

JUDGMENT / DECISION MAKING

J/DM BALLOTS IN THIS ISSUE -- PLEASE VOTE . . .

As noted in the last *J/DM Newsletter*, the balloting for officers for the Society was delayed. On Page 14 of this issue you will find the ballots President-Elect and a new member of the Executive Committee. Please cast your ballot as soon as possible. The deadline for receipt of ballots is March 1, 1992.

— Terry Connolly

J/DM NEWSLETTER EDITOR RETIRES. . .

With this issue of the *J/DM Newsletter*, your editor is retiring. I have edited the newsletter for eleven years. (Although the volume number is only number 10, the Newsletter has been published since 1981.) It all began innocently enough: In November 1980 at the first meeting of the group of researchers which eventually became the Society for Judgment and Decision Making, there was discussion of how we might communicate with each other and with others with interest in judgment and decision making. I did some quick calculations and informed the group that I could publish and mail 4-5 newsletters a year for \$1.00 per person if we could get enough subscribers to qualify for bulk mail privileges. Before I could retract my offer, Paul Hoffman, sitting at the other end of the table, whipped out a dollar, passed it down the table, and the newsletter was born. The first *J/DM Newsletter* was published in June 1981 and ran 16 pages.

During the past 10 years, J/DMer's have contributed to and supported the *J/DM Newsletter*. Indeed, whatever success we have had is due to the contributions of many readers. Although it is not possible to name every one of you here, two people deserve special mention: Jay Christensen-Szalanski who produces the *Recent Developments in the Psychology of Judgment and Decision Making* and the *Recent Advances in Medical Decision Making* sections and negotiated with the journal *Medical Decision Making* for permission to reprint his valuable contributions, and Jonathan Baron for his frequent reviews which appear as the column *Recent Philosophical Literature*. I also thank the many Indiana University students who over the years volunteered to help with the mailing of the newsletter.

It has been a pleasure and an challenge to edit the *J/DM Newsletter* for the last decade. I look forward to an even better newsletter from my successor.

— John Castellan

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SUBMISSION DEADLINE FOR THE NEXT *J/DM NEWSLETTER*: March 1, 1992

RECENT NEWS

Vol. X
Number 5
DECEMBER 1991

SOCIETY FOR JUDGMENT AND DECISION MAKING

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J/DM NEWSLETTER

Editor:

N. John Castellan, Jr.
 Department of Psychology
 Indiana University
 Bloomington, Indiana 47405

(812) 855-4261

BITNET: castellan@IUBACS
 INTERNET: castellan@ucs.indiana.edu

Dues, Addresses & Corrections:

Terry Connolly
 Management and Policy Department
 Business and Public Administration
 University of Arizona
 Tucson, Arizona 85721

(602) 621-5937

BITNET: connolly@ARIZRVAX

FROM THE EDITOR . . .

The *JIDM Newsletter* welcomes submissions from individuals and groups. However, we do not publish substantive papers. Book reviews will be published. If you are interested in reviewing books and related materials, please write to the editor.

There are few ground rules for submissions. In order to make the cost of the *JIDM Newsletter* as low as possible, please submit camera-ready copy. This means that the copy should be typed single-spaced on white 8½ by 11 paper. If possible, use a carbon or film ribbon. Please mail flat -- do not fold. A better alternative is to submit your contribution via EMAIL.

Subscriptions: Subscriptions are available on a calendar year basis only. Requests for information concerning membership in the Society for Judgment and Decision Making should be sent to Terry Connolly.

Address correction: Please check your mailing label carefully. Because the *JIDM Newsletter* is usually sent by bulk mail, copies with incorrect addresses or which are otherwise undeliverable are neither forwarded nor returned. Therefore, we have no way of knowing if copies are delivered. Address changes or corrections should be sent to Terry Connolly.

Mailing Labels: Some readers may wish to sent reprint lists or other material to people listed in the directory. Contact Terry Connolly for details.

Electronic Mail: The editor may be reached through BITNET at "castellan@IUBACS." [Some users may find it either necessary (or more convenient) to address the editor using only the first 8 characters (castella).] BITNET addresses also can be reached from most of the university and research networks.

J/DM Electronic Mail Directory: The Society maintains an EMAIL directory. To add your name to the *JIDM Electronic Mail Directory* (or to receive a copy of the electronic directory) contact Terry Connolly.

Minutes of Meeting of the J/DM Executive Committee

Scott's Carriage House Grill, San Francisco

November 23, 1991

The meeting was called to order at 8 pm, Baruch Fischhoff presiding.

1. John Carroll, for the Publications Committee, reported that the first book (Reid Hastie's) of the Society's planned series with Cambridge University Press is in final production, and will appear in early 1992. Other volumes are at various stages of writing, preparation or discussion, with emphasis on the latter. The Committee hopes to move more projects towards reality, partly by streamlining the review process, and by talking the series up. The relationship with Cambridge seems satisfactory, though the review process needs attention to avoid unnecessary duplication and delay, and to ensure that we speak to authors with one voice. It was proposed that the Committee membership be replaced at the rate of one member per year; members leaving the Committee would retain responsibility for overseeing the projects they had taken on during their terms. Overall, John's assessment was that the publications activities were going reasonably well.

2. George Loewenstein, for the Program Committee, reported on the changes that have been introduced for this year: An extension of the Monday program till 5 pm, and the introduction of some individual (non)symposium papers. The intent is to broaden member involvement and submission of papers, a process the Committee would like to see continuing. There was some discussion of splitting part of the meeting into parallel sessions, so as to accommodate more individual papers, but no resolution was reached on the desirability of this. Reid Hastie will rotate off the Program Committee this year, and a replacement will be sought. There was also discussion of the desirability of having one "local" member, to serve a one-year term and assist in local arrangements for each meeting -- a role admirably handled by Barbara Mellers this year. There was also (once again) discussion of the desirability of maintaining our relationship with Psychonomics. In light of the considerable time lags involved (contracts are now being negotiated for their 1994 meeting), it was decided that (a) We would continue to meet with Psychonomics for at least one more year; and (b) A task force chaired by Tom Wallsten would examine the longer range issue of meeting schedules.

3. John Castellan, for the Newsletter, reported that things were going well, but that he intended to resign from the Editorship as soon as a replacement can be found. The Board expressed its gratitude for John's many years of

exemplary service in this role. Nominations and volunteers for his replacement are requested.

4. Dave Johnson, visiting from the Federation of Behavioral, Psychological and Cognitive Sciences, reported briefly on the activities of the Federation. He urged that we be thinking programmatically about J/DM needs 5-10 years ahead, especially in the context of the recent NSF reorganization. He also noted the December 2 deadline for nominations for the Deputy Director post created in that reorganization. He noted that the new dues for our participation in the Federation would be \$10 per member (i.e., 50% of our current regular member dues), a figure he hoped would be held constant over the next several years.

5. John Castellan reported on the NSF reorganization which in substance split behavioral and social sciences from their previous directorate grouping with biology. The internal structure of the new directorate is still unresolved, an issue that led to considerable discussion, since it seems likely to affect the future of DRMS, a program close to many J/DM members. The content of the discussion was carried forward to the Society's Business Meeting, and will be reported there. A task force of Robin Hogarth, Lola Lopes and Baruch Fischhoff was appointed to articulate the Society's response to these issues.

5. Terry Connolly reported briefly on the Society's financial and membership status. Paid membership as of 11/19/91 totalled 919, including 118 student members, and 138 foreign members. (Note: There may be some shrinkage here from previous years, since he has been purging and updating the membership rolls, dropping members with more than two years of unpaid dues or bad addresses. The 919 total thus appears to be substantially all active members.) The Society's finances are less clear, mainly because receipts are now at their pre-meeting peak, and the major payments are due right afterwards. His best estimate is that, after meeting bills and our contribution to the Federation are paid, we will retain a working reserve in the \$12,000 range, approximately where we were last year. No increase in dues for 1992 is anticipated.

6. In other business, the President noted that election of new officers had been delayed, due to an oversight (apologies: TC). Nominations are now closed, and the ballot will be included in the December News letter. John

(Continued on next page)

Minutes of Executive Committee (continued)

Castellan brought to the Boards' attention discussion within Psychonomics of the possibility of them publishing a new journal with a decision making focus. There was some discussion of the possibility of the Society participating in such an effort.

There being no further business, the meeting was adjourned at 10 pm.

Respectfully submitted,

Terry Connolly
Secretary/Treasurer

Minutes of the General Business Meeting of the Society
Hyatt Regency Hotel, San Francisco
November 24, 1991

The meeting came to order at 5 pm, Baruch Fischhoff presiding.

(Secretary's note: Much of the business consisted of reports to the membership of business conducted during the Board's meeting of 11/23/91, and summarized in the above Minutes of that meeting. The notes here are of additional issues not covered there.)

1. Jim Shanteau asked that in future years we publicize J/DM sessions of the Psychonomics Society to J/DM members. It was noted that this had been done in previous years, and was not done this year only by oversight.

2. The possibility of improved liaison with SPUDM, the European equivalent of J/DM, was discussed, especially since they appear to be moving towards more formal organizational existence. In particular, the possibility of their serving as a dues collecting point for European J/DM members was noted, with the purpose of saving currency conversion charges that currently can exceed the dues themselves. (Note that foreign members are currently allowed in our Bylaws the option of paying dues in advance for several years at a time, to minimize these charges.)

3. The bulk of the meeting was devoted to an extensive discussion of the Society's posture towards the newly created Social, Behavioral and Economic Sciences Directorate at NSF. The discussion was informed by the remarks of several current and former Program Officers at the Foundation; present and former officers of the Society; and a wide range of the membership. Concerns touched on aspects of disciplinary affiliation, independence, funding growth, protection and development of the Decision, Risk, and Management Science (DRMS) program, and a range of other issues. After extensive discussion, it was resolved that the Society would campaign actively for the maintenance of the DRMS program as an independent entity, and for its housing in a Division on an equal footing with Economics. The Board's proposal of a task force consisting of Lopes, Hogarth, and Fischhoff to coordinate our response to these developments was also approved.

There being no other business, and the lure of the Social Hour and Poster Session becoming pressing, the meeting adjourned at 6:30 pm.

Respectfully submitted,

Terry Connolly
Secretary/Treasurer

Treasurer's Report, 1990-91

A: Summary of Indiana Filing, 7/1/90 - 6/30/91

	Opening cash on hand 7/1/90	\$13,417
<u>Income</u>		
	Dues	\$8,600
	Mtg registration	\$9,950
	Royalties	\$ 616
	Interest	\$ 565
	Mailing labels, ads	\$ 55
	TOTAL INCOME	\$19,786
<u>Expenditures</u>		
	Newsletter	\$2,000
	Meeting, total	\$9,393
	Postage	\$ 877
	Federation membership	\$3,066
	Office & Misc	\$ 577
	TOTAL EXPENDITURES	\$15,914
	Closing cash on hand 6/30/91	\$17,288

B: Transactions since 7/1/91:

<u>Income</u>		
	Meeting registration	\$11,190
	1991 dues	\$ 1,720
	1992 and future dues	\$ 7,015
	Delinquent dues recovery	720
	Label sales	\$ 370
	Interest (est)	\$ 400
	TOTAL INCOME	\$21,415
<u>Expenditures</u>		
	Meeting, total	\$14,662
	Newsletter	\$ 3,500
	Postage	\$ 361
	Office & misc	\$ 548
	Federation dues	\$ 4,230
	TOTAL EXPENDITURES	\$23,301
	Closing cash in hand, 12/31/91 (est -- some transactions outstanding)	\$15,402

T. Connolly
Secretary/Treasurer
1/1/92

NEW BOOK. . .

Chechile, Richard A., & Carlisle, Susan, (Eds). *Environmental Decision Making: A Multidisciplinary Perspective*. New York: Van Nostrand Reinhold

This book is the result of a concerted team effort at the Tufts University Center for the Study of Decision Making. We realized that there was no existing book on environmental decision making, and we realized that decision making was at the core of environmental problems as well as at the core of solutions to those problems. To meet this challenge, an Environmental Decision Making (EDM) group was formed by bringing together interested researchers from a wide spectrum of disciplines. The EDM group included individuals from twelve different departments who each have part of the story to tell in regard to environmental decision making. The EDM group met frequently in order to explore the problems, tools, discoveries and challenges of environmental decision making. The EDM seminar series went on for more than a year and has lead directly to the present work. The resulting book is quite unlike most edited books, since all the chapters have been reviewed and debated by all the other members of the EDM group. We have found this project to be exciting and hope that this book will stimulate further developments in the environmental decision making area.

This book is intended to be read at several different levels. For the interested nonprofessional and introductory university student, it represents an introduction to the problems and challenges of decision making and management in relation to the environment. For environmental professionals, the book provides a concise series of introductions to disciplinary approaches other than their own. For decision scientists, the book presents the new challenges that are posed in decision making in the environmental arena. For the advanced university student, end-of-chapter suggestions for additional reading, suggested projects, and questions are provided in order to stimulate further research. For everyone, special efforts have been made to present clearly technical and mathematical concepts without assuming advanced training in mathematics and science. Disciplinary jargon has been avoided or explained in order that the general reader can understand the issues without being a disciplinary specialist.

JOURNAL OF BEHAVIORAL DECISION MAKING

Special Rates for J/DM Members

Privileged personal subscription rates for the *Journal of Behavioral Decision Making* are available to members of the J/DM Society. The 1992 rates are US \$50. Personal subscriptions must be prepaid by personal check or credit card.

Institutional subscription rates for Volume 5 (1992) are US \$155, and individual subscriptions are US \$78.

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RECENT PHILOSOPHICAL LITERATURE. . .

Schick, F. *Understanding Action: An Essay on Reasons*. New York: Cambridge University Press, 1991. Pp. 167. \$29.95, \$10.95 (paper)

Since the eclipse of behaviorism by cognitive psychology, most psychologists have explained action in terms of beliefs and desires. Schick adds a friendly amendment to this view. We need a third factor, understandings. Schick gives the example of George Orwell, who went to Spain to fight fascism. His first opportunity to shoot a fascist was a man emerging from a trench holding his pants up. Orwell understood the man as a "fellow creature" rather than a "fascist," and he didn't shoot. Orwell's beliefs and desires were in some sense the same as if he had shot. He desired to shoot fascists and not to shoot fellow creatures, and he believed that the man was both. The difference was his understanding of the situation. Likewise, Kahneman and Tversky's Asian disease problem can be understood as involving gains or losses.

We can believe (or desire) a proposition even though we do not believe (desire) a proposition that "reports the same fact." We can therefore understand the "same situation" differently, so we violate invariance. Schick includes utility assignments as propositional attitudes like beliefs and desires. We can assign different utilities to "the same" outcome depending on our understanding, which can be influenced by how it is described.

Schick is largely concerned with making sense of action rather than evaluating it, but he suggests that his analysis also constrains expected-utility theory and invariance as normative criteria. He has indeed found problems with these criteria when they are derived from a view of utility as a propositional attitude, as something "in the head" when a decision is made. (He ignores the possibility that utility is a property of outcomes, independent of how the outcome is described.)

In addition to clarifying the nature of psychological theory, the book contains many interesting discussions of classic problems in decision theory.

-- Jonathan Baron

PATRICIA REAGAN-CIRINCIONE WINS THE SIXTH ANNUAL DECISION ANALYSIS STUDENT PAPER COMPETITION

Dr. Patricia Reagan-Cirincione won the sixth annual Operations Research Society of America (ORSA) Decision Analysis Special Interest Group's Student Paper Competition with her paper, "Combining Group Facilitation, Decision Modeling, and Information Technology to Improve the Accuracy of Group Judgment." Dr. Reagan-Cirincione received her Ph.D. at the Rockefeller College of the State University of New York at Albany. Her dissertation advisor was Professor John Rohrbaugh.

Dr. Dennis Buede was the Chair of the 1991 Student Paper Competition. Other judges for the competition were David Bell, Frederick Buoni, Kofi Kissi Dompere, Jehoshua Eliashberg, John Lathrop, Jennifer Rowley, Richard Soland, Donald Steinwachs, and Joseph Tatman. Nine papers were received for the 1991 competition and the quality of the papers was very high.

The winner was announced at the ORSA/TIMS meeting in Anaheim, November 3, 1991. Inquires about the competition may be addressed to Dr. Dennis M. Buede, Department of Systems Engineering, George Mason University, Fairfax, VA 22030-4444. Phone: (703) 993-1727.

Recent Developments in Medical Decision Making

Compiled by Jay Christensen-Szalanski, PhD, MPH

ARTICLES

BERTRAM DA, Hershey CO, Opila DA, Quirin O. A measure of physician mental work load in internal medicine ambulatory care clinics. *Med Care*. 1990;28:458-67. Develops a reliable measure of physicians' mental work load.

BRODY DS, Miller SM, Lerman CE, Smith DG, Caputo GC. Patient perception of involvement in medical care: relationships to illness attitudes and outcomes. *J Gen Intern Med*. 1989;4:506-11. Reports that "active" patients reported less discomfort, and more improvement in their general medical condition, than did "passive" patients.

FLETCHER SW, O'Malley MS, Earp JL, et al. How best to teach women breast self-examination: a randomized controlled trial. *Ann Intern Med*. 1990;112:772-9. Observes that a training program that stresses tactile skills resulted in improved long-term lump detection and examination technique.

GLEESON K, Wise S. The do-not-resuscitate order: still too little too late. *Arch Intern Med*. 1990;150:1057-60. Reports that DNR orders do not result in a reduction in the quantity of nursing activity for patients as they die.

GREENLAND S, Morgenstern H. Matching and efficiency in cohort studies. *Am J Epidemiol*. 1990;131:151-9. Shows that matching can reduce the efficiency of a cohort study even if the matching variable is a confounder.

GUYATT GH, Keller JL, Jaeschke R, et al. The n-of-1 randomized controlled trial: clinical usefulness. *Ann Intern Med*. 1990;112:293-9. Claims that n-of-1 trials can be useful in clinical practice.

HAVILAND MG. Yates correction for continuity and the analysis of 2 x 2 contingency tables. *Stat Med*. 1990;9:363-7. Shows that Yates's correction for continuity and Fisher's exact probability test should not be used.

LUFT HS, Garnick DW, Mark DH, et al. Does quality influence choice of hospital? *JAMA*. 1990;263:2899-906. Suggests that quality of a hospital played an important role in choices among hospitals even before explicit data were widely available.

MILLER RH, Williams PC, Napolitana G, Schmied J. Malpractice: case-control study of claimants. *J Gen Intern Med*. 1990;5:244-8. Identifies several patient variables that were associated with notification of an intent to file a claim.

SAGER M, Voeks S, Drinka P, et al. Do the elderly sue physicians? *Arch Intern Med*. 1990;150:1091-3. Reports that elderly people were less likely to initiate malpractice litigation despite greater exposure to potential negligence.

TIERNEY WM, Miller ME, McDonald CJ. The effect on test ordering of informing physicians on the charges for outpatient diagnostic tests. *N Engl J Med*. 1990;322:1499-504. Shows that displaying the charges for diagnostic tests significantly reduced the number and cost of tests ordered.

ZWEIBEL NR, Cassel CK. Treatment choices at the end of life: a comparison of decisions by older patients and their physician-selected proxies. *Geroontology* 1989;29:615-21. Uses vignettes to show that patients selected different outcomes than physician-selected proxies.

ARTICLES FROM MDM VOLUME 10

ASCH DA, Patton JP, Hershey JC. Knowing for the sake of knowing: the value of prognostic information. *Med Decis Making*. 1990;10:47-57. Presents a model that incorporates a test's value for the prognostic information it provides apart from its effect on patient management.

BLACK WC. The CE plane: a graphic representation of cost-effectiveness. *Med Decis Making*. 1990;10:212-4. Shows how to illustrate a cost-effectiveness analysis using graphs.

BLACK WC, Dwyer AJ. Local versus global measures of accuracy: an important distinction for diagnostic imaging. *Med Decis Making*. 1990;10:266-73. Shows that a distinction between local and global accuracy supports the commonsense notion that information pertaining to the anatomic distribution of disease is crucial for test interpretation.

BOVD NF, Sutherland HI, Heasman KZ, et al. Whose utilities for decision analysis? *Med Decis Making*. 1990;10:58-67. Suggests that utilities for a particular state of health may change when an individual enters that state; observes moderate to poor reliability of utility assessments and treatment choices over time.

BUUR T, Timpka T. Improvement of decisions regarding hemodialysis patients by urea kinetic modeling. *Med Decis Making*. 1990;10:274-82. Concludes that UKM should be used routinely to assess the adequacy of dialysis and daily protein intake.

CURLY SP, Connelly DP, Rich EC. Physician's use of medical knowledge resources: preliminary theoretical framework and findings. *Med Decis Making*. 1990;10:231-41. Presents a cost-benefit model to account for physicians' selection among potential sources of knowledge.

DÉBER R, Goel V. Using explicit decision rules to manage issues of justice, risk, and ethics in decision analysis: when is it not rational to maximize expected utility? *Med Decis Making*. 1990;10:181-94. Suggest that the MEU principle is merely one of a set of possible decision rules, and that different decision rules reflect different normative assumptions.

EDDY DM, Hasselblad V, Schachter R. An introduction to a Bayesian method for meta-analysis. The confidence profile method. *Med Decis Making*. 1990;10:15-23. Presents a meta-analytic method for evaluating technologies.

FOS PJ, McLin C. The risk of falling in the elderly: a subjective approach. *Med Decis Making*. 1990;10:195-200. Constructs

and validates a Bayesian index for predicting the risk of a fall in an institutionalized population.

GEORGESON S, Sonnenberg F, Feingold M, Pauker SG. Twisted sisters: when is the optimal time for delivery. *Med Decis Making*. 1990;10:295-302. Presents the results of a clinical decision making conference that tries to determine the optimal timing of delivery for twins who are particularly prone to entanglement of their umbilical cords.

HENKELMAN RM, Kay I, Bronskill MJ. Receiver operator characteristic (ROC) analysis without truth. *Med Decis Making*. 1990;10:24-9. Describes an ROC analysis that can be used when several accurate tests are being compared. (Commentary: Begg CB, Metz CE: Consensus diagnoses and "gold standards." *Med Decis Making*. 1990;10:29-30.)

HUGHES C, Hughes KK. N-way sensitivity analysis: a verification and stability-assessment technique for completely subjective decision analysis trees. *Med Decis Making*. 1990;10:68-74. Describes the development of an N-way sensitivity analysis.

HUNINK MGM, Richardson DK, Doubilet PM, Begg CB. Testing for fetal pulmonary maturity: ROC analysis involving covariates, verification bias, and combination testing. *Med Decis Making*. 1990;10:201-11. Finds that the above-mentioned issues meaningfully affected the results of an ROC analysis; demonstrates a method to account for these issues.

JOSEPH G-M, Patel VL. Domain knowledge and hypothesis generation in diagnostic reasoning. *Med Decis Making*. 1990;10:31-46. Provides evidence for a two-stage problem solving process.

KNAUS WA, Rauss A, Alperovitch A, et al. Do objective estimates of chances for survival influence decisions to withhold or withdraw treatment? *Med Decis Making*. 1990;10:163-71. Observes that physicians exhibited a small tendency to stop active treatment and provide comfort care to patients who were labeled as having a small chance of survival. (Related editorial: Hickam DH. Do severity of disease classification tools change patient care? *Med Decis Making*. 1990;10:153-4.)

MATCHAR DB, Simel DL, Geweke JF, Feussner JR. A Bayesian method for evaluating medical test operating characteristics when some patients' conditions fail to be diagnosed by the reference standard. *Med Decis Making*. 1990;10:102-11. Shows how to use Bayesian analysis to evaluate tests when the study group includes patients whose disease status is unknown. (Commentaries follow: Nease RF Jr, Owens DK: Assessment and representation of prior beliefs: unexpected implications of the uniform distribution. *Med Decis Making*. 1990;10:112-4. Matchar DB, Geweke JF, Simel DL, Feussner JR. Uniform priors aren't a thing of the past. *Med Decis Making*. 1990;10:114-5.)

MAZUR DJ. Judicial and legislative viewpoints on physician misestimation of patient dysutilities: a problem for decision analysis. *Med Decis Making*. 1990;10:172-80. Argues that a key link dividing the judicial and medical professions is the differing weights given to the "value of information."

MAZUR DJ, Hickam DH. Treatment preferences of patients and physicians: influences of summary data when framing effects are controlled. *Med Decis Making*. 1990;10:2-5. Suggests that the amount of data presented can influence physicians' decision making.

MCCUSH DK. Determining a range of false-positive rates for which ROC curves differ. *Med Decis Making*. 1990;10:283-7. Presents a model for directly comparing true-positive rates for two diagnostic, screening, or prognostic tools.

MOONEY C, Mushlin AL, Phelps CE. Targeting assessments of magnetic resonance imaging in suspected multiple sclerosis. *Med Decis Making*. 1990;10:77-84. Suggests that the use of MR to evaluate patients with mild neurologic symptoms may be cost-effective.

NORD E. Reducing sick leave costs by shortening waiting periods for elective surgery. *Med Decis Making*. 1990;10:95-101. Examines a policy of giving a higher priority to patients on sick leave who are waiting for elective surgery.

PARKAN C, Hollands L. The use of efficiency linear programs sensitivity analysis in medical decision making. *Med Decis Making*. 1990;10:116-25. Demonstrates a linear program-based approach to sensitivity analysis.

PINE MB, Rogers DF, Morgan D, Beller RH. Potential effectiveness of quality assurance screening using large but imperfect databases. *Med Decis Making*. 1990;10:126-34. Concludes that outcome-based quality assurance screening can be accurate when imprecise information on patient-specific risk is used.

POSES RM, Bekes C, Copare FJ, Scott WE. What difference do two days make? The inertia of physicians' sequential prognostic judgments for critically ill patients. *Med Decis Making*. 1990;10:6-14. Concludes that physicians who had the opportunity to observe patients over time could not take advantage of sequential clinical information.

RAUS A, Knaus WA, Patois E, et al. Prognosis for recovery from multiple organ system failure: the accuracy of objective estimates of chances for survival. *Med Decis Making*. 1990;10:155-62. Concludes that persistent multiple OSF results in consistent clinical outcomes despite pathogenetic variations.

SCHECHECTER CB. Sequential decision making with continuous disease states and measurements. I. Theory. *Med Decis Making*. 1990;10:242-55. Examines the mathematics of decision making with continuous variables.

SCHECHECTER CB. Sequential decision making with continuous disease states and measurements. II. Applications to diastolic blood pressure. *Med Decis Making*. 1990;10:256-65. Uses a model of sequential decision making to show that national recommendations on treatment of high blood pressure can be improved.

THORTON JG, Lilford RJ. Prenatal diagnosis of Down's syndrome: a method for measuring the consistency of women's decisions. *Med Decis Making*. 1990;10:288-93. Observes that some nonpregnant women were inconsistent in their replies to hypothetical decisions.

WEISSFELD JL, Weissfeld LA, Holloway JJ, Bernard AM. A mathematical representation of the expert panel's guidelines for high blood cholesterol case-finding and treatment. *Med Decis Making*. 1990;10:135-46. Describes a computer simulation of the national cholesterol education program.

YARNOLD PR, Nightingale S, Curry RH, Martin GJ. Psychological androgyny and preference for intubation in a hypothetical case of end-stage lung disease. *Med Decis Making*. 1990;10:215-22. Suggests a negative relationship between androgyny and a preference for using health care procedures.

For How Long

ESSAYS

BROCK DW, Wartman SA. When competent patients make irrational choices. *N Engl J Med.* 1990;322:1595-9. Discusses some of the practical obstacles in distinguishing between a patient's irrational choices and merely unusual choices.

CHALMERS TC, Frank CS, Reitman D. Minimizing the three stages of publication bias. *JAMA.* 1990;263:1392-5. Proposes interventions to minimize publication bias.

COLDITZ GA, Miller JN, Mosteller F. Measuring gain in the evaluation of medical technology: the probability of a better outcome. *Int J Tech Assess Health Care.* 1988;4:637-42. Suggests that the "probability of a better outcome" should be used more in technology assessment.

DOLAN JG. Can decision analysis adequately represent clinical problems? *J Clin Epidemiol.* 1990;43:277-84. Argues that the analytic hierarchy process, a multiobjective decision making technique, would improve the usefulness of medical decision analysis.

EBBS SR, Fallowfield LJ, Fraser CA, Baum M. Treatment outcomes and quality of life. *Int J Tech Assess Health Care.* 1989;5:391-400. Examines several methods to measure the effect of disease upon quality of life.

EDDY DM. Selecting technologies for assessment. *Int J Tech Assess Health Care.* 1989;5:485-501. Presents a model that estimates the expected impact of an assessment on health and economic outcomes for a population.

FORMAN EN, Ladd RE. Telling the truth in the face of medical uncertainty and disagreement. *Am J Ped Hem Oncol.* 1989;11:463-6. Argues that disagreements that arise because of medical uncertainties are disagreements in attitudes where appeal to expertise is not possible.

GREENES RA, Shortliffe EH. Medical informatics: an emerging academic discipline and institutional priority. *JAMA.* 1990;263:1114-20. Describes the medical informatics field.

HLATKY MA, Califf RM, Harrell FE, et al. Clinical judgment and therapeutic decision making. *J Am Coll Cardiol.* 1990;15:1-

14. Concludes that randomized studies, meta-analyses, and increased collaboration will improve the knowledge base for future decisions.

HORDER J, Metcalfe D. Requirements for technology as seen by providers of primary health care. *Int J Tech Assess Health Care.* 1989;5:91-101. Proposes principles that might ensure that procedures used in primary care are appropriate to people's needs and expectations.

HOWARD RA. Microrisks for medical decision analysis. *Int J Tech Assess Health Care.* 1989;5:357-70. Discusses the use of "microprobabilities" and "micromorts" in medical decision making.

JAESCHKE R, Sackett DL. Research methods for obtaining primary evidence. *Int J Tech Assess Health Care.* 1989;5:503-19. Reviews the benefits and risks of relying on case-control and cohort studies.

LAPUMA J, Lawlor EF. Quality-adjusted life-years: ethical implications for physicians and policymakers. *JAMA.* 1990;263:2917-21. Concludes that using quality-adjusted life-years for health policy is problematic and using it at the bedside is dangerous.

LITTENBERG B, Garber AM, Sox HC Jr. Screening for hypertension. *Ann Intern Med.* 1990;112:192-202. Concludes that screening is most cost-effective for older adults and males.

SOURMERAI SB, Avorn J. Principles of educational outreach ('academic detailing') to improve clinical decision making. *JAMA.* 1990;263:549-56. Presents several principles that may reduce inappropriate prescribing of medications.

TORRANCE GW, Feeny D. Utilities and quality-adjusted life years. *Int J Tech Assess Health Care.* 1989;5:559-75. Reviews the use of utilities and quality-adjusted life-years in technology assessment.

WOLPERT RL. Eliciting and combining subjective judgments about uncertainty. *Int J Tech Assess Health Care.* 1989;5:537-57. Reviews some of the methods for eliciting and combining opinions about uncertain events.

Marketing Decisions Using Expert Choice

Expert Choice, Inc., the Decision Support Software Company, announces their new book for marketing software: *Marketing Decisions Using Expert Choice* (\$49.95). It includes a 4-level version of the software. We also offer the workbook without the software for \$25.00. The book contains applications and case studies in marketing using decision support the Expert Choice software, which is based on the Analytic Hierarchy Process (AHP), a multicriteria decision making process. This book describes how to provide decision support to executives making marketing decisions. It discusses situatio analysis in the Expert Choice framework: market research, competition, forecasting, and market strategy planning, and includes case studies for each chapter showing how to use the Expert Choice software. Exercises are given for the reader to work out. The chapters include "Marketing Decisions and Executive Decision Support", "Situation Analysis", "Market Strategy Planning", and "Evaluation and Control". By R.F. Dyer, E.A. Forman, E.H. Forman, and G. Jouflas, paperback, 210 pp. Available from Expert Choice, Inc. Call (412) 682-3844.

FORTHCOMING MEETINGS. . .

MIDWEST DECISION SCIENCES INSTITUTE. . .

The 1992 Midwest Region Conference will be held May 3-5, 1992 at the Holiday Inn Crowne Place in Kansas City, Missouri. The theme is *Telecommunications in the 1990's*. There will be sessions on Accounting, Finance, Innovative Education, MIS/DSS/ES, Management/Policy, Marketing, Microcomputer Applications, Organizational Behavior, Production/Operations Management, Statistics/Operations Research, Public/Non-Profit Organizations. For further information contact Dr. Brian Belt or Dr. Philip Crossland, Program Co-Chairs, Bloch School of Business and Public Administration, University of Missouri-Kansas City, Kansas City, MO 64110-2499. Or (816) 235-2322 (Belt), (816) 235-2892 (Crossland). FAX: (816) 235-2312.

INTERNATIONAL ASSOCIATION FOR CONFLICT MANAGEMENT. . .

"The International Association for Conflict Management (IACM) will hold its upcoming international conference on June 17-20, 1992. The conference will be held at the Hubert H. Humphrey Conflict and Change Center, University of Minnesota, Minneapolis. Papers and presentations will deal with the following conflict management areas: organizational, communication, negotiation, bargaining, mediation, arbitration, social justice, intergroup, public sector, international, and decision making. If you wish to submit a paper for possible presentation at the conference, please write to William H. Ross, Department of Management, University of Wisconsin - La Crosse, 1725 State Street, La Crosse, WI 54601, USA, or call (608) 785-8450 for additional information."

TWELFTH INTERNATIONAL SYMPOSIUM ON FORECASTING. . .

Announcement and Call for Papers

The International Institute of Forecasters is holding its 12th International Symposium on Forecasting, ISF-92 in Wellington, New Zealand, at the Plaza International Hotel from August 7-10, 1992. Papers are invited on any aspect of producing, evaluating, or using forecasts. In addition to sessions on forecasting in commercial, economic and policy environments, there will be sessions on forecasting risks of natural disasters (earthquakes, eruptions, storms, droughts), on long term risks (the greenhouse effect) and on forecasting political, social, or technological risks and their implications for economic, commercial, and social activity. The symposium provides a unique opportunity to link experience of forecasting methodologies from these diverse fields. Persons interested in contributing a paper to the Symposium should submit an abstract by April 1, 1992. Each abstract should contain a description of the paper in not more than 200 words, the name(s) of the author(s), institution, mailing address and a contact telephone number, a facsimile number or an email address. Final drafts should be submitted by May 1, 1992. To register an interest in attending, or in contributing a paper, and to get further mailings contact ISF-92, P. O. Box 10-277, Wellington, New Zealand. Telephone: +64 (4) 472-5564. Facsimile: +64 (4) 473-3276 or contact Professor Fraser Jackson, Program Co-Chairperson by email: jackson@matai.vuw.ac.nz

ANNUAL MEETING OF THE SOCIETY FOR JUDGMENT AND DECISION MAKING. . .

The 1992 meeting of the Society for Judgment and Decision Making will be held November 15-16, 1992 in St. Louis. Further information on the meeting will be in forthcoming issues of the *JIDM Newsletter*.

COMMENTARY ON A LETTER FROM THE PRESIDENT...

Editors Note: In the September 1991 issue of the *J/DM Newsletter*, Baruch Fischhoff challenged our readers with a thoughtful letter about risk perception and risk communication. Ariel S. Levi from Wayne State University replied to Baruch with a long letter, and has provided us with a shortened version of his letter.

In his President's Column in the September *J/DM Newsletter*, Baruch Fischhoff described how he had responded to a reporter's questions about the public's "undue alarm" over risks in the blood-supply system. The gist of Baruch's reply was that the public's apparent overreaction to the risk may actually be reasonable, and that honest communication of estimated risk levels, and open acknowledgment of the uncertainty inherent in such estimates, is the best policy.

I essentially agree with Baruch's reply to the reporter, but would like to raise some related issues concerning public perceptions of, and responses to, risk. First, the conclusion that the public is "overreacting" to an announced risk should be examined very closely, especially when the conclusion is based on changes in aggregate behavior. Such changes are often biased indicators of public beliefs. This is because the beliefs of alarmists are often more likely to be reflected in publicly observable behavior than are the beliefs of skeptics. For example, in response to the announcement of blood supply risk, alarmists may make inquiries to hospitals about blood banking or write indignant letters to the editor, whereas skeptics may simply ignore the announcement or scoff at it privately to their family. As a result, even if skeptics outnumber alarmists by a wide margin, the latter will appear to be more numerous than the former.

In fact, even when an announcement of risk leads the majority of people to view something as less risky than before, aggregate behavior can make it seem as if the opposite is true. In the alar case, for example, even if the overwhelming majority of the public became more confident in the safety of alar-treated apples, only the beliefs of the alarmists would be reflected in purchase behavior. That is, the alarmists would stop buying apples, whereas those who became more confident in the safety of apples would only maintain, rather than increase, their purchases.

Second, the "overreaction" effect, if it in fact occurs, is analogous to the "cry wolf" effect. The latter occurs when a source's warnings of risk or danger are discounted because similar warnings in the past have failed to materialize. The former, of which the blood supply case may be an example, occurs when people assume that a risk is in fact higher than a source's statements indicate, because of past experience with the source's false assurances of safety.

Both effects result from low source credibility, which in turn results from the perception that the source is motivated to exaggerate or deny a risk. If members of the Red Cross, or other authorities, are seen as having a vested interest in downplaying the blood supply risk, then their acknowledgment of such a risk should (ordinarily) be trusted. Consider the (hypothetical) analogous case, in which the Tobacco Institute makes a statement confirming the carcinogenic effects of second-hand smoke. This statement would be accorded more credibility than if it were made by an anti-smoking group, a result which follows from the augmentation principle of attribution theory.

Third, public overreaction may be the result of people taking prior probability (baserate) into account when evaluating an authority's announcement of risk. People may adjust their perceived level of risk upward if in the past similar announcements have understated the true risk level. This process of integrating a source's stated risk level with the "baserate" accuracy/validity of the source's stated risk levels is precisely what a Bayesian decision analyst would recommend. (Incidentally, this Bayesian process differs from the attributional process described in the preceding paragraph in that it does not necessarily take the source's motives into account.)

Fourth, as Baruch suggested, individuals' reactions to risk will be affected by the potential payoffs they face. In the blood supply case, people may understandably be more willing to accept a Type I error (calling something risky even when it is not) than a Type II error (failing to call something risky when it is in fact risky). A reasonable response to the potential consequences of accepting a risk might be interpreted as an unreasonable overreaction to the probability of risk. This seems especially plausible in the current case, because the evidence of "overreaction" probably comes from the small, self-selected percentage of the population most likely to face the consequences of the risk (e.g., people likely to need blood transfusions).

Finally, people's reactions to the blood supply risk may be partly explained by the fact that it violates an implicit trust. When responsibility for safety is "handed over" to another party, in effect making personal exposure to risk unwitting, uncontrollable, and involuntary, people may feel entitled to a standard of 100% safety. This standard would apply, for example, to the safety of the blood supply, the safety of bridges used by motorists, and the health and sobriety of airline pilots. When the implicit trust--and the expectation of 100% safety--is violated in such cases, the sense of outrage is likely to be especially high.

Several of the processes that I have described suggest how the public response to the risk can be interpreted as reasonable. Although individual responses to risk may be based on other, less "rational" processes, it is important that reporters (and others) be made aware of the possibility that public responses to risk are based on relatively complex and logical inferences. Baruch's reply seems likely to have accomplished this. In addition, if the public does rely on the attributional and other inference processes described above, his recommendation for honesty in announcing risks would be all the more reasonable. The issue of under- or overestimating the public sophistication is a difficult one to resolve. Here, it seems reasonable to take into account the relative costs of Type I and Type II errors. Is it preferable to assume that the public reaction is based on rational inferences when it is not, or to assume that the public reaction is irrational when it is actually rational?

Any thoughts on these issues would be appreciated.

Ariel S. Levi

J/DM Election Ballot . . .

All members of the Society for Judgment and Decision Making are urged to vote in the election for officers of the Society. These are the officers nominated by you. Please vote for one person for President-Elect (to become President in 1993) and one person for membership on the the Executive Board. For your information, current officers of the Society are listed on Page 2 of this Newsletter.

President-Elect (vote for one)

- _____ Reid Hastie
- _____ Daniel Kahneman
- _____ John Payne
- _____ Frank Yates

Executive Board (vote for one)

- _____ Colin Camerer
- _____ Barbara Mellers
- _____ Elke Weber

Please mail your completed ballots to:

Terry Connolly
J/DM Secretary/Treasurer
Management and Policy Department
Business and Public Administration
University of Arizona
Tucson, Arizona 85721

(602) 621-5937

BITNET: connolly@ARIZRVAX

- BALLOTS MUST BE RECEIVED BY MARCH 1, 1992 -

IMPORTANT DUES NOTICE. . .

Please check the number in the upper right hand corner of your mailing label. This number reflects your dues status as of December, 1991.

If it is "2" then you are a fully paid member of the Society. **THANK YOU!**

If it is "1" then you owe dues of \$20 for 1992. Please send your payment promptly as we must soon pay our Society's dues to the Federation.

If it is "0" then you owe back dues of \$20 for 1991 and \$20 for 1992 for a total of \$40.

If it is "9" then you owe back dues of \$40 and current dues of \$20 for a total of \$60. If we don't receive your payment soon, you will be dropped from the mailing list.

Members residing outside the United States who incur expenses in getting checks written in U.S. funds, have the privilege of paying in advance for multiple years. Those who have done so will find a "1", "2", etc. on their mailing label indicating the last year in the 1990's for which they are credited for dues. Members residing in countries where getting checks written in U.S. funds is impractical or illegal may apply to the Society for a free membership. Such members will find a "*" in the upper right hand corner of their mailing labels.

A majority of the membership has already paid dues for 1992. Please don't be a free rider. Pay your current dues promptly. Thank you.

-- Terry Connolly

SOCIETY FOR JUDGMENT AND DECISION MAKING

1992 DUES FORM

Please check your mailing label. If it does not have a "2" in the upper left-hand corner, we have not received your dues for 1992. (If you sent your dues in the last three weeks, your payment may not have been recorded.)

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Terry Connolly, Secretary/Treasurer
Management and Policy Department
Business and Public Administration
University of Arizona
Tucson, AZ 85721

* Students must have endorsement of a faculty member:

Faculty Signature: _____ Date: _____

Printed Name: _____ Institution: _____

UNDERGRADUATE PAPER COMPETITION

Center for Decision Research
University of Chicago

The Center for Decision Research at the University of Chicago announces its 1992 Undergraduate Paper Competition for the best undergraduate paper on behavioral decision making.

A prize of \$100 will be awarded to the winning entry.

The paper can be an integrative review of existing work or an original theoretical or empirical contribution. Papers previously submitted for courses, independent studies, or honors theses are appropriate. The papers will be judged by a panel of researchers at the Center for Decision Research.

The deadline for submissions is May 31, 1992. The winner will be announced in the *J/DM Newsletter*. If you are teaching courses or supervising undergraduate students in the area of decision making, would you please alert them to this opportunity?

Please send entries to Professor Elke Weber, Undergraduate Paper Contest, Center for Decision Research, University of Chicago, 1101 East 58th Street, Chicago, IL 60637.

J/DM NEWSLETTER
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