

JOURNAL OF ADVERTISING RESEARCH

Journal of Advertising Research (JAR) (ISSN 0021-8499) is published quarterly by Warc % The Sheridan Press, 450 Fame Ave., Hanover, PA 17331 for The ARF. Periodicals postage paid at Hanover, PA and additional mailing offices. POST-MASTER: Send address

changes to Warc, 2233 Wisconsin Avenue NW, Suite 535, Washington, DC 20007.

Annual subscription rates for Volume 51 (2011): Print and online: €340, €324 or £215; Print only: \$315, €214 or £212; Online only: \$285, €278 or £185. A premium annual subscription is also available including online access to all issues published since January 2000: Premium print and online: \$680, €648 or £430; Premium online only: \$625, €602 or £400. Discounted prices are available to individuals and fulltime faculty members and students – please contact the publisher for rates. Member companies of the ARF receive a subscription to the *Journal of Advertising Research* as part of the membership fees.

JAR is intended for practitioners and users of advertising research. JAR solicits original papers. Reports of findings are favored over theoretical discussion. Letters of comment and criticism are invited. Limits on readers' time and journal space require that papers be as short as clarity permits, with a maximum length of 24 pages, including tables and figures. Manuscripts should be submitted online at www.editorialmanager.com/jar

JAR is an open forum. Publication in it implies no endorsement of the writer's purpose, methods, or views by Warc or The Advertising Research Foundation, its board of directors, or any of its councils or committees.

Editor-in-Chief: **Geoffrey Precourt**

Executive Editor: **Douglas West**

The ARF
432 Park Avenue South
6th Floor
New York, NY 10016
(212) 751-5656 *voice*
(212) 319-5265 *fax*
www.thearf.org



**ADVERTISING
RESEARCH
FOUNDATION**

© Copyright 2011 The ARF. All rights reserved.

No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from the World Advertising Research Center. Photocopying information for users in the U.S.A.: Copying for internal or personal use beyond that permitted by Sec. 107 or 108 of the U.S. Copyright Law is authorized for users duly registered with the Copyright Clearance Center (CCC) Transaction Reporting Service, provided that the appropriate remittance is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923. Specific written permission must be obtained for all other copying.

SUBSCRIPTIONS & CUSTOMER SERVICE

Americas: Warc, 2233 Wisconsin Avenue, NW; Suite 535, Washington DC 20007, USA, Tel: (202) 778 0680, americas@warc.com.

Rest of World: Subscriptions Dept, Marston Book Services Ltd, Unit 160, Milton Park, Abingdon, Oxfordshire, OX14 4SD, UK.
Tel. 44(0)1235 465574.

Fax: 44(0)1235 465556.

Email: subscriptions@marston.co.uk.

General Enquiries: jar@warc.com.

Advertising: Diana Pounsford,
Email: diana.pounsford@warc.com

PRINTED IN THE U.S.A.

ARF, THE RESEARCH AUTHORITY

ROBERT L. BAROCCI • President/CEO

TODD POWERS • Chief Research Officer

FELIX YANG • Chief Operating Officer

HEATHER JAMES • Chief Marketing Officer

WILLIAM A. COOK • Executive Vice President, Research & Standards

DAVID MARANS • Executive Vice President, Media

TED McCONNELL • Executive Vice President, Digital

HORST STIPP • Executive Vice President, Global Business Strategy

CASSANDRA BATES • Chief Business Strategist

STEPHEN D. RAPPAPORT • Director Knowledge Solutions

CATHERINE GARDNER • Managing Editor

EDITORIAL ADVISORY BOARD

Avery Abernethy
Auburn University

Anthony Adams
Marketing Insights, Inc.

Dean Adams
Merton Adams

J. Scott Armstrong
The Wharton School

Henry Assael
New York University

Allan L. Baldinger
Consultant

Robert Barocci
The ARF

Rajeev Batra
University of Michigan

Richard Beltrami
Wayne State University

Rex Briggs
Marketing Evolution

Bobby J. Calder
Northwestern University

Neil Canter
Marketing Accountability
Partnership

Ira Carlin
MagnaGlobal USA

Albert Caruana
University of Malta

Larry Chiagouris
Pace University

C. Samuel Craig
New York University

Isabella Cunningham
University of Texas at
Austin

John Deighton
Harvard Business School

Barbara Delia
Consultant

John Eighmey
University of Minnesota

Anita Elberse
Harvard Business School

Jaafar El-Murad
Westminster Business
School

Erwin Ephron
Ephron, Papazian &
Ephron, Inc.

Thomas Evans
ESPN

Paul Farris
Darden Graduate Business
School

John Ford
Old Dominion University

Judy Harrigan
Harrigan-Bodick Inc.

Robert Heath
University of Bath

Janet Hoek
University of Otago

Stephen Kim
Microsoft

Scott Koslow
Waikato Management
School

Martin R. Lautman
Marketing Channels

A. Dawn Lesh
McCann Erickson
Worldgroup

Leonard Lodish
University of Pennsylvania

Richard Lutz
University of Florida

Harold Meij
The Coca-Cola Company,
Japan

William T. Moran
Longman-Moran Analytics,
Inc.

Gary Morgan
Roy Morgan Research

Elissa Moses
EmSense

Peter Neijens
University of Amsterdam

Joseph Plummer
Columbia Business School

Gerard Prendergast
Hong Kong Baptist
University

Lew Pringle
Yorktown University

Nat Puccio
Grey Worldwide

Dwight R. Risky
Risky Business

Sheila Sasser
Eastern Michigan University

Byron Sharp
Ehrenberg Bass Institute

Jonathan B. Sims
Comcast Cable
Communications

Kate Sirkin
Starcom MediaVest Group

Marla Royne Stafford
University of Memphis

David Stewart
Marshall School of
Business

Horst Stipp
The ARF

Alice Sylvester
Sequent Partners

Isabelle Szmigin
Birmingham Business
School

John Tarsa
Bristol-Myers Squibb

Jerry Thomas
Decision Analyst

B. Stuart Tolley
Consultant

David Torres
Nestlé

Lex van Meurs
Intomart GfK

Brian Wansink
Cornell University

William D. Wells
University of Minnesota

Jerry Wind
The Wharton School

Russ Winer
New York University

Robert P. Woodard
Campbell Soup Company

Arch Woodside
Boston College

Barbara Zack
Nielsen IAG

Gerald Zaltman
Harvard Business School



WARC

Online version at
www.JournalofAdvertisingResearch.com