Centers for Disease Control and Prevention’s (CDC) Youth Risk Behavior Survey by including slightly younger children (and soon, much younger children), demonstrate not only that declines in physical activity and healthy eating habits parallel the rise in youth obesity, but also that there are links between school food and physical activity policies and programs and students’ self-reported diet, activity, and body mass index (BMI) levels.¹ Several of these papers show limited access to “healthy” foods as well as limited opportunities for physical activity in school environments that are all too often mirrored in the communities surrounding schools. There also has been a disturbing lack of obesity control initiatives from public health departments.² Powell, Szczypka, and Chaloupka³ found that powerful media influences are almost all in the direction of promoting unhealthy behaviors. These research results show some of the fundamental forces that may be shaping the obesity epidemic and imply that multi-level, multi-component policy-based approaches will be required to bring the epidemic under control.

One of the most tragic realities of the youth obesity epidemic is that the problem is most severe and rising fastest in low-income populations and communities of color, which have the fewest resources to intervene or cope with the consequences. Several papers^{1–6} indicate environmental and policy disparities may explain part of the disparities in obesity, eating, and physical activity. Low-income students and schools were found to have less participation in intramural and varsity school sports, more soft drink pouring contracts, more soda ads in schools, less access to healthy foods in schools and communities, less access to physical activity facilities, and more exposure to TV food ads.¹ Examining potential policy and environmental solutions to these inequities are priorities for Healthy Eating Research and Active Living Research, as guided by Robinson and Sirard’s⁷ dictum to pursue solution-oriented research.

Building on the provocative findings of Bridging the Gap, Healthy Eating Research and Active Living Research will be able to examine in more detail the behavioral and economic effects of specific policy and environmental factors, not only in middle and high school students, but also in the elementary and preschool-aged groups. Healthy Eating Research and

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Active Living Research are able to move relatively quickly to evaluate innovative interventions that are not yet in wide use to identify promising strategies for further analysis and dissemination. For instance, in 2005–2006, both Healthy Eating Research and Active Living Research solicited proposals to evaluate school wellness policies mandated by the Child Nutrition and Women, Infants, and Children (WIC) Reauthorization Act of 2004. There are over a dozen studies in the field now seeking to identify effective uses of school wellness policies to improve children's nutrition and physical activity. Other studies are needed to identify the policies and economic factors that account for Johnston, Delva, and O'Malley's⁴ findings of disparities in participation in school sports and intramurals.

Bridging the Gap findings highlight community-level disparities related to supermarkets and fast-food outlets in low income communities. The paper by Powell, Auld, Chaloupka, O'Malley, and Johnston⁵ found that increased access to chain supermarkets was associated with lower adolescent BMI. Analyses by Powell, Chaloupka, and Bao⁶ found that low-income and minority neighborhoods have a higher proportion of fast-food restaurants compared to high-income and predominantly white communities. Healthy Eating Research and Active Living Research will be able to further explore community environment associations with weight-related outcomes and evaluate policy and environmental strategies to reduce disparities in access to healthy foods and opportunities for active living in low-income and minority communities.

Healthy Eating Research and Active Living Research are probing the outer layers of the "ecologic model" to identify powerful state and federal policies. For instance, Healthy Eating Research recently co-funded, with the W.K. Kellogg Foundation and the Johnson Foundation of Racine, Wisconsin, a multidisciplinary meeting to examine the impact of federal agricultural and food policies on public health and to identify opportunities for the food system and agriculture policy to contribute to healthier eating and childhood obesity prevention (report available at www.healthyeatingresearch.org). The Active Living Research Program supported an analysis of schools' liability for public use of their recreation facilities. Recommendations for state tort immunity legislation, the nature of joint-use agreements, and insurance coverage provide guidance to reduce real and perceived liability threats for school officials.⁸ Active Living Research grants are examining school siting policies, community design, and land-use policies, policies that account for disparities in access to parks, and perceived and actual crime and traffic safety as they are related to playground use, children's walking to schools, and overall physical activity—especially in low-income communities.

There are other opportunities for synergy among RWJF's three childhood obesity-related research programs. As policy and environmental variables are found by Healthy Eating Research and Active Living Research investigators to be related to obesity and obesity-related behaviors, those variables can be incorporated into Bridging the Gap for long-term monitoring. Observational measures of food environments and physical activity environments developed through Active Living Research and Healthy Eating Research can be used to supplement Bridging the Gap measures. For example, measures of park quality,^{9,10} design of streetscapes,^{11,12} and the presence and cost of healthy foods in stores and restaurants^{13,14} could be valuable additions to Bridging the Gap community measures in a subset of locations. Bridging the Gap, Active Living Research, and Healthy Eating Research already are working in concert with one another and the National Cancer Institute and U.S. Department of Agriculture (USDA) to develop valid and reliable measures of school food and physical activity policies to strengthen the quality and comparability of school obesity policy research. The resulting measures can give concerned parents, principals, and public health advocates the tools they can use to assess their schools and use the findings to improve the healthfulness of school environments.

According to the U.S. Surgeon General¹⁵ and the Institute of Medicine (IOM),^{16,17} policy and environmental changes will be needed to control the childhood obesity epidemic, but the evidence base to guide those changes is lacking. The need for evidence is rising as government, philanthropy, communities, schools, and health professionals implement new programs and policies to address the childhood obesity crisis. All of this activity will generate new demands for information, new ideas for solutions that need to be evaluated, and new questions to be answered by research. There is a heightened sense of urgency, creating the need for more rapid methods of translating research to policy and practice. Bridging the Gap, Healthy Eating Research, and Active Living Research are developing innovations in funding, research implementation, and dissemination that we hope will quickly identify promising solutions to childhood obesity, especially solutions that will meet the needs of low-income communities of color that are at highest risk.

Although the RWJF research programs are rapidly building a literature on policy and environmental solutions to obesity, healthy eating, and active living, the range of research questions and the need to ensure that the research is relevant to the communities at highest risk requires a long-term commitment from multiple funders. The Healthy Eating Research and Active Living Research programs are working closely with major federal funders at the National Institutes of Health (NIH) and CDC. Staff from NIH, CDC, and USDA, as well as private funders (e.g., W. K. Kellogg Foundation,

The California Endowment, Kaiser Permanente, Blue Cross of Minnesota) contribute to Healthy Eating Research and Active Living Research by advising and playing important roles in grantee meetings and conferences.

We celebrate the pioneering scientific contributions that fill the pages of this timely Bridging the Gap supplement to the *American Journal of Preventive Medicine*. Researchers will find many ideas for studies that build on these findings. Policymakers as well as community, school, and public health leaders will find the seeds of promising interventions to reverse current childhood obesity trends and disparities. Bridging the Gap has accomplished something rarer than good science; they have produced findings that point toward solutions to one of the nation's and the world's most pressing health concerns.

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