

COMMENTS ON MAB PROJECT 13 WORKSHOP
ON METHODS AND INTERPRETATION OF
ENVIRONMENTAL PERCEPTION RESEARCH
VICTORIA, CANADA, 24-28 MAY 1976

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Evaluation of Workshop

I will evaluate the workshop from my background as environmental and clinical psychologist and from my experiences as an environmental activist. I want to emphasize that I am not a methodological "purist" but just speaking about meaningful research with as immediate practical implications as possible.

The purpose of the workshop was "to aid the development of the programme of UNESCO/MAB Project 13 and to enable countries to incorporate environmental perception perspectives and methods into their MAB research" (invitation letter, 8 January 1976). The purpose to integrate environmental perceptions research into other MAB projects was strongly emphasized at the beginning of the workshop. Looked at from this goal the workshop has not succeeded very well. Several very serious criticisms can be levelled against the workshop:

(a) The concept of "environmental perception" was and still is used in a very vague, undefined and confusing manner. In psychological theories it is a much more narrow and rather well-defined concept. MAB Project 13 seems to have destroyed the concept. Sound research must be based upon reasonably clear concepts. It is also very dangerous to only use the

concept of perception as a steering concept when integrating behavioral science into MAB projects. This will tend to make future research blind to other aspects of man as learning, memory, cognition, motivation, emotion, behavior, action, etc. Human psychology does not consist only of perception. Concepts as behavior or action may be more important than perception when attacking environmental problems. I suggest "environmental psychology" or the broader concept "environmental behavioral science" as overall concepts.

(b) The plan for the workshop has been based upon a conception of research methodology that is much too narrow and even dangerous. The participants have essentially been given an uncritical catalogue of very briefly described conventional methods that have not been put into a total research context. Furthermore, several of the methods do not have much applicability and some of them necessarily require a thorough methodological training of the user, e.g. in psychometric theory. It is a waste of time and resources for others to use them. Often the methods are culture-bound. There are indeed more important theoretical and methodological questions to discuss in a workshop. Meaningful research above all includes selecting meaningful and important problems and problem analysis. It also includes, for example, selecting theory, choosing and/or constructing methods for each problem rather than uncritical application of methods used in other contexts, careful data analysis and critical interpretation of results.

For instance, selection of problems and construction of a simple questionnaire could have been more fruitful as learning experiences than the data collection with ready-made instruments.

Naive application of methods requiring thorough training will with high probability lead to accumulation of meaningless data. A lot of such data already exist and we don't need more. I got impressions from our very superficial exercises in data collection and data analysis that confirm this view. The risk of meaningless, unreliable and harmful research is very great indeed. The workshop may have done more harm than good!? The superior research method is still THINKING and we have not done much of that in the workshop!

(c) The lack of concern about psychological theory will lead to very superficial research. I don't think it is necessary to use psychological theory every time you do a practical investigation, but it will certainly lead to more fruitful research. There is a lot of relevant psychological theory, e.g. perception theory, cognition theory, learning theory, sensory deprivation theory, attitude theory, stress theory, game theory, etc. that can help the study of practical questions enormously.

(d) A complete lack of integration with other MAB projects. I think it is possible to select practical psychological problems from one or more such projects and study how to approach them during a workshop, preferably in small

working groups.

(e) Because of the lack of a sound educational plan for the workshop, I think it was confusing to many participants without behavioral science training and disappointing to others, including myself.

To say something positive about the workshop, I would point to the condition of having participants from different countries with different backgrounds. This may to some extent have led to a fruitful "melting pot," although the communication problems were disturbing.

Proposals

The roots of environmental problems are in human psychology. There exists within the behavioral sciences, especially within psychology, research methodology and theory that are highly relevant when trying to approach environmental problems. When selecting research problems the criteria of seriousness of the problem and generalizability of results to other problems should be used. The introduction of behavioral science methods must be done essentially by scientists with an appropriate training in research methodology. There is no lack of such scientists today. Bad research by inadequately trained researchers can be worse than no research at all and research may lose credibility and funding. Simple research methods should be used rather than theoretically and statistically advanced ones that are sometimes used for their own

sake or prestige reasons. There are at least three reasons for simplicity: (a) quicker results; (b) lower research costs; (c) communication, i.e., people not acquainted with research methods will understand the research better.

I believe the main steps of the research process should be:

Select an important problem according to criteria of importance, specify and analyze it.



Try to find relevant theories.



Select or construct methods according to the simplicity criterion



Collect data, if necessary. Analyse and interpret the results.



Practical implications, that should be kept in mind during all the preceding steps.

There are several other methodological approaches to environmental problems that seem more relevant than some of those presented at the workshop and often theoretically simpler, e.g.:

(a) There are more important variations on the scenario techniques with their hypothetical character. One can, for example, let people describe the consequences of real forecasts in city plans for the community and for themselves or let them comment upon real alternative proposals from politicians or planners. The proposal can be changed after the first reactions and be given back again for further reactions and so on, i.e. a dialogue or interaction process. Another possibility is to give people well-defined planning problems and let them propose solutions that, for example, can be presented to other samples of the population.

(b) Other techniques may be to let people participate in planning in more direct ways, e.g. through group discussions, allocation of fixed resources on different goals, etc. Group methods have the advantage that people not react as isolated "social atoms," which is the case in many techniques.

(c) Different kinds of "incident" techniques, where one gathers incidents, critical or otherwise (positive and/or negative) in different environments by observation, interviews or questionnaires. A simple category analysis of incidents may suggest changes that can be made.

(d) Different kinds of action research, e.g. techniques for changing perceptions, attitudes and actions of the public and decision-makers and for evaluating the changes. The researcher may himself initiate change processes, participate in actions and evaluate the effects.

(e) Different kinds of goal analysis techniques are needed, where the public, politicians and specialists from different fields can interact to set long-range planning goals.

(f) Research where the public selects the research problems and not the researchers themselves or the decision-makers.

(g) Techniques of content analysis may be used, e.g. to study documents and talk that the decision-makers produce. This can reveal that they tend to think in certain ways, for example, that they think with technical-economical terms and are ecologically unaware and dehumanized in their thinking. The analyses may, for example, be made by simple frequency counts of some key concepts. Such research can for instance make decision-makers more aware of their own psychological processes.

(h) Practical psychological training techniques like methods within group dynamics, role playing, perceptual sensitizing techniques (maybe like Perl's gestalt therapy), cognitive training methods, etc. can be used, evaluated and modified for environmental problems.

Cautions

There are several risks within environmental behavioral research that may exist even when it is properly done in a technical sense. For instance:

(a) It should not be isolated too much from social, economical and other problems. Environmental problems should be put into a total context. It is, for example, possible that in a certain area there are more serious problems than those in the physical environment. If so, resources should perhaps first be put into these problems. In research this may mean broad questions to cover a larger context in the beginning of a questionnaire.

(b) Behavioral research data are often not the only basis for resource allocation or measures. Other bases may be such things as biological facts or available economical resources. This may have important research implications, as when selecting and formulating problems.

(c) Research seems sometimes to be misused by politicians for avoiding the problem. They feel happy when they have put a researcher on the problem and thereby perhaps can avoid a controversial or difficult issue until after the next election. Problems often can be approached by some thinking efforts instead of by time-consuming accumulation of data. Action alternatives need not be too difficult to evaluate without research projects.

(d) Decision-makers are a key group when approaching environmental problems. As a consequence their psychological

characteristics and processes should be studied a lot. But what has happened is that they let researchers gather information about the public. It is possible that it would be easier to solve environmental problems if the public could get much more information about the decision-makers, that also need information about themselves. It is obvious that attitude research is highly biased in favor of the decision-makers. In Sweden, for instance, a strong political party has done opinion polls on environmental questions among the public but refused to answer a short questionnaire about environmental education from me, saying that they didn't answer questionnaires.

(e) It is a great risk that research techniques and data concerning environmental questions will be used for manipulating and deceiving people like commercial investigations often seem to be used. In Sweden, for instance, private companies and organizations have kept opinion data secret when these did not show what they wanted them to show and have given data to mass media when they supported their views. Research also has been misused by pressure groups by asking leading questions about controversial environmental issues.

(f) Researchers should be aware that an investigation can have effects (positive or negative) on the respondents. In Sweden it has been shown in an air traffic noise study that a leading questionnaire and a gift (book about aeroplanes) to the respondents made them report lower annoyance in a

follow-up study.

(g) As a rather general caution, I should say that the methodologically well-trained researcher who is naive concerning environmental decision-making may do more harm than good in some cases. In order to understand what research data are needed and how they can be used or misused, it is often necessary to understand the decision-making processes.