October 1992

Volume 24, Number 4

Journal of Biosocial Science

Incorporating *Biology and Society* of the Galton Institute

Published by the Biosocial Society

Cambridge, England

Editor: C. G. N. Mascie-Taylor

Editorial Advisory Panel

J. L. Boldsen
D. A. Coleman
P. L. C. Diggory

G. A. Harrison A. G. Hill G. W. Lasker D. M. Potts P. F. Selman I. Timæus S. J. Ulijaszek V. Reynolds

For the Galton Institute

J. A. Beardmore

R. Chester

Review Editor

Erica Haimes

Associate Editor M. A. Herbertson

Consultant D. F. Roberts

Notice to Contributors

The Journal of Biosocial Science publishes original papers, short reports: reviews, lectures, and book reviews dealing with social aspects of human biology, including reproduction and its control, gerontology, ecology, genetics and applied psychology; with biological aspects of the social sciences, including sociology, social anthropology, education and criminology: with social and biological elements of nutrition, growth and development, health and epidemiology; and with biosocial aspects of demography. Preference will be given to material which is clearly interdisciplinary.

Papers are considered for publication on the understanding that they have not been, and will not be, published elsewhere in whole or in part, and that, where customary, they have been approved for publication by the relevant Head of Department. The Editor is not responsible for any loss of or damage to manuscripts or illustrations and his decision on all editorial matters is final. This Journal is covered by Current Contents, Biological Abstracts, Psychological Abstracts and Population Index.

Manuscripts should be sent in duplicate to the Editor. Journal of Biosocial Science, Department of Biological Anthropology, Downing Street, Cambridge CB2 3DZ. They should be clearly typewritten, on one side of the paper only, with a 1½ inch margin, and be double-spaced and in the English language. Spelling should follow that of the Concise Oxford Dictionary. The Editor reserves the right to make minor literary emendations in the final editing, but manuscripts will not be altered substantially without consultation with the author or marked unless the paper is thought provisionally to be acceptable. The author is responsible for the accuracy of quotations, tabular matter and references. Manuscripts or tables prepared on dot-matrix printers are not acceptable.

Manuscripts should bear the title of the paper, name of the Institution where the work was done, the present postal address of the author if different from that of the Institution, and a short running head of not more than 50 letters. Titles should be brief. A short summary should precede the text. Acknowledgments should be made in a separate section.

Diagrams must be numbered and should bear the author's name, short title of the paper and figure number on the back. Captions should be typed on a separate sheet.

Tables should be typed on separate sheets, be given Arabic numbers and be headed by adequate captions. Their approximate position in the text should be indicated by a note in the margin. They should not exceed in size the equivalent of one page of print. Weights and measurements should be given in metric units. Standard abbreviations should be used $(\mu g, mg, g, kg, ml, 1; mm, cm, m, km, ^{\circ}C, \%, <, >$, hr, min). Abbreviations should not be followed by, and initials need not be separated by, full points (eg, FPA). Mean values should, where possible, be accompanied by standard errors or similar statistical indications of variance.

References in the text should be given in the manner that is standard in the Journal. Titles of journals should be abbreviated according to the *World List of Scientific Periodicals*. 4th edn (1964) and its supplements, and as also given in *World Medical Periodicals*. An unpublished paper should not be cited unless it is already in press.

Debate. A *Debate* section is reserved for comments on papers appearing in previous issues. Authors whose papers are involved will be given an opportunity to reply for simultaneous publication. The Editor's decision as to publication of comments is final. Comments, not exceeding 500 words (one printed page), should be sent to the Editor.

Proofs will be sent to contributors for minor corrections, and should be returned to the Editor within one week. Major alterations to the text will be accepted only at the author's expense. The date of receipt given at the end of the paper is that on which the script as published was received or agreed.

Offprints. A copy of the issue of the Journal in which the paper appears will be supplied free to the author, or, where there are two or more, to the author responsible for ordering offprints. Offprints may be purchased by ordering on the form sent out with the proofs.

© Biosocial Society. With the exception of abstracts of no more than 300 words, no part of this publication may be reproduced or stored in a retrieval system in any form or by any means without the permission of both the Biosocial Society and the author.

JOURNAL OF BIOSOCIAL SCIENCE

The Journal of Biosocial Science is published by the Biosocial Society and distributed by the Portland Press (formerly the Biochemical Society Book Depot).

Orders, payments and enquiries regarding distribution should be sent to:

Journal of Biosocial Science, PO Box 32, Commerce Way, Colchester CO2 8HP, UK

For 1993 (Volume 25) there will be four issues, published in January, April, July and October.

The subscription rates for 1993 are:

	UK and	USA, Canada	
	overseas	and Mexico	Japan only
	(surface mail)	(by air)	(by ASP)
Annual subscription	£60.00	\$116.00	£71.00
Per part	£18.50	\$31.00	£21.50

To avoid a break in continuity subscribers are asked to place their orders, either direct or through an agent, by mid-December. Should a Standing Order be required, this should be indicated in the order instructions and an invoice will then be sent automatically in the last quarter of each year. Limited numbers of earlier issues are available. Volumes 1–10 (1969–78, original price £111.50) are offered to subscribers at the special price of £52.00 (US\$105.00) for the set.

Manuscripts for publication and books for review should be sent to:

The Editor,
Journal of Biosocial Science,
Department of Biological Anthropology,
Downing Street,
Cambridge CB23DZ,
UK

Second-class postage paid in Rahway, New Jersey, USA.

Postmaster. Send address corrections to: Journal of Biosocial Science, c/o Mercury Airfreight International Inc., 2323 Randolph Avenue, Avenel, NJ 07001, USA (US mailing agent).

JOURNAL OF BIOSOCIAL SCIENCE

Vol. 24, No. 4	Contributors October	r 1992
William A. Alto	Assistant Secretary for Health, Mendi, Southern Highlands Province, PNG	p. 527
Shunichi Araki	Professor and Chairman, Department of Public Health, University of Tokyo	, Japa n p. 497
Deanna Ashley	Ministry of Health, Kingston, Jamaica	p. 515
K. M. A. Aziz	Scientist, ICDDR, Dhaka, Bangladesh	p. 427
Patricia E. Bailey	Operations Research Specialist, FHI, Research Triangle Park, NC, USA	p. 433
Fidel Barahona	Chief, Unit of Science and Technology, Honduran Ministry of Public Health	p. 433
Abbas Bhuiya	Associate Scientist, ICDDR, Dhaka, Bangladesh	p. 447
Jesper L. Boldsen	Lecturer, Department of Social Medicine, University of Odense, Denmark	p. 505
Senga Bond	Director of Research, Centre for Health Services Research, University of Ne	
	upon Tyne	p. 561
A. I. Chowdhury	Senior Statistical Office, ICDDR, Dhaka, Bangladesh	p. 427
Janet Daling	Professor, Department of Epidemiology, University of Washington, Seattle, USA	p. 515
Peter Diggory	Chair of Trustees, International Family Health, London	p. 569
Vincent Fauveau	MCH-FP Physician, ICDDR, Dhaka, Bangladesh	p. 427
G. A. Harrison	Professor of Biological Anthropology, University of Oxford pp. 4	177, 561
Ulf Högberg	Associate Professor, Department of Obstetrics and Gynaecology, University of Sweden	f Umeå, p. 487
David Hubacher	Research Associate, FHI, Research Triangle Park, NC, USA	p. 433
Robin Humphrey	Department of Social Policy, University of Newcastle upon Tyne	p. 568
Barbara Janowitz	Population Economist, FHI, Research Triangle Park, NC, USA	p. 433
Sylvia Kirchengast	•	p. 433
Jenny Kitzinger	Research Assistant, I Gynaecological Clinic, University of Vienna Research Officer, MRC Medical Sociology Unit, Glasgow	•
- •	•	p. 566
P. C. Lee	Lecturer, Department of Biological Anthropology, University of Cambridge	p. 563
N. J. Mackintosh	Professor of Experimental Psychology, University of Cambridge	p. 539
C. G. N. Mascie-Taylor	Lecturer and Head of Department of Biological Anthropology, University of Ca	p. 539
Carmen McFarlane	McFarlane Consultants, Kingston, Jamaica	p. 515
Kath M. Melia	Senior Lecturer, Department of Nursing Studies, University of Edinburgh	p. 567
Katsuyuki Murata	Instructor, Department of Public Health, University of Tokyo, Japan	p. 497
Y. Oheneba-Sakyi	Assistant Professor of Sociology, State University of New York, Potsdam, N	•
•	•	p. 463
Helen Pickering	Director, Tari Research Unit, PNG Institute of Medical Research	p. 527
Marco Pinel	Physician, Unit of Science and Technology, Honduran Ministry of Public Health	p. 433
Tessa Pollard	DPhil Student, Institute of Biological Anthropology, University of Oxford	p. 477
Dimitri Prybylski	Health Information Co-ordinator, Division of Health, Mendi, PNG	p. 527
Stephen Rogers	Director, Tari Research Unit, PNG Institute of Medical Research,	p. 527
Tom Shakespeare	Associate, Social Welfare Research Unit, Newcastle Polytechnic	p. 565
Kim Streatfield	Associate, The Population Council, Dhaka, Bangladesh	p. 447
Eiichi Uchida	Postgraduate Student, Department of Public Health, University of Tokyo, Japan	p. 497
Giles Ungpakorn	Research Technician, Institute of Biological Anthropology, University of Oxford	p. 477
Stig Wall	Professor, Department of Epidemiology and Health Care Research, University of	
Charles Warrer	Sweden Secials sist. Division of Adelescent and Saksal Health. Contact for Disease.	p. 487
Charles Warren	Sociologist, Division of Adolescent and School Health, Centers for Disease Atlanta, USA	p. 515
Linda Webster	Epidemiologist, Division of STD/HIV Prevention, Centers for Disease Control,	-
	USA	p. 515
A. M. West	Child Care and Development Group, University of Cambridge	p. 539