# Overcoming Barriers to Use of Promising Research Among Elite Middle East Policy Groups

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This qualitative research examines how barriers to the use of new theoretical constructs in social science research might be overcome. Five groups of elite members of the Middle East policy communitypeer reviewers, newspaper reporters, Congress people, non-governmental influentials, and US diplomats-assessed a research study that explored a strategy for reducing conflict in the Middle East. That study was published in the Journal of Conflict Resolution (International Peace Project in the Middle East: The Effects of the Maharishi Technology of the Unified Field, or IPPME) and found that when a critical mass of people used the Transcendental Meditation technique, social stresses (e.g., crime and war intensity) were reduced in the surrounding population. Over half of each group reviewing the research rejected IPPME immediately without examining scientific merit. Stereotyping and prejudice were evident. Others, who assessed scientific quality independently of their organizational philosophies and practices and exhibited greater curiosity, were likelier to consider IPPME further.

This year 24 significant armed conflicts involving a thousand or more deaths rage around the world. Thirty-eight hot spots may slide into war (Azar, 1990; Raum, 2000; Smith, 2004). Efforts to counter alleged

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*JSBP Editor's Note:* This paper discusses an extreme example of many of the problems of the journal publication process that this Journal was founded to show could be improved. Bias against "unpopular" research exists and should be dealt with by editors. I am not affiliated with TM and don't know much about it. But editors should let the evidence speak for itself.—Rick Crandall

Journal of Social Behavior and Personality, 2005, 489–544. ©2005 Select Press, Novato, CA, 415/209-9838. terrorists continue with highly controversial results (Cohen, (5/18/2004, Sec.A, p.19); Friedman, (5/23/2004, Sec.4, p.10).

In this context it is important to understand how members of a foreign policy community confront new ideas. Success in US foreign policy often relies on policy makers' ability to re-evaluate their assumptions about what is true and practical. Once policy is set, however, it may take dramatic events to prompt such re-examination. This tendency is often cited to explain why policy makers do not use scientific research, and why researchers should tailor their studies to policymakers' needs and assumptions (Galvin, 1994; George, 1994).

This paper summarizes elite policy makers' assessments of a piece of research not designed to fit their assumptions and explores implications for overcoming obstacles to its use.

#### **International Peace Project in the Middle East**

"International Peace Project in the Middle East: The Effects of the Maharishi Technology of the Unified Field" (IPPME) was published in the *Journal of Conflict Resolution (JCR)*, one of the leading journals in its field (Orme-Johnson, Alexander, Davies, Chandler, & Larimore, 1988). The study concluded that a large group of meditators practicing the Transcendental Meditation (TM) and TM-Sidhi programs daily together in one place in Jerusalem appeared to reduce social stresses in the surrounding population as indicated by statistically significant changes in eight different dependent variables when the group reached predicted critical sizes, proportionate to each relevant population. Variables such as crime (in Jerusalem), national crime (excluding Jerusalem), and war deaths and war intensity (in neighboring Lebanon) decreased. All variables used publicly available data or were derived from newspapers, using standard content analysis.

To the extent that further research might bear out these results, they would be of significant social and scientific value to the international policy community.<sup>1</sup> But the IPPME findings were generally met with various levels of disbelief. At the time of publication, two reviewers observed in print that the study was well done but appeared to support premises running counter to generally accepted understandings about behavioral phenomena (both personal and social) and mechanisms that can alter them.<sup>2</sup>

IPPME authors rejoined that IPPME's premises have been assumed through much of Western thought, and that their empirical findings, benefiting from the precision of methodological tools and meditation techniques currently available, supported concepts of consciousness and collective consciousness raised by William James, Gustav Fechner, and Emile Durkheim (Orme-Johnson & Alexander, 1992).<sup>3</sup> They wrote that quantum field theorists (including Schroedinger, Jeans, Eddington, Pauli, and D'Espagnat) anticipated the basis of a fundamental field theory of consciousness in suggesting, as Max Planck wrote, that consciousness is fundamental and matter is "derivative" (Klein, D.B. 1984 as cited in Orme-Johnson & Alexander, 1992).

According to IPPME co-author John Davies, IPPME and related research presents a new level of analysis, "complementary to conventional behavioral and sociological levels of analysis. It gives policy makers new possibilities for understanding and alleviating societal stress and improving related social factors like health and productivity, thereby enhancing the effectiveness of existing policy efforts" (J. Davies, personal communication, September, 1995). IPPME author David Orme-Johnson explained that with the changed climate brought about by meditating groups he would expect changes in foreign policy to be accomplished through traditional channels. He pointed out that the Maharishi Effect research, of which IPPME is a part, has found that collective TM practice appears to affect negotiations as well as reduce violence.<sup>4</sup> He said, for example, that negotiators recognize the importance of a more cordial atmosphere and reduced hostility for negotiations.

<sup>&</sup>lt;sup>1</sup> As a teacher of the TM program and former student and administrator at Maharishi International University (now called Maharishi University of Management), which has incorporated the TM program into its curriculum, I have been alert to my own biases in writing this paper.

 $<sup>^2\,</sup>$  To honor confidentiality agreements with all respondents, I neither name them, nor cite their writings.

<sup>&</sup>lt;sup>3</sup> David Orme-Johnson and Charles Alexander, in an unpublished summary, wrote (p.24):"While contemporary social theory views human beings 'classically' as ontologically separate individuals, the longest tradition of philosophical thought in the West—the idealist tradition—has maintained, at least implicitly, the connection of human beings on the level of consciousness. It is also the case that several of the founding theorists of modern psychology proposed the concept of consciousness as a field through which individuals may be fundamentally connected. Fechner, for example, described a unity or continuity of 'general consciousness' underlying the discontinuities of consciousness associated with each individual, accessible in principle simply through lowering the threshold of conscious experience (in James, 1898/1977). James (*ibid.*) suggested that the brain may reflect or transmit, rather than produce consciousness, which in turn may be conceived as a transcendental, infinite continuity underlying the phenomenal world."

<sup>&</sup>lt;sup>4</sup> See comparison of cooperative events, verbal hostilities and hostile acts, Orme-Johnson, Dillbeck, Bousquet and Alexander, 1985, pp. 2540–2541; content analysis of President Reagan's public statements, Gelderloos, 1988, 1989; and indications of negotiation breakthroughs during TM assemblies as well as reduction of hostilities, Davies and Alexander, 1989, p. 27.

In explaining the mechanics of the TM technique and the proposed field effect described in the IPPME research, philosopher Kenneth Chandler (1987, p.8) described them as a revival of traditional Vedic concepts by Maharishi Mahesh Yogi:

Vedic seers discovered the capability of the human mind to settle into a state of deep silence while remaining awake, and therein to experience a completely unified, simple, and unbounded state of awareness, called *pure consciousness*, which is quite distinct from our ordinary waking, sleeping, or dreaming states of consciousness. In that deep silence, they discovered the capability of the mind to become identified with a boundless, all-pervading, unified field that is experienced as an eternal continuum underlying all existence.

Glimpses of this experience have been described by writers "from Plato to Plotinus and Augustine, and from Leibniz to Hegel and Whitehead" (Chandler, 1987, p.9). Furthermore, Kepler, Descartes, Cantor, and Einstein "have written of it and seemingly drew insights into the laws of nature from this experience" (Chandler, 1987, p.9). Scholars have found the TM and TM-Sidhi techniques, which require no belief themselves, are compatible with Judaism, Christianity, and other religious traditions (Smith, 1983).

Transcendental consciousness is described as a "qualitatively distinct state of 'restful alertness,' psychophysiologically different from adult waking as waking is from dreaming and deep sleep," which has been correlated with heightened EEG coherence and "postmeditation behaviors indicative of continued growth, such as fluid intelligence, principled moral reasoning, concept formation, and creativity" (Alexander et al., 1990, pp. 310–311).

Citing this research and TM founder Maharishi Mahesh Yogi's proposition that enhancing such coherence in even a small proportion of a population would stimulate measurably increased coherence in a society, scientists proposed that a primary determinant of quality of behavior in society is coherence in collective consciousness. In their 1983 research proposal, Orme-Johnson and Alexander hypothesized that a sufficient number of people meditating should achieve drastic tension reduction within the broader social environment. They drew this hypothesis from the proposition that human consciousness has a "field character" like other action-at-a-distance phenomena and that coherent sub-populations may generate coherence in an underlying field of consciousness. They conjectured that "if the human brain and nervous system are sensitive to the field phenomenon of consciousness, then a number of individuals generating coherence in this field could influence the coherence of others in the environment" (Alexander & Orme-Johnson, 1983, pp. 3-4).

IPPME is part of a larger body of over 40 scientific research papers published during the last eighteen years on the same general topic. Fourteen of these research studies, including IPPME, have been published by ten social science journals: Journal of Conflict Resolution (Orme-Johnson, Alexander, Davies, Chandler, & Larimore, 1988; Journal of Crime and Justice (Dillbeck, Landrith & Orme-Johnson, 1981); Journal of Mind and Behavior (Dillbeck, Banus, Polanzi, & Landrith, 1988; Dillbeck, Cavanaugh, Glenn, Orme-Johnson, & Mittlefehldt, 1987); Social Science Perspectives Journal (Gelderloos, Frid, Goddard, Xue, & Löliger, 1988; Orme-Johnson, Gelderloos, & Dillbeck, 1988); Psychological Reports (Assimakis & Dillbeck, 1995); Social Indicators Research (Dillbeck, 1990; Hagelin et al., 1999); Psychology, Crime, and Law (Hatchard, Deans, Cavanaugh, & Orme-Johnson, 1996); Journal of Iowa Academy of Sciences (Gelderloos, Frid, & Xue, 1989); Alcoholism Treatment Quarterly (Orme-Johnson, 1994); and Journal of Offender Rehabilitation (Orme-Johnson, Dillbeck, Alexander, Chandler, & Cranson, 2003). Another six are included in association conference proceedings, including those of the American Psychological Association, and the American Statistical Society. All papers are published in six volumes of collected papers (Chalmers, Clements, Schenkluhn & Weinless, 1989 (vols. 2, 3, 4); Orme-Johnson & Farrow, 1977 (vol.1); Wallace, Orme-Johnson, & Dillbeck, 1990 (vol. 5); Maharishi University of Management (vol. 6, in press).<sup>5</sup>

Professor of government David Edwards (1990), who reviewed a paper that followed IPPME, wrote that the findings were "startling," that the "promised practical societal impact of this research significantly exceeds that of any other ongoing social-psychological research program" and that "the research along with the theory that informs it deserve the most serious evaluative consideration by the social science community"

<sup>&</sup>lt;sup>5</sup> Innovative research like the IPPME study may well be expected to receive greater scrutiny and skeptical inquiry than less innovative research. Scientific change results from the evaluation over time of ongoing research programs rather than from single studies, because there is no "instant rationality" and no "watertight way to take a piece of scientific work and decide on its merits" (Lakatos, 1970, pp. 91–196). From a policy perspective, action is considered unlikely as the result of a single research report (Cohen & Garet, 1975; Weiss, 1980b).

The value of observing fairly informal, incomplete assessments of a single study is to simulate the actual process that policy makers go through on a rather constant basis. They do not seek out research directly, but assess it as it crosses their desks. If it meets whatever criteria they apply, they may seek evidence of replication. The question is how they determine whether to look at more research or to consider more evidence as they may encounter it.

(1–3). This consideration has been denied, according to Edwards, by "designated 'gatekeepers' or 'disciplinary mental hygienists'—the organizers of professional conferences and the editors of major journals."

# Understanding How Research Sensitizes Policy Makers to Issues and Approaches

For over three decades social scientists have examined the use, nonuse, and abuse of social science research (Berg, Brudney, Fuller, Michael, & Roth, 1978; Caplan, Morrison, & Stambaugh, 1975; Lazarsfeld, Sewell, & Wilensky, 1967; Rich, 1981; US General Accounting Office, 1977; Weiss, 1980a, 1978). Only in rare instances do policy makers use research directly or instrumentally. More often, real "use" is conceptual—involving increases in sensitivity to issues or adjustments in frameworks; or symbolic—fulfilling needs to justify, rationalize, or legitimate positions or approaches (Weiss, 1980c). Policy makers accumulate evidence for or against a program or policy and use ordinary knowledge and common sense as much or more than research (Lindblom & Cohen, 1979; Rich, 1981; Scheffler, 1984, 1985; Weiss, 1983).

Identifying obstacles to research use has required understanding officials' actual practice, which is fragmented—involving many people, high turnover, harried schedules, mismatch of jurisdictions, resource limitations, political boundaries, compromise, acceptance of things as they are, and precedence given to knowledge derived from experience (Weiss, 1982). Policy makers implicitly filter the information that bombards them. Research that fails this filtering is discarded. If it passes, a residue is "incorporated into their stock of knowledge," gradually sensitizing them to issues and approaches (Weiss, 1980a, p. 382).

# **Decision Makers Apply Truth and Utility Tests in Filtering Research**

In order to simulate the review that decision makers apply to research they usually encounter in abstracted form, sociologist Carol Weiss' study (1980b) interviewed 255 administrators, professionals, and researchers about their assessment of two research study abstracts.<sup>6</sup> This simulation served as a more reliable proxy for research use than after-the-fact self reports. Weiss used factor analysis of 510 ratings of 50 research reports to locate groups of study characteristics that form analytically separable dimensions as a way of identifying how respondents describe and assess research (Weiss, 1980c). She identified four

factors: research quality, action orientation, conformity to user expectations, and challenge to the status quo. In order to determine what effect each factor had on how decision makers perceived usefulness of the research, Weiss regressed usefulness ratings (based on respondents' assessments of how likely they or appropriate users were to take the study into account in the future) on these four factors and on relevance. All were positively associated with perceived usefulness and all were significant predictors, accounting together for 42% of the variance in the likelihood of using a research study.

Weiss was surprised by the salience of research quality in light of observations by researchers that decision makers do not care about research quality. She also found surprising the positive and significant regression coefficient for challenge to the status quo, indicating that her respondents said they were not put off by politically challenging research. Hypothesizing contingent relationships between research quality and conformity to expectations, and between action orientation and challenge to the status quo, Weiss regressed the likelihood of use on relevance, the four factors, and these two interactions. Both hypothesized interactions were negative, substantial, and statistically significant (p < .01), adding 3% to the variance explained, an amount significant at p < .01 (Weiss 1980c).

Weiss (1980b) concluded that decision makers in federal, state, and local mental health agencies invoke stable frames of reference in assessing the likelihood they will use research: relevance of the study; trustworthiness of the study (truth); and direction that it provides (utility). The most significant is the truth test, which asks:

- "Was the research conducted by proper scientific methods?"
- "Are the results compatible with my experience and values?" (pp. 54–55)

Weiss found that the answer to the first question is most predictive of whether decision makers are likely to take a study into account and whether its ideas and information would substantively contribute to their work. Decision makers tend to discard research that does not conform to their experience and values but are less inclined to do so if it seems of high quality (Weiss, 1980b).

Weiss found that the utility test asks two further questions:

- "Does the study demonstrate how to make feasible changes in things that can feasibly be changed?"
- "Does the research challenge the status quo?" (pp. 54–55)

<sup>&</sup>lt;sup>6</sup> Weiss used summaries of a total of 50 research studies that varied as to manipulability of independent variables, administrative implementability of conclusions/implications, and political acceptability. Two were assigned to each respondent.

Positive answers to either question (but not both) increased the likelihood of a study's application. If a study provided actionable conclusions, it was better if it did not challenge the status quo. If it challenged current policy, it was better if it did not offer specific direction for action.

Weiss found no relationship between decision makers' judgments about a study's compatibility with their experience and values and their judgments about its acceptability in social/political work environments, implying that people distinguish their personal views from those of their agency. Decision makers often valued research that was at political variance with their agency's policy. Weiss' research suggested that, contrary to what social scientists may believe, decision makers weigh social research in light of what they know about science and are open to ideas that challenge conventional wisdom.

# Assessment Along the Communication Nodes of the Middle East Policy Community

This paper makes use of Weiss' findings to examine the filtering of research at significant nodes of the Middle East policy community, where crucial decisions are typically made about a piece of research as it proceeds from author to end-user. These decision nodes involve journal referees, reporters, and governmental and non-governmental policy makers.

Assessment within peer review poses problems for innovative research. The communication of research information to the policy maker begins with peer review and requires that editors and reviewers balance the need to advance new knowledge with quality standards (Horrobin, 1990; Lindsey, 1978) and with social conventions (Harnad, 1982; Kronick, 1990; Polanyi, 1958). Editors and reviewers assess whether or not to publish research in the context of intense competition for publication space, which often favors the functioning consensus instead of fresh conjectures (Lindsey, 1979; Luban, 1987). Entrenched opinion, posturing, irrational rebuttal, and intellectual authority are used to maintain the status quo (Atkinson, 1994; Hanson, 1958). Peers who assume superiority in the particular topic, but who lack qualifications to judge breakthrough research, may arbitrarily dismiss it (Atkinson, 1994). Nobel Laureate Rosalyn Yallow (1982) contends that those with truly important breakthroughs have few appropriate peer reviewers.

Reviewers may have special problems assessing the truth and utility of paradigm-challenging research, because they often have "no common quality upon which to make comparison," including concepts, language, and standards of measurement (Kuhn, 1970, p. 175). New paradigms may also strike reviewers as subversive of normal science's basic commitments, which result from education's profound influence on scientific thinking (Kuhn, 1970). The resulting defense of normal science may extract a high cost from the scientific community in blocking innovation.

The social science community tends to maintain itself as a vessel for conveying knowledge, even if such maintenance interferes with the scientific mission and produces leaders who focus on protecting their status and beliefs from young critics, and who occasionally "mobilize hostility and disgust toward outgroups" (Campbell, 1979, pp. 183–185).

Demarcating scientific boundaries is a practical and ideological means of securing intellectual authority and career opportunities (Gieryn, 1983). Identifying an inquiry as religious instead of scientific denies resources to unwanted contenders, even though standards for "partitioning science from non-science" have proven inadequate and insufficiently precise (Laudan, 1983, pp. 124–125).

Conventions influencing foreign reporters' use of social science research. US policy makers rely on the Washington Post and the New York Times as forums for quick communication with other policy makers (Kingdon, 1984). Newspapers are also one of the only forums for evaluation of social science research that policy makers have time to consider (Caplan et al. 1975; Weiss, 1983, 1978). Even those with research staffs and specialized information networks rely on newspapers for social science news and for coping with information overload (Kingdon, 1984; Weiss & Singer, 1988).

Within the context of increased social science reporting in recent years (Stocking & Dunwoody, 1982) and the permeation of policy discussion with social science language, concepts, and data (Weiss, 1983), reporters cover a small percentage of social science stories submitted. They exercise considerable latitude and influence in selection, though they generally lack social science training (Weiss & Singer, 1988).

Just as peer reviewers are concerned with defining boundaries of legitimate scientific inquiry, reporters are often concerned with what to keep out of the newspaper. Both domestic and foreign reporters are also often bound by existing story lines or interpretations, with the result that they may miss a larger story or an aspect of a story because they are wedded to past assumptions.

Story lines determine which information gets interpreted and reported. Breaking from a story line requires asking "dumb questions, dissecting the assumptions, ... [and having] the guts to say aloud 'The emperor has no clothes'" (Lederman, 1992, p. 17). This is not easy "when one is up against a powerful editor and the expenses involved in sending the kids through college" (Lederman, 1992, p. 17). Super story lines prominent in Middle East reporting, which are collections of "myths [and] ideological constructs, tied together by an overall narrative," are derived from Judeo-

Christian traditions and ensure that those traditions receive more attention from a disproportionate number of reporters (Friedman, 1989, pp. 428–429).

Elite reporters who work within the "Golden Triangle" between the President, Secretary of State, and the Pentagon are admitted by invitation as virtual co-participants in the government. They are bound to follow the government's rules and tendencies, including disdaining peer-reviewed research (Blumer & Gurevitch, 1981; Hess, 1981).

In filtering research, reporters are less concerned with research quality than with what interests large numbers of people (Weiss & Singer, 1988). They care more about credibility of sources than validity of news items (McCall & Stocking, 1982; Ridder, 1980).

Reporters' fashioning of social science coverage into stories that fit journalistic story-telling conventions influences their social science reporting (Weiss & Singer, 1988). Reporters seek to correct social scientists' inclination to write abstractly. Since 1937, reporters have pointed out their preference for the concrete. They pay more attention to current affairs and trends than to historical or scientific insight. The aim is for more realism—including etching personalities into recognizable stereotypes and affixing lasting labels (Rosten, 1937).

Middle East reporters may discount more optimistic perspectives as they encounter constant random violence, physical intimidation, government censorship, and lies (Friedman, 1984). Foreign reporters are given limited resources to cover a shrinking number of countries, and rely more on Washington bureaus, which means "more reliance on government and greater opportunity for government to influence both the news agenda and its content" (Montalbano, 1994, p. 24).

*Foreign policy research use influenced by operational codes.* Diplomats are the most influential players in the foreign policy community. They tend to dismiss research and historical analysis due to constant demands within the large-scale and complex scenarios with which they deal. Their operational codes, inherited from the cold war, tend to view the gritty job of dealing with power as a "tag-team wrestling match" requiring a realistic view of people as evil and states as inevitably involved in an unending power struggle (Blight, 1987, pp. 24–25). They view their job as strategically managing conflict (Morgenthau, 1962; Smith, 1986) and often see research as irrelevant.

Policy makers have dismissed interesting and seminal research because they were too busy, found psychology abstract and abstruse, and had difficulty admitting and correcting their own shortsightedness (Blight, 1987). Observers write that as long as realists, who rigidly maintain one world view or operational code, guide policy, others will be considered "policy irrelevant," no matter how compelling the implications may be for national and international policies (Holt, 1988, p. 325).

Foreign service professionals are also skeptical about generalizations beyond a few instances (A.K. Henrikson, personal communication, November 15, 1995), including those in the applied field of conflict resolution (Gaddis, 1987). Relying on their own judgment, however, they have mistaken the present for the past with disastrous consequences (Judis, 1992).

Research use in the US Congress limited by legislative context. Members of Congress are also less likely to use scientific research because of the nature of Congress itself. Daniel Dreyfus (1977) wrote that this was surprising because Congress is "primarily a policy analysis mechanism." He reasoned,

The functions of the legislature are to sense the needs of society for policy initiatives, to define and articulate the options, and to determine and assert the will of the collective social decision maker. These functions in the broad sense include everything that policy research can encompass. (p.100)

But Dreyfus pointed out that these functions are "done in ad hoc ways," with problems and options being "nominated by the executive, the media, and interest groups;" and selection of options "based on nebulous criteria and instinctive, almost mystical determinations of the public will." Dreyfus explained, "The whole process is frequently obscured by rhetoric designed to rationalize rather than to explain the decision" (Dreyfus, 1977, p.100).

Research does not fit easily within the range of Congressional tasks—that is, not within the "incremental adjustments in bodies of existing policy" involved in "legislative oversight and policy adjustment" and not within "fundamental revisions of existing policies, programs, or activities; important reorganizations of federal agencies; and very large increases or reductions or outright terminations of ongoing activities" (Dreyfus, 1977, pp.101–102). In considering oversight and adjustment matters, members do not have the time to consider facts that are "conveniently available," much less to seek and absorb further research (Dreyfus, 1977, pp.101–102). Representatives averaged only eleven minutes reading per day (U. S. House of Representatives, 1977).

Congress people are focused on constituents' concerns, on hammering out compromises, and passing bills. When members and staff become promoters of their bill, they are not interested in neutral analysis (Weiss, 1989) or taking in new factual knowledge or overlooked alternatives (Dreyfus, 1977). Staff members "collect information through personal interaction, and ... take pride in their ability to 'read people' rather than...reports" (Weiss, 1989, p. 414).

Because innovations are worked out elsewhere, the most common use of research in Congress is support for preexisting positions. Relatively few people use research to reconceptualize problems. High volumes of competing messages mean that it takes "multiple repetitions before a new perspective makes headway" (Weiss, 1989, p.427).

Policy group networks value research that challenges conventional wisdom. Over the last three decades networks of specialized policy watchers and interest groups have rapidly proliferated (Heclo, 1978). Policy makers pursue these specialists and interest groups more than being pursued by them (Laumann & Knoke, 1987). These policy specialists refine, debate, and resolve alternative options though not in well-organized ways (Heclo, 1978). Within policy networks, incentives work "against ... decisive closure."

New studies and findings can always be brought to bear. The biggest rewards in these highly intellectual groups go to those who successfully challenge accepted wisdom. The networks thrive by continuously weighing alternative courses of action on particular policies, not by suspending disbelief and accepting that something must be done." (Heclo, 1978, p.121)

Interest networks are a major source of analytic information that Congressional staff take seriously, because the analysis has already been melded with political positions, applied to legislative provisions, and linked to committee business. Information from one interest group competes with others, and staff members assume that both sides are exaggerating. "They see their task as ferreting out enough about the strengths and weaknesses of each side's arguments to get a good purchase on the actual situation" (Weiss, 1989, p. 421).

# **Purpose of This Study:**

# **Exploring Policy Community Members' Assessments of IPPME**

Decision makers routinely review research within the context of other information. This paper presents findings from Brown's (1996) dissertation, which explored the extent to which individuals in the Middle East policy-making community apply truth tests and utility tests to research in determining whether to pay attention to it in the ways Weiss describes, particularly when the research information in question involves unorthodox assumptions.

Several pivotal sets of questions suggested by Weiss' findings included:

- 1. How do members of the Middle East policy community determine whether research information is trustworthy? Do they:
  - weigh the research premises and results against their experience, expectations and values?
  - ascertain whether and to what degree the research information conforms to scientific standards?
- 2. How do they determine whether the research information is useful? Do they:
  - examine whether the research proposes feasible changes in policies and other things that can be changed?
  - assess whether the research challenges the status quo?
- 3. How important is each of these factors in determining whether they will give the study further consideration or whether the research ideas and information would substantively contribute to their work?

The data gathered to answer these questions raised two more: What are the significant barriers to use of this research? How can barriers be overcome?

# METHODS

# Respondents

Analyzing policy decisions would be, in Heclo's (1978) words, "disastrously incomplete" without taking into account the makeup of "specialized subcultures composed of highly knowledgeable policywatchers...[whose] detailed understanding...comes from sustained attention to a given policy debate" (p.88). In order to examine research use within the Middle East policy context, respondents were selected from different communication junctures of the policy network: journal referees, reporters, and governmental and non-governmental policy makers (Patton, 1980). Within these subgroups respondents were selected based upon their positions as people who reviewed research and their reputations for influence within the policy community (Laumann & Knoke, 1987).

Selecting a diverse set of respondent categories—even with a small number of respondents within each—allowed variation in assessments and greater explanatory power (Miles & Huberman, 1984), including comparison of the in-depth assessment by scholars who actually reviewed IPPME and follow-up research with more immediate assessments of potential end-users (Patton, 1980). Respondents included elite, active members of each of five groups: (a) six scholarly peer reviewers of the IPPME study; (b) ten journalists writing for pacesetting papers (Hess, 1981; Weiss, 1974); (c) seven members of Congress and staff (both Democrats and Republicans) including two members and five staff of members of Congressional committees responsible for Middle East policy; (d) eight influential consultants, advisors, lobbyists, and organizers, identified by governmental respondents as people they consult; and (e) four senior US negotiators and strategists responsible for carrying out US policy at the highest level.

#### **Conduct of the Interviews**

In August of 1993 (just after the historic Oslo accords, but before the formal signing of the declaration of principles on Palestinian self-rule in the Occupied Territories) one reporter respondent said, "Until there is a dramatic breakthrough or a dramatic collapse, this is a dead story." She said this even though peace talks had brought Israel to a position sought for 44 years—direct conversations with neighboring Arabs. By completion of these interviews in December 1994, events in the Middle East had become one of the top stories of that year (Shelby, 1995). Interviews accordingly were conducted during historic breakthroughs in negotiations as well as during increased terrorism and controversy.<sup>7</sup>

Respondents were assured of anonymity. The first interview focused on the respondents' use of information in their work, including how they decided which information to take into account. Each respondent was then asked to consider a two-and-a-half page summary of IPPME before the second interview. The entire article was also provided, though not as required reading. In the second (usually final) interview respondents responded to the summary. The interview was intended as an undirected simulation, eliciting honest and natural responses to the IPPME summary. Questioning was designed to allow the respondent the possibility of experimenting with a range of answers and then responding legitimately. A reflective answer was sought, rather than a conventional answer or visceral response. Questions were also presented to test the implications of what the respondent was saying, using neutral language, occasionally returning to points made by the respondent—in order to encourage him or her to go beyond code phrases or thoughts.

#### **Analysis and Interpretation**

In order to reach accurate and reliable conclusions that are not overgeneralized, I kept track of the interview context, while considering the research questions. All interviews were transcribed and monitored for accuracy.

Interviews with all 35 respondents were summarized and charted within the following five spheres:

- How Middle East policy community members determine whether research information is trustworthy.
- Do they ascertain whether and to what degree the research information conforms to scientific standards? How? Do they weigh the research premises and results against their experience, expectations and values? How?
- How do they determine whether the research information is useful?
- Do they examine whether the research proposes feasible changes in policies and other things that can be changed? How? Do they assess whether the research challenges the status quo? How?
- What is the likelihood that the respondent will consider similar or related research in the future?

Each interview was examined for the relationship of the trustworthiness and usefulness spheres to the assessment of likelihood of further consideration. Analysis of scholarly reviewers also involved correspondence, referee reports, and some published essays, which were integrated into the charts.

Distinguishing patterns, approaches, and questions within groups were documented. Each step of analysis involved careful comparison of respondents, taking into account their whole transcript. Across-group analysis charted the assessments for all 35 respondents on a list of outcome and intervening variables gathered over the course of the analysis. These were summarized as follows:

• Aspects of observed assessments organized according to respondents' consideration of scientific quality (Table 1);

<sup>&</sup>lt;sup>7</sup> I interviewed one diplomat days before Israeli settler Baruch Goldstein shot 29 Muslims at prayer in the Hebron mosque (2/25/94). Edward Said (5/26/94, 25–27) described the slaughter as the inevitable result of monotheistic (Christian, Jewish, and Islamic) religious passions. His article appeared within the same month that Israel and the Palestine Liberation Organization signed a detailed agreement for implementing the first stage of autonomy in the Gaza Strip and the West Bank town of Jericho. Thomas L. Friedman (2/5/95, Sec.4, p.17) described the devastation felt by Israelis when a suicide bomber killed 19 Israelis (1/22/95), which Friedman said "snapped something in the Israeli psyche." Andrew Bilski (2/6/9, 30–31) reported that in the 16 months since the signing on the White House lawn, "at least 112 Israelis and 195 Palestinians have died in continuing bloodshed."

- Factors influencing a usefulness assessment. A list of 19 observations was condensed down to a charting of five key difficulties and the absence of those five (Table 2);
- The influence of prior knowledge of the intervention, and
- Elements of scientific quality that were of interest to respondents.

"Likelihood of use" in this study refers to the likelihood that in the course of their work the respondent would pay attention to similar or related research. Judgments about how likely a respondent felt he or she was to examine or credit a similar or follow-up study within the same research program were made based on explicit and implied statements within the interview. Respondents were forthcoming with these statements. Decisions about the relative likelihood that each respondent would examine another study reflected their adamancy, repetition of statements, and comparisons and references to like-situations within their professional context.

Assessments by respondents most- and least-likely to consider IPPME further were compared. Barriers to use of IPPME research were extracted from Charts I and II. Means for overcoming them were derived from comparison of most- and least-likely respondents and from relevant literature.

In order to ensure validity, objective criteria were used for respondent selection, interviews were documented (Miles & Huberman, 1984), and attempts were made in drawing inferences to avoid any tendency to strengthen preexisting opinions. Two colleagues read every third interview transcript (by date and group) for evidence of bias. One colleague also monitored the analysis for explicit or implicit effects of the researcher's views on the plausibility of inferences. Both auditors certified that the study was free of obvious investigator bias (Brown, 1996).

## RESULTS

#### **Consideration of Scientific Quality**

Across groups, respondents made use of what Weiss (1980b) referred to as "a series of implicit filters" (p. 249). Table 1 illustrates the wide variation in respondents' consideration of scientific quality. Twelve did not examine scientific quality and nine of those said that science could not contribute to social solutions or was irrelevant to their jobs. Fifteen were inclined to resist the data, even though they looked at it. Eight took their own evaluations of scientific quality into account (Brown, 1996).

TABLE 1 As <sub>F</sub>	pects of Observed Assessments,	TABLE 1 Aspects of Observed Assessments, Organized According to Respondents' Consideration of Scientific Quality	Consideration of Scientific Quality
	Reporters 1,2,3,4,5 Congressional Resp. 1,2 Policy Advisors 1,2,3 Diplomats 1,2	Scholarly Reviewers 1,2,3,4 Reporters 6,7,8,9 Congressional Resp. 3,4,5 Policy Advisors 4,5,6 Diplomat 3	Scholarly reviewers 5,6 Reporter 10 Congressional Resp. 6,7 Policy Advisors 7,8 Diplomat 4
Thoroughness of assessment of scientific quality	Minimal or no assessment.	Mixed—evaluation to a point by respondents with expertise; as fully as possible by some without expertise; and minimally by others.	Three levels—thoroughly by respondents with expertise as fully as possible within time allowed.
Attitudes about science	Skeptical about science— judged it irrelevant.	Valued science, but not this expert- this experiment. "Resisted the data."	Valued science—took it into account in assessment/decisions.
Level of engage- ment—crediting the research	Didn't credit—didn't know enough.	Engaged, but also experienced cognitive dissonance.	High engagement.
Utility test	Emphasis on lack of relevance/expediency.	Concerned with challenge to the status quo.	Interested in feasibility, challenge. Judged relevant because of outcomes.
Trustworthiness assessment	Assessment based on experience and authority.	Assessed in relation to consensual belief. Concerned with legitimacy.	A lot of caution, but science helpful in continuing to think about ideas.
*Respondents are lis	stRespondents are listed by number. Brief bios are presented for each in Appendix A	d for each in Appendix A.	

#### Likelihood of Future Review

Respondents who were less likely to consider the research in the future (n = 23) and those who were more likely  $(n = 14)^8$  inhabited almost distinct worlds (see Table 2). (See Appendix A for a description of the 35 respondents.) The group of 23 evaluated IPPME's trustworthiness largely independently of their assessment of scientific quality. The group of 14 approached the premises with caution, but did engage with the scientific analysis at levels of thoroughness commensurate with their skills and roles. Their engagement caused some to raise alternative explanations, some to suspend judgment, and some more technical reviewers to put aside their alternative explanations and publish or report the piece.

The 14 more-likely respondents examined IPPME's trustworthiness in ways predicted by Weiss' research, separating their investigation from the philosophies, practices, and tacit assumptions of their organizations and professional committees. They maintained some distance from those assumptions and examined the ideas in the light of their personal experience in relation to the quality of scientific discourse. Their distance from operational and other assumptions did not appear to reflect disaffection toward their organizations, but rather an ability to step aside intellectually and morally, aided by science.

The 23 less-likely respondents tended to intermingle their own estimations of IPPME's trustworthiness with those of their organizations, assignments or policy repertoires. They did not examine scientific quality, or dismissed such examinations, giving more weight to the tacit assumptions and shared agreements that guided their work. For example, they indicated that the Transcendental Meditation technique seemed out of place in the cultural and tribal realities of the Middle East conflict and in diplomacy generally. Most of these respondents reacted strongly to the research information, as if it challenged their identity. They described many aspects of dissonance at once, including prejudice and distrust of science.

Respondents more likely to consider this research further were less attached to conventional wisdom in their assessments because, as Diplomat 3 put it, they were accustomed to challenging their own assumptions. They saw science as more than a tool; it was a way of conceiving problems and testing them. They expressed reservations about IPPME, but did not describe IPPME as challenging core assumptions or identities, as did respondents who rejected it. They engaged with science, suspended their predispositions, and expressed curiosity. They were able to evaluate the study independent of prejudice, preconceptions, and taboos, and were willing to wait for more evidence without expressing a black and white, either/or reaction. They were open to the possibility that they did not know all there was to know.

All nine of the respondents in the likely and most-likely columns expressed open-mindedness and/or the importance of being open-minded. Although they did not believe IPPME, only Policy Advisor 5 came to the immediate conclusion that it could not be true. (He decided to reserve judgment by the end of his interview.) Policy Advisor 8 explained that people in her position could not afford to "be closed minded."

A big concern for respondents less likely to consider IPPME was the legitimacy of the IPPME research. As US Think Tank Policy Specialist Reviewer 4 pointed out, the legitimacy question sometimes hinged on others' willingness to allow examination of religious-sounding ideas different from their own. Causal explanations examined by IPPME fueled these concerns. The thought that action at a distance might have consequences that might be observed in societal trends involved even deeper taboos than those associated with the introduction of a scientific and/or spiritual dimension into the field of foreign policy. Respondents more likely to examine IPPME-related research were not threatened by IPPME. They did not think an idea "could hurt them" (Reporter 10), but were intellectually interested.

# Characteristics of Respondents More or Less Likely to Further Consider IPPME Research

More direct experience or knowledge of IPPME interventions. More first-hand knowledge or awareness of IPPME interventions contributed to—but did not fully explain—the differences in prejudice or tendencies to question IPPME as religious or antithetical to a given religion among respondents. Ten of the 14 respondents who were more likely to consider further research had knowledge of the TM program and/or the research and the Maharishi Effect. Seven of those had some personal experience or knew of friends or relatives practicing the TM program or another form of meditation or yoga. Only one of the ten expressed prejudice. Eleven of the 23 people less or least likely to consider IPPME-related research further had awareness or knowledge; but only two had more direct experience of the TM program or other meditation techniques. Of those eleven, seven expressed prejudice. IPPME's concepts were as counter-intuitive to practitioners of the Transcendental Meditation technique as to other respondents.

*Sex and age.* Women were not necessarily more open to IPPME than men. Age and tenure did not explain differences either.

<sup>&</sup>lt;sup>8</sup> These numbers include reviewers 5 and 6 who are counted twice, once for 1987—when they suggested *JCR* publish the research—and once for their changed positions in 1994—when they were interviewed.

#### TABLE 2 Likelihood of Future Consideration of Maharishi Effect Research

	Religious/ spiritual concerns <sup>a</sup>	Expressions of prejudice <sup>b</sup>	Social science not helpful <sup>c</sup>	Not 'real' or relevant <sup>d</sup>	Possible political threat <sup>e</sup>
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#### SCIENCE NOT RELEVANT OR NOT MOST DECISIVE FACTOR

#### Least Likely -10. 27%

(П	=	LU;	- 4	1%	D)

Scholarly Reviewers	1	1			
1	X	X	1		X
2		X		Х	X
3	X	X	1		X
Reporters					
1	X	X	X	Х	X
2	X	X	X	X	X
Congressional					
Respondents					
1	X		X	Х	
2			X	X	X
Policy Advisors					
1	X		X	X	
Diplomats					
1		X	X	X	
$\frac{1}{2}$	X	X	X	X	
			~~~~	71	
Somewhat Unlikely (n=5; 14%)					
Reporters	1	1	1 1		1
3		X	X	Х	
4				Х	
5	X		X	Х	
Policy Advisors					
2	X		X	Х	X
3				Х	
Unlikely (n=8; 21%)	ł	1	1 1		1
Scholarly Reviewers					
4	X			Х	X
5 (1994)					Х
Reporters					
6	X	X	X	Х	X
7	X	X	X	Х	X
8			X	Х	
Congressional					
Respondents					
3					X
Policy Advisors					
4	X	X	X	Х	
5	X	X	X	Х	X
		(continued)			I

#### TABLE 2 (cont.)

	Religious/	Expressions	Social science not	Not 'real' or	Possible political
	spiritual concerns <sup>a</sup>	of prejudice <sup>b</sup>	helpful <sup>c</sup>	relevant <sup>d</sup>	threat <sup>e</sup>
		TENCE USER			
Somewhat Likely (n=5; 14%)	50		02		
Scholarly Reviewers					
6 (1994)			1		Х
Reporters					
9				1	X
Congressional					
Respondents					
4		X			X
5	X			X	
Diplomats					
3				X	
Likely (n=3; 8%)			;		
Congressional					
Respondents					
6					X
Policy Advisors					
6		X		Х	X
Diplomats					
4		X		X	
Most Likely (n=6; 16%) Scholarly Reviewers		1	i		i
5 (1987)					
6 (1987)					
Reporters	-				
$\frac{10}{10}$					
Congressional					
Respondents					
$\frac{\text{Respondents}}{7}$					X
Policy Advisors					
7					
U					

Difficulties with aspects of International Peace Project in the Middle East (IPPME) expressed by respondents:

<sup>a</sup> Reference to a concern for the perceived religious or spiritual aspect of IPPME, including the concern that what was described appeared to contravene their or others' religion;

<sup>b</sup> Expressions of prejudice, including acknowledgements of one's own prejudice;

<sup>c</sup> Assertions that social science was not helpful;

<sup>d</sup> Judgments that politically and practically what was proposed was not 'real' or relevant to the way foreign policy was conducted or the way conflict occurred; and

<sup>e</sup> Indications that any kind of acceptance or legitimation of IPPME might or did pose a political threat.

*Educational attainment.* Educational levels were roughly equivalent across all groups, with all scholarly reviewers having PhDs and all but one skilled in statistical and mathematical modeling. Eight of ten reporters had BA equivalents and two had masters degrees (one mostlikely and the other unlikely to give further consideration). All Congressional respondents except one had higher degrees. Two members had JDs. All but one of the consultants and analysts had higher degrees. The diplomats all had PhDs and had been professors and/or university administrators.

*Educational and professional focus.* An important differentiator among the most-likely respondents was the area of educational focus and sustained professional interest. The most-likely reviewers, Reviewers 5 and 6, appear to have been interested in empiricism and in solving scientific puzzles, rather than gaining advantage in a substantive field. Reporter 10, with an Oxford masters degree, described having intellectual frameworks for understanding the ideas and for reporting them, as did Congressional Respondent 6 (Senator), who had engineering and scientific training. Diplomats 3 and 4 were more focused on empirical considerations. Diplomat 4, who was more likely to look at related research, had a PhD "out of one of the most empirical PhD programs in the country."

Across groups, most-likely respondents tended to focus on solutions to the problems of violence and war in the Middle East, cultivating alternative positions and applying leverage for change. For least-likely respondents solving the problem was beside the point; the focus was more squarely on the requirements of the agency. This was in part due to a calculation that conflict in the Middle East was insoluble. These respondents tended to be more concerned with selling US foreign policy positions to elites (for diplomats) or covering those in power and keeping bad ideas out of the paper (reporters). Congressional respondents who were least-likely did not see the mission of the US Congress as solving problems in the Middle East. Social scientists who set out to debunk IPPME were not focused on the meaning of the outcomes described, but in "going after... these dudes [who] are trespassing on my turf" (Reviewer 1).

#### CAN BARRIERS TO USE OF RESEARCH BE OVERCOME?

Given that IPPME's findings have been born out in subsequent research (see end note 10) and understanding that research use depends on the tests that gatekeepers in a policy community give a piece of research as they encounter it in the course of their work, a relevant question is: what can be done to overcome the barriers identified in these interviews? Five categories of barriers to use of IPPME research were derived from analysis of respondents' truth and utility testing. Means for overcoming them are also reflected in respondents' assessments and in relevant literature. Five categories of barriers and their remedies are listed here.

- I. Incompatibility with experience, operational codes, and deeper paradigms constitutes one half of the truth test that posed difficulties for many respondents. Remedies involve providing more direct experience and enough background information to address major framework differences.
- II. The other half of the truth test, scientific quality, was not valued in general by 12 respondents and was not valued in this case by 15 others (see Table 1 above). To remedy this difficulty, authors can call attention to meta-paradigms within social science emphasizing the need to consider innovative research, and continue to conduct in-depth research.
- III. Open and fair scientific deliberation is a necessity for examination of research such as IPPME, because it provides the ongoing stream of inquiry which reporters and policy makers require. Closing down the debate occurred in this case when social scientists found it more useful to critique the research instead of to examine its quality in-depth. This created a rhetorical climate that delayed publication. Remedies include providing standards for editors, who may be besieged by adversaries of challenging research.
- IV. A significant barrier to IPPME was also prejudice—expressed or acknowledged. Remedies to stereotyping and prejudice involve different levels of advocacy, depending upon the level of stereotyping or prejudice.
- V. Identification with institutional agendas is an expression of the challenge to the status quo aspect of utility testing. Remedies for overcoming the perception that IPPME was not politically possible or did not fit existing agendas and repertoires include increasing sensitivity to those agendas and repertoires, but also identifying more natural niches for evaluation of research and innovative approaches within the policy community.

#### **Barrier I:**

# Incompatibility with Experience, Operational Codes, and Deeper Paradigms

Respondents who concluded that they would not give further consideration to IPPME or related research did so partly because they did not believe it. Additional, concurrent judgments often resulted in explosive expressions of dissonance or "shutdown." For these respondents, the IPPME study appeared to violate tacit assumptions and practices at the junction of science, religion, and foreign policy. IPPME did not fit within their story line about how to influence behavior in the context of conflict.

More importantly, it did not fit with super story lines, which Friedman (1989) described as the constructs that reporters use to decide which information or cultural perspective is significant and who gets covered. Most respondents had no context for understanding how a group of people practicing the TM and TM-Sidhi programs in East Jerusalem might achieve a 75% reduction in war deaths and a 45% reduction in war intensity in Lebanon. Respondents felt that IPPME simultaneously challenged:

- their conceptions of the causal mechanisms that explain such significant changes in behavior;
- presumptions about the boundaries of legitimate scientific inquiry, including the boundary between science and religion, called "a Berlin Wall" by a Congresswoman and assumptions that scientific inquiry has no place in foreign policy practice;
- tacit agreements about the nature of human beings;
- perceptions that the Middle East conflict is insoluble;
- operational codes, unwritten rules, and tacit determinations that govern foreign policy.

A senior diplomatic correspondent at a pacesetting US newspaper for 32 years [Reporter 6] described IPPME as striking out "very, very early in the game" as a result of a "subconscious calculus" which gave the most weight to IPPME's challenge to the status quo. As Weiss and Singer (1988) predicted, Reporter 6 did not engage in science, but invited comment from his psychologist wife, who did not accept IPPME's validity. He attended faithfully to the diplomatic agenda and found the ideas unfeasible and incompatible with the cultural hierarchy. His reactions were highly charged.

Diplomats' judgment about whether to consider IPPME: "Is it real?" In judging whether to consider a piece of information like IPPME, diplomats asked: "Is it real?" A diplomat who had been honored for his 20 plus years of work [Diplomat 4] in the region said his job was "to frame choices ... to take information and to put it in policy terms" and described the reasoning his colleagues and bosses would apply to IPPME. Without experience with the TM technique and the research hypothesis and not enough information to understand what it really was, he said that certain stereotypical images would come to mind, but that the bottom line consideration would be, "Is it real?" He described diplomats running around plugging the latest hole in the dike, of necessity oblivious to anything outside their experience and priorities. Daily, diplomats processed an enormous stream of intelligence in order to persuade, manipulate, or coerce elites within Middle Eastern governments to accept US propositions. That, to them, constituted reality.

Another strategist and negotiator with a leading role in formulating and implementing US policy for over a dozen years, described as "as much of an expert in the area as there is," Diplomat 3, said that he was always concerned with testing underlying assumptions. He attributed successful breakthroughs in negotiations to conceptual shifts away from old formulas. While he understood IPPME's causal claims and expressed them in terms that would be recognizable to Orme-Johnson et al., he felt that IPPME excluded essential variables that could affect the results. His entire diplomatic approach rested on mastery of detail, and IPPME's measures such as "purely deaths" seemed incomplete. He said he needed a picture of intervening steps, and evaluation of behavioral change.

# Means to Overcome Barrier I: Incompatibility with Experience, Operational Codes, and Paradigms

Several respondents who did not necessarily believe IPPME, but who would consider further research, explained that IPPME's counterintuitive premises and findings required more background than their colleagues usually had. Reporter 10 observed an " automatic tendency to flip off" something like IPPME, explaining that space in a newspaper is tight. She said, "People don't make a quick connection. They need to build confidence. They need more background." She, on the other hand, had an intellectual framework for considering IPPME and for remaining open to new ideas. Her suggestions are in line with Weiss' findings that policy makers give studies greater consideration when they conform to intellectual frameworks and experience.

Congressional respondents observed that presentation, advocacy, and demonstrations that address the realities of group conflict are crucial to gaining consensus for long-term implementation. A US Senator [Congressional Respondent 6] who had served in the House and Senate for 21 years and on several foreign affairs committees also had frameworks for taking IPPME more seriously, based on experience of meditation and scientific training. He stated that IPPME's "political problems will not always be insurmountable." He thought funding requires increasing policy makers' trust and an estimation of "where to start," and recommended not starting with "people who are probably not receptive but even alien to this kind of an approach"—but rather starting with more receptive people such as the agencies at a distance from Congress who are used to testing more creative approaches. He suggested that, "some sort of funding to do some demonstration projects of a much larger size or for an even longer period of time" might be obtained from an alternative conflict resolution group.

A Congressional committee chief of staff on US policy toward the Middle East for 20 years immediately emphasized the importance of distillation of an idea like IPPME for Congressional staff and the members, who had no time to interpret scientific graphs, but who needed succinct summaries that "look at the problem in the macro sense" in relation to other conflict resolution approaches.

Reporters and Congress people suggested that to overcome barriers to use of research like IPPME, they needed more than a simple explanation. They needed direct experience and orientation and they needed advocacy. But advocacy bothered a prominent *JCR* reviewer [Reviewer 6], who said that IPPME authors breached scientific boundaries by publicizing the study. He expressed ambivalence about use of research to promote ideas, though he acknowledged the impulse to positively contribute to solutions for disease and war. Other scholars point out that not publicizing may sometimes indicate lack of "an adequate sense of professional and personal responsibility for the impact of [scholarly] work on society" (Goodfield, 1981, p.32). Still others focus on setting aside stereotyped images about their differences and working with reporters (Dunwoody & Scott, 1982; Dunwoody & Stocking, 1985).

## **Barrier II:**

# Skepticism or Disdain for Scientific Study of Social Problems within the Policy Context

Respondents who assessed IPPME's scientific argument minimally or not at all expressed skepticism about scientific solutions to social problems in general (See Table 1 above). They alleged "no track record of scientific solutions to social problems" (Reporter 1) and observing that "too many variables" made society resistant to experimentation (Reporter 2). Policy Advisor 3 called IPPME "political psychology," which he said came from "people who sit in their ivory towers [who] are not in the real world." He called it "marginal" and "irrelevant."

I don't believe really in social science and even political science. ...Human behavior is not a science and it's more like art. Even economics, which is supposed to be like the most scientific of all the social sciences...clearly there is nothing certain about it. I think it's intellectually challenging and it helps you to organize your thinking, and—but to call it a science...

Other respondents found the scientific presentation irrelevant to their jobs. They didn't value the format: they felt one would have to believe the research in order to consider it seriously, expressed skepticism about statistical analysis and described being too old or too far advanced career-wise to put aside practical concerns for an academic or conceptual presentation.

The most important question to these respondents involved expediency: Is this information someone needs? Would it be too risky to consider? Four respondents explicitly stated that they were not interested in whether IPPME was right, wrong, or true (Reporter 4, Congressional Respondent 2, Policy Advisor 2, and Diplomat 1). For them, almost the only consideration was that IPPME was irrelevant either to high diplomacy, to Congressional funding, or to "the debate" which reporters cover.

Relevance involved another decision, namely, whether to credit the research enough to consider it further. Several respondents referred to the limited amount of time they had to make decisions and expressed anger at having to take any time to consider scientific research.

A second category of respondents examined the scientific quality of the IPPME research information at different levels of thoroughness and decided that they would "resist the data." Like the first group, they pursued assessment of scientific quality within institutional and strategy constraints. The second group's decisions show the consequences of juxtaposing scientific corroboration with a set of ideas that violate their common experience or philosophical assumptions. Even scholarly reviewers with high-level expertise experienced cognitive dissonance and decided something "must be wrong." They found it difficult to step into the circle of IPPME assumptions and measurements; to do so would mean stepping out of their comfort zones.

#### Means to Overcome Barrier II:

# Recognizing the Policy Audience and Publishing Conceptually Profound Research

Eight of the 35 respondents found scientific quality decisive in their assessments of IPPME and in their decisions to give further consideration to related research. They examined scientific quality largely independent of institutional and societal constraints. Their view of IPPME's trustworthiness was more like what Weiss found: primarily based on how the research conformed to their expectations, independently of what might be valued by their agencies. Their judgments of IPPME's high quality tended to offset its seeming implausibility.

In examining IPPME's trustworthiness this group tended to be intellectually cautious. They did not embrace IPPME but acknowledged the scientific inquiry and were curious about the scientific results. Their concern with utility tended to focus on questions about its feasibility, given what they knew of the Middle East. At the same time they recognized that IPPME would challenge conventional wisdom. The scholarly reviewers in this subset were also more committed to following the scientific results wherever they led, though they eventually succumbed to pressure and doubts raised by critics.

In this context, overcoming skepticism and resistance to scientific data as a relevant form of discourse means recognizing that there is an audience for science. For example, some Middle East Policy Community respondents within each group were prepared to examine the science, even if they were not fully capable of evaluating it technically or comprehensively.

Appropriate research use does not require consensus but may eventually change perspectives and theoretical frameworks. To these ends social scientists may take heart that continued attention to broader, longer-term, and conceptually profound research has an important place in eventually influencing policy debates. It may also be appropriate for social scientists and policy makers to consider how to foster more inquiry that challenges conventional approaches.

#### **Barrier III:**

# **Examination of a Research Program Depends** on Open and Fair Deliberation

The opportunity for policy makers to further review discussion of IPPME-related research depended first on it being published, and then on it being reported in the media. When avenues for publication are limited due to adversarial peer review, occasion for further review in the media is limited or eliminated.

This section contrasts two scholarly reviewers: one gave IPPME a thorough review; the other repeatedly asserted that IPPME was illegitimate without giving it a full review, resulting in significant publication delays. An analysis of a fairly complete collection of background correspondence and reviews found that Reviewer 5 asked whether the research could be true, and rigorously tested its truthfulness. Critics of the research, on the other hand, were more interested in debunking it than reviewing it, searching for weaknesses rather than carefully examining its scientific quality.

Peer review of IPPME began with an effort to treat it as any study would be treated, despite its unusual claims. An extensively published and acclaimed political science professor of over thirty years [Reviewer 6] observed that the IPPME review was an "open scientific process." Accumulated critiques, however, changed the rhetorical climate.<sup>9</sup>

Five of six scholars interviewed had time-series analysis expertise. Reviewer 5 was the only one to review IPPME in detail. He initially called for rejection and suggested further testing using transfer function models. When those statistical methods resulted in "adequately resolving" his questions with "a *prima facie* convincing argument," he wrote that he was "left with the problem that the hypothesis falls outside the normal peace research/conflict studies paradigm" (anonymous review provided by Orme-Johnson).

Reviewer 5's eventual recommendation to publish despite his disbelief conforms to the pattern of truth testing Weiss (1980c) described as most predictive of future consideration of research, that is, that decision

One of two anonymous referees deferred to editorial judgment, calling the analysis rigorous while raising reservations about such "ethereal explanations." The other referee favored publication, and stated, "The author(s) have designed the studies and analyzed the data in ways that answer all reservations I have had, and more. And the results are internally consistent (across assemblies, across indicators of the dependent variable, and across time) as well as being congruent with the theoretical argument."

However, the paper was rejected. About a year after IPPME appeared in *Journal of Conflict Resolution (JCR)*, a critique of the IPPME study was published along with a response by Orme-Johnson et al. About that same time, *International Studies Quarterly* rejected the Davies/Alexander paper on the basis of two anonymous referee reports. In 1993, the *JCR* received a fresh critique of IPPME. Several peer reviewers recommended that the critique be published. Orme-Johnson et al. requested that they be allowed to publish a rebuttal. Publication of the critique was declined. In an effort to stem further critique had been accepted and scheduled for publication at the time of my interview with him, though he later withdrew it based on a detailed response from David Orme-Johnson. Orme-Johnson showed that Reviewer 2 missed several key elements of the analysis.

<sup>&</sup>lt;sup>9</sup> Scholarly reviewers assessed the "International Peace Project" research prior to its 1988 publication. Within six months John Davies and Charles Alexander, two of the four IPPME co-authors, submitted a follow-up study to the *Journal of Conflict Resolution*. As summarized by David Orme-Johnson (1991):

This study replicated...[findings of the IPPME study] by examining the seven occasions in which groups practicing the TM-Sidhi program have been sufficiently large and close to Lebanon for a predicted impact on the war (based on the square root of one percent formula). Three of these groups (with up to 8,000 participants) collected in the United States, and one each was in Israel, Lebanon, Yugoslavia, and the Netherlands.

This study improved on the earlier study by examining more information relevant to conflict in Lebanon, using more sensitive conflict scales and data from a greater number of sources. Event data were scored by an independent, expert Lebanese coder who was blind to the hypotheses being tested.

makers tend to discard research that does not conform to their experience and values, but are less inclined to do so if it seems of high quality.

Another political science professor of 18 years whose applied work dealt mostly with quantitative models of international behavior [Reviewer 1] also determined that IPPME challenged the status quo, but acknowledged in his interview that his review was cursory. He assumed an authoritative stance in critiquing methodological problems and invited himself or was invited to review the subsequent Davies and Alexander paper (1989, 2005) wherever it was submitted. He questioned IPPME authors' theory and motives in an essay circulated within the political science community immediately after IPPME was published, in a published critique, in three anonymous reviews, and in correspondence with editors. He demanded that further publication involve randomized design, though no other social science research is required to meet this standard.

Reviewer 1 called for banishing from political science any models like IPPME, which he said lacked independent empirical evidence, a plausible mechanism justifying the model, and on-going, replicable empirical testing. Other respondents pointed out that models generally lack such confirmation—especially in the early stages of scientific scrutiny. Reviewer 1 chided editors and reviewers for publishing the research, claiming that Box Jenkins time-series analysis allows for flexibility in adjusting for noise and is thereby susceptible to finding significant results by chance. Without having looked into the actual analysis, Reviewer 1 asserted in every critique, and led his readers to presume, that Box Jenkins was used improperly. Reviewer 1 influenced decisions to dismiss further research in this area.

A political science professor reported that after a highly emotional draft of the first critique was circulated, the research was ignored. The negative portrayals eventually influenced editors and reviewers to reject and avoid follow-up research. Reviewer 1 strongly influenced the quantitative conflict resolution community. Background correspondence and his own reports suggest that he was aggressive, persistent, and emotional in talking to colleagues and their wives, using strong language, innuendo, and even name calling in his letters and anonymous reviews. He appealed to the community on the basis of his authority and referred to history, standards, and philosophical differences (Brown, 1996). The community may have been particularly susceptible to his efforts because they collectively shared his basic paradigmatic beliefs. IPPME coauthor Wallace Larimore observed, "Those belief structures are so strong... Evidence could be 10, 1000 times stronger and replicated 100 times and [they] might still reject it" (personal communication, November 3,

1993). Interviews suggested that the conflict resolution scholars were slow to accept new ideas without frequent exposure. The controversy itself may have been off-putting.

## Means to Overcome Barrier III: Securing Open, Fair Deliberation When Research Debates Become "Too Hot to Handle"

A survey of correspondence and reviews of IPPME and subsequent research raises questions about peer review practice by editors. One political science professor observed that attacks on IPPME were political and related to limited resources. It was not an issue of "disagreement with the IPPME study and the studies that preceded and follow it, but really a struggle for identity." He said, "They won't tell you what they really do… Journals and funding are tools for war." He noted that some social scientists were afraid of losing their hard-won elite status, and that others work with the intelligence and defense industry.

How do editors and anonymous reviewers sustain fair and open review when they are intimidated? How responsible are they for securing a fully deliberative environment? Editors cannot be expected to anticipate adversarial motives. Nor can they be expected to protect every new idea from attack. The literature suggests that editors might need to consider some additional standards to resist pressures from adversaries and to maintain a scientific, deliberative environment:

- Recognizing that science is adversarial and selecting peer reviewers who are more likely to give a careful review;
- Understanding that even a renowned scholar is not necessarily qualified to judge a new paradigm;
- Granting critics a limited role and giving authors more opportunity to answer them;
- Understanding that critics may pose as deliberative and at the same time not examine science thoroughly, requiring a more thorough review;
- Maintaining openness to debate and resisting pressure to close debate;
- Acknowledging that not all research must fully explain all mechanisms as a pre-requisite for publication;
- Demanding full documentation when anonymous critics allege or intimate ethical or legal misconduct;
- While acknowledging that anomalous research may warrant application of more rigorous standards, not demanding fulfillment of standards beyond those required of other research if such stan-

dards are simply a tacit rationale for withholding access to publication.

Maintaining a fair and open scientific forum is a primary responsibility of editors and reviewers, especially when research is considered paradigm- or politically challenging. If social scientists will not act in defining standards, how can policy makers and reporters be expected to do better?

#### **Barrier IV:**

#### The Influence of Prejudice on Assessment of IPPME

Over half of respondents least likely to consider IPPME in the future described assessments deeply influenced by prejudice. While stereo-types help people make sense of the world using oversimplified conceptions (Lippmann, 1922), prejudice is a negative, unreasonable predisposition, not based on facts. Three forms of prejudice were observed:

A. Stereotypes were associated with questions about how others including institutions—might react to IPPME.

B. Strong disbelief prompted a search for an explanation, sometimes resulting in prejudiced judgments about IPPME authors.

C. Prejudice was used as a tool and justification for debunking in adversarial peer review.

A. *Stereotypes associated with how others might react.* Reporters who initially categorized IPPME using negative stereotypes tended not to engage with science. One senior diplomatic correspondent [Reporter 7] explained that IPPME did not "fit within the universe of likely stories." He couldn't accept its "metaphysical explanation" because he was unable to conceive of a mechanism causing the effects. He doubted the science of IPPME and discussed the risk involved with covering a new idea: Is it news? And if so, is it simply too hot to cover?

A Senate aide [Congressional Respondent 4] who had primary regional responsibility on a Senate Middle East committee staff would consider further Maharishi Effect research despite concluding politically, based on a negative stereotype, that it was too challenging for the Senate and not immediately implementable. His biggest concern was "the giggle factor"—reactions by members and staffers from within their "very closed world." He said, "To be brutally honest, you picture somebody in an airport handing you a rose and saying, read this study." Congressional Respondent 4 acknowledged, "Maybe it's just a lack of understanding … or even some sort of prejudice, … but it's something I have to take into account." Likewise, press perception was an increasingly prominent factor for him in assessing how to use information.

B. Strong disbelief, search for explanation, and questions about source credibility. Two other respondents who reacted to IPPME by questioning the authors' credibility also relied on colleagues and other experts for guidance. A research director for a human rights organization on behalf of four countries, including the Israeli Occupied Territories [Policy Advisor 6] routinely checked facts with many sources in his work. One friend he consulted gave him incorrect assessments of "Maharishi University's" academic seriousness. Policy Advisor 6 said, "If somebody were from Harvard [he had not noticed C.N. Alexander's association with Harvard cited on the study], I might think maybe I should try to read this more carefully."

Policy Advisor 6 said he would not normally take the time to examine IPPME closely because he felt he lacked the statistical background to critique it seriously. He wanted someone "more knowledgeable" to tell him what was wrong: "how they chose the variables, that they were careless or misleading, or the data is fabricated, or something like that." For him academic journals were not necessarily credible: "You can get stuff into those journals that is garbage." An article in *Science* or the *Economist*, however, would impress him.

A social psychology professor who had published extensively [Reviewer 3] was a "trusted associate" of JCR with experience in time-series analysis. He reviewed IPPME, but not formally or thoroughly. He said, "Looking at it from a purely technical point of view-in terms of the internal analysis, [IPPME was] not of discriminably different quality from your average JCR article." However, he built a case for recommending against publication. Reviewer 3 assumed no track record for the IPPME team, though several of the IPPME authors had published extensively in more than thirty-five peer-reviewed journals. He, like several other respondents, assumed that IPPME authors were all from Maharishi International University, when one was at Harvard University at the time and another, Wallace E. Larimore (1990), was an independent statistician who had designed an advanced method for time series analysis. He assumed that the Transcendental Meditation technique involves conversion and belief, both of which assumptions are widely acknowledged to be incorrect. He also presumed that suspension of loyalty on the part of Orme-Johnson et al. was more difficult than for other scientists.

Citing Stephen Jay Gould (1981) Reviewer 3 contended, "When you combine politics and religion into science ... data fabrication is quite common." Actually Gould's book gives examples of scientists justifying unsound theories with "fudged" and otherwise unsound data, but he does not specify the source of such behavior as political or religious. As Mitroff's study (1974) suggests, attachment to one's ideas may not be a liability in science. Participants in his study—among the most creative and effective in science—noted that such an expectation is naive.

Reviewer 3 was concerned that IPPME challenged "our understanding of the workings of human psychology, human physiology, and physics. Basic laws within those disciplines would have to be revised to accommodate these findings." Unlike Reviewer 1, however, Reviewer 3 would not "go to the mat" regarding whether IPPME should or should not have been published, stating, "I think that in many respects this article does pass the normal scientific tests, within social science."

Believing that something must be wrong with IPPME, despite its evidently robust statistics, Reviewer 3 decided the IPPME authors were suspect. He said that falsifying data was an extreme charge, but ruled out simple capitalization on chance because "to the best of my understanding … their results did look reasonably robust, statistically." He proposed a third possibility—"an enormous file drawer problem," wherein only significant findings are submitted to journals.

In a letter to *JCR*, IPPME co-author John Davies addressed the file drawer problem, noting that the paper he submitted after IPPME, an evaluation of the entire sequence of all World Peace Assemblies, was designed to answer exactly such threats to validity. He explained that a "further control against selectivity" was the announcement of expected results to the press in advance of the assemblies: "All assemblies outside Lebanon big enough for a predicted influence there are thus a matter of public record" (J. Davies, personal communication, August 29, 1989).

Reviewer 3 concluded that he would "be willing to consider seriously the current research for publication if, and only if, it were conducted by an independent, scientific body such as the National Academy of Sciences." He called for "a particularly high threshold of proof in this case." In a published comment, a *JCR* editor observed that social science journals should not refuse implausible ideas on the basis of their source. He understood Reviewer 3's unease, but observed that independent researchers were unlikely to test an unconventional theory they saw as implausible. Waiting for them to do so would consign the research to never being tested.

C. *Prejudice Used in Adversarial Peer Review*. Two scholarly reviewers set out to end deliberation about IPPME and follow-up research. Reviewer 1 is described in Barrier 2 above. Reviewer 2 acknowledged his own prejudice and wrote a review for *JCR* that was withdrawn after IPPME authors successfully argued that Reviewer 2 misunderstood the study.

Reviewer 1 considered TM a religion and sought to mark IPPME off—an approach that may be more emotive and political than scientific

(Laudan, 1983). According to Davies, characterizing the Maharishi Effect research as religious and therefore unscientific is grounded in cultural misunderstandings. He noted that the Vedic tradition, especially Raja Yoga, from which the TM technique is drawn, takes an experimental, empirical approach to knowledge in contrast to approaches based on devotion, belief, or acceptance of authoritative texts as being beyond testing. Davies associated the TM program with science: "only the emphasis is on the study of consciousness rather than behavior as being fundamental" (H. Smith, personal communication, January 10, 1995).<sup>10</sup>

Prejudice was also a factor in Reviewer 2's critical essay. In 1993, debate over IPPME re-emerged when a critique of the 1988 article was submitted to *JCR* and Orme-Johnson et al. wrote a rebuttal. A *JCR* editor asked Reviewer 2, a retired social psychology professor of 42 years who was skilled in time-series analysis, to compose a critical essay that would close the debate.

Reviewer 2 explained "I've never [before] had someone ask me to review something with a mandate to find a way to stop debate on this." He described his "predispositions" and "a series of attitudes." He said an important factor in his decision was his "long history" of skepticism about matters he deemed similar to the focus of IPPME, such as belief in UFOs, reincarnation, and ESP. He said:

I don't for a moment believe that they're on to something. I think it's mischievous of them to be proposing this.... [E]veryone is going to think, 'Well, to solve the world's problems, all we've got to do is sit around and think.' ... They are doing a bad thing. And I'm glad I was able to find a justifiable criticism of them. I would have been disappointed if I hadn't.

Reviewer 2 explained that he had not undertaken a thorough review of IPPME. He had scanned the research and found what Orme-Johnson later acknowledged as a typographical mislabeling of a chart specifying upper and lower boundaries of meditation group size quartiles—which Orme Johnson, after checking the original data, explained did not affect the mathematical analysis and accompanying diagram.

Reviewer 2 linked the mislabeled chart to his view that the independent variable—i.e., number of TM-Sidhi practitioners on a given day— "deviated considerably from randomness" while Orme-Johnson et al.

<sup>&</sup>lt;sup>10</sup>Huston Smith (1991) observes that raja yoga "outlines a series of steps that are to be followed as rigorously as the steps in a physics experiment" (p. 41) resulting in experiences that either confirm or disconfirm a hypothesis having to do with the nature of the human self and resulting in direct personal experience of "the beyond that is within" and with the expected result that contact with this level of the mind can be examined as the "unquenchable source by which all peoples and societies are renewed." (p. 43).

stated that this was "effectively randomly distributed." Orme-Johnson responded that Reviewer 2 misunderstood the nature of the independent variable—mistaking four different binary variables for one. "He either hadn't read or hadn't acknowledged that trends and cycles were removed from both the dependent and the independent variables before assessing the relationships between them in the cross-correlation and transfer function analysis" (Brown, 1996, p. 88). Orme-Johnson wrote that Reviewer 2 had overlooked the fact that his concerns had been addressed in two primary analyses in the original paper and in a parallel robustness check with pseudo variables (Orme-Johnson, unpublished essay, pp. 2–3).

Orme-Johnson added that IPPME, "though not a random assignment experiment, needs to be judged in the context of the standards of the field," citing a reply to an earlier critique wherein he and his co-authors "found that of the 98 studies appearing in *JCR* from 1984 to 1990, only 40% were on international conflict and that none of these had a true experimental design or even quasi-experimental design" (Orme-Johnson, unpublished essay, p. 9).

Reviewer 2 acknowledged that he used the typographical error that he had found to make his argument more emphatic. He placed dots on a copy of the IPPME diagram to indicate quartile boundaries as they were (mis)labeled and not as they appeared in the IPPME graph. He said that he realized that Orme-Johnson et al. might not have intentionally mislabeled their chart, but in his writing, he implied that they had. He explained that his three-page discussion of the discrepancy between the labels and the chart was a ploy.

[My focusing on] the dots being in the wrong place is, at the most, uncharitable; it's a cheap trick. At the most charitable, it's a diagnostic of their being sloppy about their data. I did it as a ploy, really, to be frank with you. How can anybody in a journal make such an elementary mistake? They've been very sloppy about this.

In his rush to indict, Reviewer 2 rhetorically implied fraud, even though he said he did not consider that part of his analysis "definitive" and would not have used it if he had not decided that the series was nonrandom. Consistent with Reviewer 2's explanation that he did not thoroughly review the research, he missed several key elements of the analysis. When they were pointed out by Orme-Johnson, the critique was not published.

# Means to Overcome Barrier IV: Confronting or Preventing the Influence of Prejudice in Research Review

Reactions to IPPME such as denial and "shutdown" are akin to culture shock. In this case respondents reacted to a paradigm that to some

appeared foreign, which in some cases also collided with cultural conditioning, almost beyond conscious awareness or control (Bennett, 1993; Juffer, 1993). Intercultural trainers suggest that travelers dealing with culture shock can expect to grow developmentally beyond it, if they do not withdraw (Bennett, 1993). They may eventually accept or even adapt to the new culture, implying that researchers may be well advised to sustain their research program and communication of it, even in the face of prejudiced reactions.<sup>11</sup>

As reporter 10 pointed out, more background is needed to effectively communicate IPPME. But effectiveness depends on respondents' capacity and motivation to go beyond cultural stereotypes, initial categories, or generalizations. This requires them to pay attention in new ways to attributes that distinguish the research from those categories or stereotypes (Dovidio, Brigham, Johnson, & Gaertner, 1996). People in power—such as these gatekeeper respondents—may stereotype the less powerful, because they are less attentive to them.

Table 3 describes means suggested by relevant literature to overcome stereotyping at the different levels of cultural sensitivity, ethnocentrism, and denigration expressed by respondents above—from mild "images that came to mind" to political efforts to suppress the research. Interventions would be more effective if tailored to meet individual needs (Levy, 1999, p.17).

Respondents (Table 3, row one) who did not express prejudice:

- Expressed interest and empathy in understanding precisely how IPPME would be perceived within a number of cultures (Bennett, 1993);
- Weighed scientific quality;
- Decided about further consideration independently of their institutions—though they were aware that others might look askance at their acceptance of the research.

<sup>&</sup>lt;sup>11</sup> In fact, since IPPME was published, the researchers have published a rebuttal of Reviewer 1's critique, presented a paper on seven replications on the war in Lebanon at the annual convention of the *American Political Science Association* (Davies & Alexander, 1989) and finally have gotten the paper published after numerous attempts to block it (Davies & Alexander, this issue).

Since IPPME, two further studies have been published in *Social Indicators Research*, the leading journal in that field (Dillbeck, 1990; Hagelin et al., 1999). Replications and extension on reducing conflict and terrorism as international crimes are also being published in the *Journal of Offender Rehabilitation* (Orme-Johnson, Dillbeck, Alexander, Chandler, & Cranson, 2003). In addition, further replications have been published in *Psychological Reports* (Assimakis & Dillbeck, 1995), and in *Psychology, Crime & Law* (Hatchard, Deans, Cavanaugh, & Orme-Johnson, 1996). Two reviews of research in this area have been published since IPPME (Orme-Johnson, 1994; Orme-Johnson, 2003).

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Importance of utility testing	Independent of institutional constraints or judgments about challenge to status quo	appeal to standards)	Institutional con- straints more impor- tant in deciding not to consider IPPME	
Importance of truth testing	Weighing of IPPME's scientific quality important in decisions whether to give fur- ther consideration	ut more can be done; i.e.,	Sometimes weighed IPPME's scientific quality	(continued)
Observations re: stereotyping	No stereotypes, prejudice; aware of others' categorizations/ stereotyping	e in all categories, b	Negative stereo- types; mild deni- gration of IPPME	
Experience, cultural sensitivity, open-mindedness	Experienced TM tech- nique, other meditation, or yoga—personal, friend, or family; interest in communica- ting interculturally; valued open-mindedness; scientific training/ empirical orientation	(Same indications as above in all categories, but more can be done; i.e., appeal to standards)	Expressed cultural sensitivity	
Selected respondents	Congressional Respondent 6 Policy Advisors 7,8	Scholarly Reviewer 5	Congressional Respondent 4 Reporter 7	

Remedies for Overcoming Stereotyping and Prejudice Associated with International Peace Project in the Middle East

**TABLE 3** 

# TABLE 3 (cont)

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Importance of utility testing	Felt that IPPME challenged work arrangements and status quo arrange- ments	Political motives more important: aimed to remove IPPME from turf and to end publication
Importance of truth testing	No truth testing: didn't feel capable: relied on outside sanctions; thoroughly examines scientific quality, but suspected authors	No thorough truth testing ic)
Observations re: stereotyping	Denigration of authors as short cut to negative assessment of IPPME	Expressed strong N denigration; high te emotion; highly motivated; used emotionally loaded associations (rhetoric) to convince others (conditioning)
Experience, cultural sensitivity, open-mindedness	Expressed ethnocentrism	Expressed ethnocentrism
Selected respondents	Policy Advisor 6 Scholarly Reviewer 3	Scholarly Reviewers 1,2

- Tended to have more direct experience of the TM technique, another meditation technique, or yoga—personally or through family or friends, intellectual frameworks, and/or relevant academic preparation.
- Suggested that more background would help them and their colleagues.

Two respondents at the next level of prejudice (row three), who were mildly affected by stereotypes, articulated questions they needed answered. Senate aide Congressional Respondent 4 could not imagine anyone in the Senate besides his Senator taking the research seriously. An introduction to Congressional Respondent 6 (Senator), who was interested in exploring IPPME further, might influence his decisions about further consideration. With careful communication of theory or additional studies, Reporter 7, who gave IPPME enough attention to be deeply challenged by the causal claims, might find some of his doubts ameliorated enough to move IPPME into the universe of stories worthy of legitimate investigation. Providing more information, experience, and contact over time may be a first level solution to answering doubts and institutional constraints concerned with legitimacy.

More intense reactions to stereotypes (row four), involving suspicion of IPPME authors, would not likely be assuaged with more information. Repositioning the group, changing perceptions and labels, and increasing availability of IPPME authors' credentials might help (Stangor & Schaller, 1996). Human Rights Advocate Policy Advisor 6's efforts to ascertain IPPME authors' professional standing indicates the importance of maintaining active, visible professional associations.

Continued appeals to adhere to social scientific standards might motivate the scholarly community to attend more fairly to IPPME successors. Involvement of "independent" authors without TM affiliations would help.

Strategies for overcoming stereotyping include "priming shared values," that is, encouraging colleagues informally or formally to go beyond stereotypes in attending to scientific standards (Eberhardt & Fiske, 1996, p. 401). While intense criticism of editors who initially published IPPME succeeded in suppressing further consideration, praise for their fair treatment might open further avenues for publication. Eliminating intergroup conflict by inviting scholars like Reviewer 3 or policy makers like Policy Advisor 6 to participate in additional studies might mitigate "turf defending" tendencies (Eberhardt & Fiske, 1996, pp. 391–392).

Reviewers 1 and 2 (Table 3, row 5) expressed strong stereotyping and tried to persuade colleagues to undertake prejudiced action. Reviewer 1 in particular rhetorically associated IPPME and its authors with repeated unscientific and negative images. These associations were akin to classical conditioning, a basic learning mechanism. The intent appeared to be evocation of anger, fear, and distress when IPPME and its authors were mentioned.

Information, experience, contact, repositioning, or appeal to standards alone would not influence this level of prejudice—which is motivated in part by political competition for resources. To effect a change, a higher order response appealing to scholars to examine their collective conduct, educating policy constituents, and/or seeking arbitration would be required.

#### **Barrier V:**

## Identification with Institutional Agendas and Ways of Using Information

Respondents' assessments of IPPME were significantly influenced by their identification with their institutions and professions. Respondents from every group said IPPME was off their radar screen—out of the policy debate. Diplomats 1 and 2 adamantly asserted that IPPME was irrelevant to their strategic aims—namely to convince Middle Eastern government elites to adopt their perspectives and proposals.

Senior Diplomat 1 described his job as selling, as "persuading people to do things that they're reluctant to do." Information was particularly valuable, he explained, "to find the best way to make someone do something that is in their own self-interest and to recognize that it can be done in a way that meets the other person's self-interest." Diplomat 1 contended that the IPPME interventions "could not be integrated" into this kind of consultation with elites. He said it was "not relevant to affecting the attitudes of two men."

Diplomat 2 acknowledged that manipulating the thinking of "the political leadership, the professional bureaucracy, the opinion leaders, and academics in the Middle East" was part of his job. Contrasting his approach with IPPME's he said that he solved problems more realistically: "I take the reality of political events. I take the reality of human interaction, and I try to figure out a way to get people to talk to each other." He saw IPPME as useful only if it provided a tool to persuade or possibly even to calm opinion leaders with whom he might be negotiating.

Diplomat 2 said that promotions and demotions within his organization were often based on how people selected information from an enormous overflow. If they understood which information was considerd "real" and useful to top diplomats like him, they would advance in the bureaucracy. Some respondents who considered the import of implementing IPPME found it threatening to their jobs and discomforting in its unorthodoxy. Human Rights Advocate Policy Advisor 6, described above, explained that IPPME might actually undermine his work because it would require him to consider reality differently:

To stop doing what we do and try to set up these experiments. Get 200 people in Indonesia and China and Taiwan and everywhere else to meditate so that we would have a more positive impact on human rights conditions and the well being of people.... I certainly would have to think about whether I wanted to work here any more if I believed that this is the solution to some of the problems we spend our day, our time working on.

Policy Advisor 6 had no way of knowing that the Maharishi Effect interventions described in IPPME are not intended to replace human rights work, negotiations, or other traditional means for resolving conflicts, but instead to supplement them (see Note 4).

# Means to Overcome Barrier V: Effects of Identification with Institutional Agendas

As Lederman (1992) implied in the literature reviewed above, in order for Middle East correspondents to break a story that goes against prevailing story lines or super story lines, they need to take a different perspective, and break rules for continued access in Washington. Reporters whose beats include finding different perspectives, as Reporter 10 did, are better able to break with the story line and "ask dumb questions" about cultural distinctions needed to understand shifts in the Middle East, whether the Intifada or the Maharishi Effect.

Advocacy may be needed to promote more lateral thinking and to help researchers, reporters, lobbyists, and policy makers to develop intellectual frameworks within which they might ask such questions. Advocates might consider:

- including popular venues for debate like the *Economist*;
- communicating with sensitivity to the mismatch or incommensurability of respondents' working assumptions and those posed by the research; and
- developing strategies for addressing perceived and real political vulnerabilities.

Respondents in each group most likely to consider IPPME-related research in the future cultivated alternative approaches, were less defensive in their use of information, and were more open to risks. Their responses confirm that reconceptualization may better occur elsewhere than on center stage in government. These respondents had earned acclaim and respect from Middle Eastern and US governments. Their consideration of IPPME-related research could provide an incubator for testing and applying the research.

An example: Lobbying Organization Director Policy Advisor 8 gained credibility (and an award) in Washington for her writing and her ability to get involved with principals on both sides and to talk to people "both at the elite level and at the grassroots level." Twenty years' experience in resolving conflicts in different countries had cultivated her ability to listen to competing viewpoints. She approached the IPPME research information by first sorting out and addressing the difficulties different parties might have with it. She considered the Israelis' and especially Israeli leaders' discomfort with foreign ideas, especially mystical traditions that might overturn Judaism, and then the ways in which it could be explained to them. She had no prior knowledge of the Transcendental Meditation program, but she said she knew that there were people in Israel who did. She considered it equally from the Arab, the Israeli, and the Palestinian points of view and was impressed that the IPPME researchers had been able to gain the cooperation of these parties.

Although Policy Advisor 8 had doubts about the TM program's utility in the Israel-Palestine conflict, she was ready to consider the IPPME research further. "People who were trying to do what I'm trying to do can't afford to say, 'I'm not going to read it or go further."

Policy Advisor 8's risk taking and credibility could provide a means for testing ideas like IPPME at arm's length from Congress and the diplomatic community, if for example she were to review related and subsequent studies in the course of other work, or to help monitor further Maharishi Effect demonstrations. On the ground in the Middle East she would bring the ability to bridge differences, as well as the skill and contacts to communicate results within the policy community.

Like Policy Advisor 8, Policy Advisor 7 might have been in a better position than other respondents for considering IPPME's use. He too worked on the community-organizing level: the level suggested by Congressional Staffers (Congressional Respondents 2 & 7) and Congressional Respondent 6 (Senator) as a more appropriate level than Congress for consideration of a new paradigm. Policy Advisors 7 and 8 and Congressional Respondent 6 (Senator) were more interested in results than people's opinions. Both Policy Advisors 7 and 8 were aware that many Israelis practiced the TM technique without feeling a challenge to their Judaism.

Policy Advisor 7 was studying law, preparing to return to human rights advocacy—involved with the mainstream, but not of it—in Israel. He considered himself a realist and thought IPPME sounded "too good to be true." On the other hand, Policy Advisor 7 did not discount IPPME,

partly because "ignorance has stopped lots of good things in the world." He had considered the research information from a background in regression analysis, and found that the data and their significance led him to consider IPPME further. He found the size of statistical correlations to be "overwhelming," but added, "overwhelming increases skepticism."

Policy Advisor 7's and 8's readiness to consider IPPME in the future was based on multiple factors. Neither expressed prejudice. Both saw IPPME as compatible with Israeli culture and religion and could imagine the population being affected, despite questions and doubts. The scientific argument helped, and both were able to think independently of their policy institutions.

# CONCLUSION

Ultimate use of IPPME would mean applying its interventions in the Middle East with the expectation of preventing or dramatically reducing war deaths, improving negotiations, decreasing or eliminating human rights abuses, and improving quality of national and city life. This study has considered a necessary precursor to such use, namely use of research for reconceptualization.

Observations of the evaluations policy makers gave IPPME and whether they would give it future consideration confirm earlier reports that many—or even most—foreign policy community members tend neither to use nor to trust social science research. This study suggests, however, that a small number of people within every respondent group attended to social science and evaluated the research independent of their institutional constraints. Their examination of IPPME's scientific quality helped them to remain open to further consideration of the related research.

The majority of respondents in every group expressed many layers of difficulty occurring at once when examining IPPME. These difficulties, which are aspects of truth and utility tests, included:

- perceptions that IPPME did not fit their paradigms, operational assumptions, and information processing criteria;
- distrust of science;
- mild to strong negative stereotypes and prejudice;
- judgments that IPPME did not fit within their institutions or their conceptions about how foreign policy is conducted; and
- that it was also potentially challenging politically.

The greatest barrier to further use of IPPME-related research within the policy community—and especially its use for reconceptualization—

was decision makers' diminished access to more than one study, when peer review was overtaken by efforts to debunk the research.

Interviews with a smaller number of respondents within each group who were more likely to consider further research suggested means for overcoming these barriers to future consideration and use. Respondents who were more likely to consider further IPPME-related research were able to separate their assessments from the philosophies and practices of their organizations and the wider policy community. They had reservations, but their core assumptions or identities were not threatened. They engaged with science, suspended their predispositions, and inquired further. Respondents who did take research into account did so because they examined scientific quality, and this examination caused them to suspend their disbelief.

Surveying respondent interviews and relevant literature for means to overcome barriers to use, including use for reconceptualization, both of IPPME and related research, suggests that:

- Policy community members could benefit from more background, especially direct experience and orientation to overcome disbelief.
- The readiness of some respondents to examine further studies indicates that even though some respondents found social science irrelevant to social problems, others would continue to attend to follow-up studies, especially if social scientists continued to address quality issues.
- To maintain deliberative evaluation of research when it is attacked within peer review, editors and reviewers may also need to consider additional standards.
- Stereotyping and prejudice were evident on multiple levels indicating varying levels of perceived challenge to the status quo. Researchers are advised to sustain their research program and communication of it and to appreciate the appropriate responses for different levels of stereotyping and prejudice, including appealing to scholars to create and uphold standards.
- To promote thinking outside of institutional constraints, social scientists may also consider advocacy in the popular press, paying more careful attention to policy makers' constraints, and forming coalitions with organizations at a distance from mainstream policy-making, where innovation and risk-taking are undertaken more regularly and where policy advisors communicate with the mainstream with skill.

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#### APPENDIX A

#### **Respondent Descriptions**

#### **Congressional Respondents**

**Congressional Respondent 1** majored in history and earned a master's degree in political science and international affairs. She had served as a legislative assistant to one representative from 1979 to 1985, and was working for a Representative (committee chair) as a professional staff committee member.

**Congressional Respondent 2**, chief of staff for a Congressman since 1991, had worked as a college intern for another representative. She spent 10% of her time on Middle Eastern issues.

**Congressional Respondent 3**, a law school graduate, was in his fourth year as a US Representative. Prior to being elected, he was a practicing attorney and law school professor.

**Congressional Respondent 4** had a master's degree in international relations and had worked in the Senate for six and a half years, first as a legislative correspondent and later on a committee staff working for the chairman.

**Congressional Respondent 5** majored in South Asian studies in college. He was a foreign policy legislative assistant who had focused on various regions. Before joining his Senator's staff he worked on Asian issues with "public interest groups that lobby on Asia."

**Congressional Respondent 6,** an attorney and a Senator, had served in the House and Senate for a total of 21 years and was known for his independent and principled stands. He had served on several foreign affairs committees.

**Congressional Respondent 7** had recently completed a master's degree in Middle Eastern Studies and had been a Congressional staffer for about two years.

#### Diplomats

**Diplomat 1** earned a PhD in Middle Eastern history and American diplomatic history, was an author, a former professor, and was serving as a senior diplomat.

**Diplomat 2,** PhD, was a former university administrator who had served in various capacities since 1977. He oversaw relations with many countries, managed hundreds of people, and was considered an effective and pragmatic diplomat and negotiator with particular expertise in the Middle East.

**Diplomat 3,** PhD, was a former university professor, strategist, and negotiator. He held a leading role in formulating and implementing US policy in several areas for over a dozen years and had published extensively. According to one journalist, he was, "as much of an expert in [Middle East diplomacy] as there is."

**Diplomat 4,** PhD and former university lecturer, had often been honored for his work in various management capacities related to Middle East diplomacy over 20 years.

#### Policy Advisors, Analysts, and Lobbyists

**Policy Advisor 1** interrupted his PhD work and academic teaching in political science and Middle East studies to become executive director of an organization representing Americans of Middle Eastern descent. He was born in the Middle East.

**Policy Advisor 2,** with a B.A. in political science, had been working for four years as a senior lobbyist in constant contact with members and staff in a hundred House and Senate offices. She was responsible for relations with major foreign policy committees. She had served as a legislative assistant for two years in the Senate and three years in the House.

**Policy Advisor 3** held a PhD in international relations and was a Middle East scholar who taught international relations at a major university. He was associated with several think tanks and was working as a reporter. He had been New York and Washington correspondent for several foreign newspapers, and had served as a U.N. bureau chief. He had recently published a book on Middle Eastern affairs, had written articles for many US and foreign newspapers, and had appeared frequently on radio and television.

**Policy Advisor 4,** PhD, had been a senior Middle East analyst for 25 years in government, universities, and think tanks. He had published several books on the Middle East and was frequently quoted by other analysts.

**Policy Advisor 5,** PhD, had been a political science professor for about 30 years. He wrote and edited books on US policy toward the Middle East and on international politics and conflict generally. He had contributed to numerous scholarly journals. He was the director of a Middle East institute and a presidential advisor.

**Policy Advisor 6** held a master's degree in international affairs, and directed research activities and advocacy work for a human rights organization on behalf of four countries, including the Israeli occupied territories.

**Policy Advisor 7**, an Israeli and a law student at the doctoral level, was a human rights attorney in Israel.

**Policy Advisor 8,** codirector of a lobbying organization, had worked with notable success in related areas since 1977 and for her current organization since 1990. She received an award for her work in the Middle East and coauthored a book on peace in the Middle East. She had held direct conversations with principals on both sides at both the elite level and the grassroots level.

# Reporters

**Reporter 1**, a senior regional Middle East diplomatic correspondent for a pacesetting US newspaper, had specialized in Middle Eastern affairs for the past 20 years.

**Reporter 2,** who at 30 earned his M.A. in journalism, was a diplomatic correspondent at a pacesetting US newspaper, had written for all of the other pacesetting papers and had been at his current paper for 16 years. He covered economics initially, but had been "watching the Middle East closely for 6 or 7 years," as a member of a news team.

**Reporter 3** held a B.A. in political science, economics and psychology, and was a Washington diplomatic correspondent for an important Israeli newspaper. He had been a reporter for 25 years. Before that he was a spokesman for an Israeli politician.

**Reporter 4** had an undergraduate degree in economics and political science, and completed a one-year graduate-level journalism fellowship. He was a diplomatic correspondent who had worked in Washington D.C. for thirteen years, primarily covering foreign policy.

**Reporter 5**, a diplomatic correspondent specializing in the Middle East for 25 years, lived and studied in the Middle East for 20 of those years.

**Reporter 6** was a senior diplomatic correspondent at a pacesetting US newspaper for over 30 years.

**Reporter 7** was a diplomatic correspondent for a pacesetting US newspaper. After having been stationed in Jerusalem for 4 years, he specialized in Middle Eastern affairs.

**Reporter 8** served as bureau chief for 5 years for a major US newspaper. He had been based in Jerusalem since 1990 and covered Washington, D.C. from 1985–90.

**Reporter 9,** diplomatic correspondent for a major regional newspaper, was bureau chief for 6 of 10 years stationed in the Middle East.

**Reporter 10**, a former Woodrow Wilson Scholar and Oxford graduate in political philosophy, was a reporter for a large regional newspaper. Earlier, she had written stories about the Maharishi Effect as a freelance reporter, covering "what the Associated Press would not cover."

#### **Scholarly Reviewers**

**Reviewer 1** completed his PhD in political science. His master's degree was in mathematics. He also earned a minor in religion. Known as a rigorous mathematician, he had taught international relations, mathematical modeling and other courses for 18 years. His applied work dealt mostly with quantitative models of international behavior. He expressed an interest in using mathematical modeling and computer technology to predict outbreaks of war or famine.

**Reviewer 2**, with an undergraduate major of mathematical statistics and a PhD in psychology, was a retired social psychology professor who maintained involvement in a dozen research interests. He had taught statistics to graduate and undergraduates in psychology for 42 years and had published in a wide range of fields.

**Reviewer 3** earned his PhD in social psychology in 1976 and had worked as a professor since 1979. He was known for creatively using alternative research approaches, and for his interest in macro as well as micro issues in political science. He had published extensively.

**Reviewer 4** was a policy specialist at a US think tank and an applied mathematician interested in large-scale problems. He had published in numerous technical journals and had been involved in shaping US policy.

**Reviewer 5,** who studied physics and majored in philosophy as an undergraduate, earned a PhD in international relations. He had been a professor of political science for 11 years. His doctoral dissertation focused on statistical techniques, especially time-series statistical methods.

**Reviewer 6,** PhD in political science, had been a political science professor for over thirty years. He also trained in economics. He had published extensively, received numerous awards, and served on numerous editorial boards and as a consultant to many government agencies.

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