



INSTITUTE OF BEHAVIORAL SCIENCE >

UNIVERSITY OF COLORADO

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NEWSLETTER

483 UCB Boulder, CO 80309

IBS@colorado.edu

<http://www.colorado.edu/IBS>

(303) 492-8147

KUDOS

J. Terrence McCabe, IBS Faculty in the Research Program on Environment and Behavior, has been promoted to Professor in the Department of Anthropology.

Lori Hunter, IBS Faculty in the Research Program on Environment and Behavior, has been promoted to Associate Professor with tenure in the Department of Sociology.

David S. Brown, faculty research associate in the Research Program on Political and Environment Change, has been promoted to Associate Professor with tenure in the Department of Political Science.

PROGRAM ACTIVITIES

ENVIRONMENT AND BEHAVIOR PROGRAM

Working Papers

<http://www.colorado.edu/ibs/EB/pubs/wp.html>

Hunter, Lori M., Wayne Twine, and Aaron Johnson. "Population Dynamics and the Environment: Examining the Natural Resource Context of the African HIV/AIDS Pandemic." (EB2005-0004). There is a significant lack of research as to how demographic dynamics interact to shape household use of natural resources in less developed regions. This information is, however, key to understanding the complex interactions between humans and the environment, particularly given the centrality of the natural environment within rural livelihoods. Within the rural African context, natural resources also act as a buffer against household shocks, offering, for example, a potential means of generating income and/or meeting dietary needs. In this study, we focus on HIV/AIDS mortality as a particular household shock, examining natural resource use, specifically fuelwood strategies, as shaped by households' mortality experience. In the year 2000, 21.5% of deaths in the study region of South Africa's Limpopo Province were attributed to AIDS. It is projected that by 2010, this will rise to nearly 65%. Making use of both quantitative and qualitative data, the authors respond to the following two research questions: (1) What are the associations between household size, composition and economic status, and natural resource use in rural South Africa?; (2) Beyond these household characteristics, how does mortality shape the ways in which households use key natural resources? Our analytical focus is on households that have experienced the recent death of a household member in the most productive age group (15-49). As for results, although the quantitative analyses reveal little distinction between fuelwood strategies between mortality-impacted households and their non-mortality counterparts, the interviews provide insight into the nuanced stories of coping strategies following the loss of an adult household member. In general, the study's results begin to shed light more generally on the environmental dimensions of the HIV/AIDS pandemic.

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PROGRAM ACTIVITIES

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Natural Hazards Center

The Natural Hazards Center hosted its 30th Annual Natural Hazards Research and Applications Workshop July 10-13. This invitational meeting brings together representatives from academic and practitioner communities around the world who work to reduce disaster losses, to foster face-to-face networking, and to discuss current issues and trends that affect how society deals with hazards and disasters. The 30th anniversary presented an opportunity to reflect on how the hazards community has developed and evolved as well as what the future holds. This year it addressed the hazards issues of the day and used the past as a lens for anticipating future challenges. Session topics included the 2004 Asian Tsunami, megacities and disasters, the legal issues surrounding outbreaks and quarantine, innovations in earth observations, and gender issues. The keynote address, "The Natural Hazards Center, a Leadership Platform for 30 Years," was given by William Anderson, associate executive director of the Division on Earth and Life Sciences and director of the Disasters Roundtable at the National Academies. The final workshop program, session summaries, and abstracts are available online at <http://www.colorado.edu/hazards/workshop/2005/>.

As always, a number of people at IBS were instrumental in the success of the event, with a special thanks to **John Wiener** (Environment and Behavior research associate) for recording a plenary session, "Climate Change and Unpredictability in Hazards Management," and IBS administrative assistant, **Sugandha Brooks**, for preparing the invitations and participant lists.

POPULATION PROCESSES PROGRAM

In Print

McNown, Robert F., and Cristóbal Ridao-Cano (former IBS graduate research assistant). "A Time Series Model of Fertility and Female Labour Supply in the UK." *Applied Economics* 37, no. 5 (2005): 521-32. Multiple time series procedures suitable for estimation and testing with nonstationary data are applied to UK data on age-specific fertility rates, age-specific female labor force participation rates, and women's and men's wages. Cointegration tests establish the existence of two long-run equilibrium relations, identified as a fertility relation and a labour supply equation, for each age group. Maximum likelihood estimates of these equations are consistent with the new home economics model of fertility, and tests of Granger-causality show evidence of extensive feedback among the variables.

McNown, Robert, and Cristóbal Ridao-Cano (former IBS graduate research assistant). "The Effect of Child Benefit Policies on Fertility and Female Labor Force Participation in Canada." *Review of Economics of the Household* 2, no. 3 (2004): 237-54. The authors present an analysis of the effects of Canadian child benefit policies on fertility and female labor supply. Canada has adopted a variety of child benefit policies since 1918 that are incorporated into an economic model of fertility. This model is estimated and tested with time series data on fertility, female labor force participation, female wages, male incomes, female education, and child benefits. Cointegration methods are employed to accommodate problems of nonstationarity and endogeneity that characterize time series models of fertility and female labor supply. Two cointegrating relations are found, and

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IN FOCUS

Providing a Healthier Start to Life



Tania Barham
IBS Faculty
Health Behavior Program

My research to date has evaluated the success of two government policies in improving the health of poor children: managed health care in California and cash transfers conditional on health care utilization in Mexico.

Tania Barham is a new IBS Faculty in the Health Behavior Program and an Assistant Professor in Economics. She received a B.A. in Economics from McGill University in 1994 and an M.A. in Economics at the University of British Columbia in 1995. From 1995 to 2000 she worked at the Human Development Department in the World Bank investigating various health issues. Two of these years were spent in Yemen where she was part of a World Bank/UNICEF team developing a project aimed at improving children's health and educational status. In 2005, she received a Ph.D. in Agriculture and Resource Economics from the University of California, Berkeley.

It is well known that good health as a child has important implications for a person's future welfare. Governments have therefore often targeted young children in an effort to improve lifetime health outcomes. My research to date has evaluated the success of two government policies in improving the health of poor children: managed health care in California and cash transfers conditional on health care utilization in Mexico.

Managed Care in California

During the 1990s, many states in the United States shifted Medicaid beneficiaries from fee-for-service to a managed care method of financing health care. By 2002, 57% of all Medicaid recipients nationwide were in managed care. States embraced managed care to control skyrocketing costs and to improve access to quality primary care for low-income groups. California provides a natural experiment since the managed care option was mandated in only 22 out of 58 counties and these counties were phased in over time between 1994 and 2000. I investigated whether mandating managed care for California Medicaid beneficiaries improved access to prenatal care and birth outcomes. I compared two competing models of managed care: one that mandated a county-organized health system (COHS), and the Two Plan Model (TPC) that provided mothers with a choice between the county system and a commercial managed care organization. The results show that while COHS improved access, only the TPC program led to reductions in low birth weight. The superior health outcomes obtained with TPC might be explained by higher quality care induced by competition among health providers and/or mainstreaming Medicaid beneficiaries into commercial organizations that also serve higher income populations.

Mexico's Conditional Cash Transfer Program

In 1997, the Mexican government embarked on a new anti-poverty program, Progresa. The aim of the program was to break the intergenerational transfer of poverty by building the human capital of young children. The program is a departure from a typical income transfer because cash transfers are provided conditional on the beneficiary household engaging in a set of behaviors designed to improve their health, nutrition, and education status. The program has

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extensive coverage reaching approximately 2.5 million households. I again use a natural experiment to determine the impact of Progresa on infant mortality. I find that Progresa led to an 11% decline in rural infant mortality among treated households. Given the relatively high incidence of infant mortality in rural areas, and the fact that infant mortality rates fell by less than 1% a year over the five years prior to Progresa, this 11% decline is important. Reductions were even higher in communities where the population all spoke some Spanish and had better access to piped water.

Research at CU Boulder

I will continue my work in Mexico by examining the change in health behaviors/outcomes that led to the decline in infant mortality. I am also investigating a project on health and decentralization in Mexico and another on the effect of air pollution on health outcomes in the United States. I chose to come to IBS because it has a productive environment for interdisciplinary and collaborative work. I look forward to meeting many of you in the next few months and starting some collaborative projects in the near future.

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these are identified as a fertility relation and a female labor supply function. All economic variables, including child benefits, have statistically significant and appropriately signed coefficients. The estimates are used to evaluate the effects of policy and other economic changes on fertility.

Rogers, Richard G., Robert A. Hummer, Patrick M. Krueger (former IBS graduate research assistant), and **Fred C. Pampel**. "Mortality Attributable to Cigarette Smoking in the United States." *Population and Development Review* 31, no. 2 (2005): 259-92. Cigarette smoking is an especially pernicious behavior because of its high prevalence and mortality risk. The authors used the powerful methodology of life tables with covariates and employed the National Health Interview Survey-Multiple Cause of Death file to illuminate the interrelationships of smoking with other risk factors and the combined influences of smoking prevalence and population size on mortality attributable to smoking. They found that the relationship between smoking and mortality is only modestly affected by controlling for other risk factors. Excess deaths attributable to smoking among adults in the United States in the year 2000 were as high as 340,000. Better knowledge of the prevalence and mortality risk associated with different cigarette smoking statuses can enhance the future health and longevity prospects of the population.

Rogers, Richard G., Robert A. Hummer, and Patrick M. Krueger (former IBS graduate research assistant). "Adult Mortality." In *Handbook of Population*, edited by Dudley Poston and Mike Micklin. NY: Springer Publishers, 2005. This chapter underscores the significance of demographic research on adult mortality for understanding the health consequences of social inequality, human behavior, biological factors, and various other forces in human populations. It outlines the general substantive concerns that guide demographers who conduct research on adult mortality, discusses the data and methods that are commonly used to conduct research in this area, summarizes findings of specific influences on adult mortality, reveals variations in mortality across a number of

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demographic, social, and behavioral factors, and provides some ideas for ongoing research in this area. [This handbook was showcased at the International Union for the Scientific Study of Population meetings in France, July 2005. The reaction was so positive that some individuals are calling the book “The Harry Potter of Demography.”]

PROBLEM BEHAVIOR PROGRAM

In Print

Elliott, D. S. and S. Mihalic. “Issues in Disseminating and Replicating Effective Prevention Programs.” *Prevention Science* 5, No.1 (2004): 47-53. The new frontier for prevention research involves building a scientific knowledge base on how to disseminate and implement effective prevention programs with fidelity. Toward this end, the authors present a brief overview of findings from the Blueprints for Violence Prevention-Replication Initiative, identifying factors that enhance or impede a successful implementation of these programs. Findings are organized around five implementation tasks: site selection, training, technical assistance, fidelity, and sustainability. Overall, careful attention to each of these tasks, together with an independent monitoring of fidelity, produced a successful implementation with high fidelity and sustainability. The authors discuss how these findings inform the present local adaptation-fidelity debate.

Mihalic, Sharon F. “The Importance of Implementation Fidelity.” *Emotional & Behavioral Disorders in Youth* 4, no. 4 (2004): 83-105. Over the past several years, a large amount of information has been collected on the risk and protective factors for violence. Research has also identified prevention programs that can modify these risk and protective factors. The Blueprints initiative has been in the forefront in identifying exemplary programs that have been evaluated in rigorous, controlled trials, and much attention has been focused nationally on selecting and implementing quality programs. However, identification of effective programs is only the first step in the efforts to prevent and control violence. Widespread implementation of effective programs is unlikely to affect the incidence of violent crime unless there is careful attention given to the quality of implementation—the degree to which a program is delivered as intended (American Youth Policy Forum, 1999; Biglan & Taylor, 2000; Lipsey, 1999). Research demonstrates that successful implementation is not guaranteed by a site’s decision to adopt a best practices program. Many science-based programs have been adopted in different settings with widely varying outcomes. In fact, a high-quality implementation of a less promising program may be more effective than a low-quality implementation of a best practice program (Gottfredson et al., 2000; Wilson & Lipsey, 2000).

BITS AND BYTES FROM CRS

Jani Little attended a workshop August 8-10 on the American Community Survey (ACS), held at the University of Michigan in Ann Arbor and sponsored by ICPSR. The ACS is an annual survey which replaces the survey component of the decennial census. The course covered the purpose, structure, and research applications of the ACS.

If you have problems related to statistics or data analysis, Help Desk advisor **Jarron Saint Onge** is available Monday-Thursday afternoons 1:00-3:30p.m. for help. Stop by.

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BITS AND BYTES FROM CRS

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IBS Building 4 during these hours, call 492-6917, or e-mail jarron.saintonge@colorado.edu to make an appointment

Please Continue to Install Security Updates. This is a reminder that you should be diligent in patching your computer with critical security updates. Generally, you will receive an e-mail from ITS Security announcing that a new vulnerability has been discovered. In any case, you should have your computer configured to do automatic updates or you should regularly check for critical updates. The steps for patching your computer with critical updates are outlined at this website:

<http://www.colorado.edu/its/docs/hardwaresoftware/windowsupdate.html>.

If you have questions, please contact Gabe Westmaas (gabe.westmaas@colorado.edu) or Bill Studer (stbill79@gmail.com).

UPCOMING COLLOQUIA

Please refer to the following webpage for the IBS colloquia schedules:

<http://www.colorado.edu/ibs/events/colloquia.html>.

IN THE NEWS

Alexandra Marks writes about the valuable role citizens have played in providing the initial, and often lifesaving, assistance during acts of terrorism in her article, “The Real First Responders: Citizens?,” that appeared in the July 14 issue of the *Christian Science Monitor*. In her article Marks notes the “upstart group of sociologists, physicians, and terrorism experts contends that the use of ordinary citizens during a large-scale emergency could save hundreds if not thousands of lives. And they are determined to ensure the public is properly prepared before the next catastrophic event.” She quotes **Kathleen Tierney** regarding the need to “... readjust our thinking. If you look at the 9/11 commission report they talked about first responders versus what they called ‘civilians’, as if all of [*sic*] the civilians did was just stand at the sidelines.... That is so radically at variance with what actually happened that day.”

Tierney was one of three researchers from the National Consortium for the Study of Terrorism and Responses to Terrorism (START) interviewed for the article, “Facing the Terrorist Threat,” written by Michael Hill of the *Baltimore Sun* on July 10. The article addresses the reality of terrorism in our everyday lives, how it compares to and differs from other types of life-threatening situations, the importance of unity, the need “to very systematically and very carefully assess risks, responsibilities, and plans,” “the dangers of certain reactions,” and “some simple things that can be done quite quickly.”

Tierney was also interviewed for *Kiplinger's Magazine* August publication. In the article “Brace Yourself for the Hurricane Season,” she states that the big problem in the areas subject to hurricanes is that they are the fastest growing in population. Tierney then addresses how to determine risks, the most common mistakes made in emergencies, and the best way to prepare for disaster.

In the June 13 *High Country News* feature article “How Dense Can We Be?,” Allen Best writes about the history, surge, and consequences of exurban development with its.

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burdening and significant unseen costs. In terms of the environment it has negatively affected air and water quality, biodiversity, and the natural role of wildfires, and economically it has increased tax dollars and insurance premiums for the general public. However, there are those who he sees as addressing the problem. He quotes Environment and Behavior faculty research associate **William Travis** as saying, "You can put a lot of people in the landscape, but with less impact if you do it in certain ways. We will have to pay a lot of attention to the patterns rather than the raw numbers." The full article is available at <http://www.headwatersnews.org/hcn.sprawl061305.html>.

RESEARCH PROPOSALS SUBMITTED

Environment and Behavior Program

Howe, Charles	Estimating the Impacts of Complex Climatic Events: The Economic Costs of Drought in Colorado, Nebraska and New Mexico	NOAA via Univ. of Nebraska at Lincoln	03/01/06-02/28/09	New	\$67,086
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Population Processes Program

Kuhn Randall Silvery, R. and Menken, J. (Co-PI's)	Migrant Networks and Health in Indonesia and Bangladesh	NIH	04/01/06-03/31/09	Resubmission	\$645,325
Menken, Jane	African Population Studies and Training Program	William and Flora Hewlett Fdn.	10/01/05-09/30/06	New	\$400,000
Young, Joseph	A Comparison of Health and Healthcare Utilization in Bangladesh and Indonesia	NIH	04/01/06-03/31/08	New	\$149,000

Problem Behavior Program

Huizinga, David	Understanding Delinquency: A Longitudinal Multi-Disciplinary Study of Developmental Patterns	Dept. of Justice	10/01/05-09/30/09	Continuation	\$400,000
Menard, Scott	Exposure to Violence Across Multiple Contexts, Generations, and the Life Course	NICHD	10/01/06-09/30/11	New	\$633,250
Thornberry, Terry	Program of Research on the Causes and Correlates of Delinquency: A Panel Study of a Reciprocal Causal Model of Delinquency	Dept. of Justice	10/01/05-09/30/06	Renewal	\$350,000
Huizinga, David	From Risk Factors to Leading Indicators: Using Longitudinal Cohort Data to Forecast Aggregate Crime Trends	Univ. of Pennsylvania	08/01/05-07/31/06	New	\$121,764
Woodward, Bill	Homeland Security Program	State of Colorado, Dept. of Local Affairs, Div. of Emergency Mgmt.	06/01/05-12/31/06	New	\$220,000

RESEARCH PROPOSALS AWARDED

Problem Behavior Program

Elliot, Del (Grady, J. Co-PI)	The Challenge Newsletter Grant Dept. of Education	06/20/05-06/19/10	New	\$1,576,487
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Jane A. Menken, Institute Director

Research Program on Environment and Behavior

Lee J. Alston, Director
Natural Hazards Center
Kathleen Tierney, Director

Research Program on Health Behavior

Richard Jessor, Director

Research Program on Political and Economic Change

Edward S. Greenberg, Director

Research Program on Population Processes

Richard G. Rogers, Director
Population Aging Center
Jane A. Menken, Director

Research Program on Problem Behavior

Terence P. Thornberry, Director
Center for the Study and Prevention of Violence
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Computing and Research Services

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