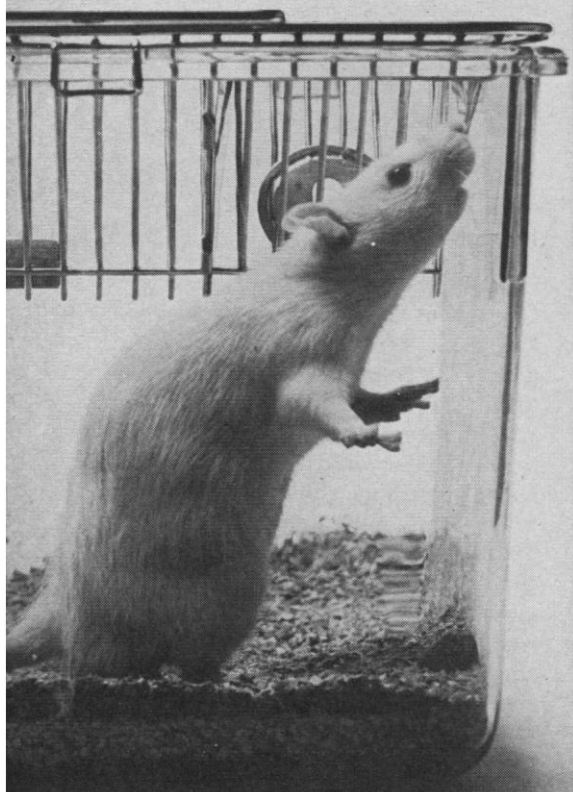


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whom I felt would "stay with it" longest. In this situation the *long-term* value of the commodity determines its price, not the immediate value. Lab directors just don't want and won't pay the same prices for people whom they suspect have a high chance of leaving.

I tried this letter out on a female colleague. On the dead-run out of her lab and over the crash of flying Erlenmeyers I caught her riposte: "You hammerhead, the lower survival rate is the result of the dollar discrimination!"

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Those who have written so vehemently about disparity between pay for men and women employees (particularly scientists) have not considered the employer's side of the coin. In buying the services of any equipment, mechanical, animal, human, or otherwise, the purchaser must consider return on his investment relative to initial cost, upkeep, depreciation, and perhaps other factors with which cost accountants are most familiar.

When hiring a scientist, male or female, the employer must look to the future. What is the productive life expectancy of the individual? What is the probable productivity of that person in terms of what the employer wants? How much will the individual cost per unit of output? And, could some other procurable person give comparable or more satisfactory service at the same or a cheaper per-unit cost? In view of the apprenticeship required for maximum productivity on most jobs, probable absenteeism, retirement and disability benefit costs, and so forth, these are valid considerations. Some years ago I found that some employers would not consider "common labor" beyond age 40. Their reason: It costs too much for retirement benefits for the time ahead that they can do this type of work.

I have seen no data comparing the relative per-life-unit-output cost of men and women in science, nor in any other occupation. I have heard that (i) most young women work only until they can find husbands; (ii) most mothers are engrossed with their families and not with their jobs; (iii) women are of uncertain tenure because their husbands move; (iv) pregnancy and parturition decrease the working woman's usefulness on the job; (v) women are not as dedicated to getting ahead as men are and, consequently, are not worth as much; and

(vi) women cause more friction and conflict than men.

During the past few years I have been instrumental in hiring several psychologists—men and women. My frustrating experience is that women and neophyte male psychologists are not good risks for employment in a community mental health program outside a large city. They don't stay long enough to become effective. They're looking for "a place to jump"—one with more "social advantages" and opportunity to start at the top of their profession.

I suggest that scientists come up with better predictive measures of lifetime professional output—also with short-term expectancies—before they become too exercised at what they cannot prove to be discrimination. What we see as discrimination may in fact prove economically and socially justifiable. There is no virtue in preferential treatment of a minority because it is a minority and may have been discriminated against.

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## DDT Proponents Challenged

The counterattack by pesticide manufacturers and their associates in defense of DDT charges environmentalists with being "emotional" and "hysterical" in their efforts to curtail the use of DDT (Letters, 27 Nov.). Lykken, formerly with Shell Chemical Company, speaks of "the emotional oratory about the apparent decline of certain species of birds. . . ." Nevertheless, the literature reveals abundant documentation by competent scientists on the inhibition of avian reproduction by DDT, the mechanisms involved, and their deleterious impact on populations of carnivorous birds (1). Unsupported charges that this work is "emotional oratory" are themselves indications of irrationality, yet they continue to appear in the popular media and as letters to editors of journals. If Lykken or his colleagues have any evidence from scientific studies showing that DDT has *not* caused the declines of these birds, they have certainly kept it a closely guarded secret. Until they publish such evidence in the scientific literature, most scientists will continue to believe the numerous refereed research studies they have already seen, rather than unsupported rhetoric.

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White-Stevens, formerly with American Cyanamid, threatens that without DDT and the like there will be disease, losses of food crops, and devastation of forests from "vast hordes of flies, fleas, mosquitoes, cockroaches, termites, and myriad other annoying household and home garden insects." Again, this and many similar sweeping statements by a few highly vocal DDT proponents are entirely unsupported. How did we survive before 1945? The insignificance of DDT in food production is demonstrated by its use on less than 1 percent of the food crop acreage in the United States (2), and its nearly complete elimination from use in California, our richest and most prolific food producing state. Voluminous documentation indicates that crop yields are maintained and often increased, not decreased, by integrated control programs that use less insecticide and no DDT (3). It is a matter of record that *no* insect pest problem has been eliminated by insecticides, and, in fact, that many have been *caused* by these chemicals—by the target pest resurgences, secondary pest outbreaks, and pest resistance that follow the dissemination of broad spectrum poisons (3).

It is curious that DDT proponents have not availed themselves of the normal channels for publication of scientific information, while evidence against DDT continues to be published in the scientific literature almost weekly. Nevertheless, the number of pro-DDT letters suggests that there must be *something* to support them. Since the Environmental Defense Fund and other organizations have undertaken litigation against DDT in several federal courts, DDT proponents will have ample opportunity to have their evidence heard in an impartial forum where its validity can be tested by cross-examination. It is unfortunate that the DDT proponents who speak so frequently in the media have so far avoided any role in this litigation, thus maintaining secrecy around the evidence for their position.

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## References

1. D. B. Peakall, *Science* **168**, 592 (1970); *Sci. Amer.* **222**, 72 (1970); S. N. Wiemeyer and R. N. Porter, *Nature* **227**, 737 (1970); R. G. Heath, J. W. Spann, J. F. Kreitzer, *ibid.* **224**, 47 (1969); R. D. Porter and S. N. Wiemeyer, *Science* **165**, 199 (1969); J. J. Hickey and D. W. Anderson, *ibid.* **162**, 271 (1968).
2. *U.S. Dep. Agr. Econ. Rep.* **158** (1969).
3. R. F. Smith and R. van den Bosch, in *Pest Control*, W. W. Kilgore and R. L. Doutt, Eds. (Academic Press, New York, 1967); R. van den Bosch *et al.*, in *Biological Control*, C. B. Huffaker, Ed. (Plenum Press, New York, in press); R. van den Bosch, *Environment* **12**, 21 (1970).

Lykken states: "Even if one accepts the emotional oratory about the apparent decline of certain species of birds and fish . . . and about the presence of DDT residues in mothers' milk, the fact remains that there is not any evidence, emotional or not, of harm to *man and his useful animals* [italics added] from the legitimate use of DDT and other persistent chlorinated insecticides despite widespread, high-volume use for over 20 years."

Population declines of the brown pelican and the peregrine falcon are well documented. Hatching failure due to thin eggshells associated with DDT residues in the parent birds is also well documented. It is irresponsible to imply that these findings are simply emotional allegation. The italicized statement reveals an arrogance that I do not share. Can anyone decide which animals are useful and which are not?

It is true that DDT substitutes that are cheap and readily available are hard to find. This does not mean that non-persistent, safe, more selective materials are not known. We have several pesticides that are much more toxic to insects and yet are nonpersistent and safe to use. None is as cheap as DDT and most are not readily available, but this is our fault for waiting so long to work on the problem.

DDT is no longer used by the U.S. Forest Service to combat defoliating insects and there is no need or effort to reinstate it that I am aware of. We have more effective and safer substitutes. One of these is Zectran. The safety of this compound to birds, mammals, and fish has been intensively studied. It is much more toxic than DDT to every insect species we have tested; the amount needed for control of the spruce budworm, for example, is only 0.15 pound (68 grams) per acre compared to 1 pound of DDT. Other materials that we are working with are even more toxic to destructive insects though not hazardous to nontarget animals, but they are not yet registered or available.

If Sweden has had to resort to DDT to control destructive forest insects, I suspect they are not actively working on substitute materials.

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... Predator insects in a normal biotic situation, or in one unaltered to any great extent by man, are animals *useful* to man and these are known to have been destroyed by DDT and other persistent chlorinated pesticides. . . .

Some animals regarded as useful to man have, in certain areas, lost their usefulness. One example is the coho salmon of Lake Michigan: in a short period during the spring of 1969 the FDA seized 35,000 pounds of these fish because they were found to contain levels of DDT dangerous to man (*Science*, 23 May 1969, p. 936). A similar situation occurred about a year ago with mackerel caught off California. What is most shocking is that because of the persistence and relative insolubility of DDT it will continue to build up in the oceans for the next decade or so even if its use were stopped today.

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### Psychologists' Preprint Plans

Constance Holden (25 Dec., p. 1385) reports statements attributed to David Grant, editor of the *Journal of Experimental Psychology*, as follows: "Grant . . . says that the APA journal, the *American Psychologist*, accords virtually no space to those who wish to criticize NISP or offer alternative ways of improving the information system."

This is not the case. The *AP* has never refused to publish critical articles on the NISP program. I assume that Grant was referring to the only two manuscripts received in this office on this subject. In one case the manuscript was withdrawn by the author almost immediately after the manuscript was submitted; and in the other case, during the course of correspondence with the author, he advised me that the article would appear as an editorial in another journal and was not suitable for publication as a paper.

It would have been so easy for

Miss Holden to check the facts with the editor of the *American Psychologist* before her article was published.

CHARLES S. GERSONI  
*American Psychologist, American  
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Constance Holden has made an honest attempt to capture the essence of APA's program for a National Information System for Psychology (NISP), and the opposition to it by some members of the association. . . . Her errors of fact are relatively minor; for example, APA has never contemplated "computerized distribution of tape cassettes and films." Dean Kenneth E. Clark (University of Rochester, College of Arts and Sciences), chairman of APA's communications committee, can provide accurate factual material on which the reader can make his own evaluation of the program.

More distressing in her report is the dearth of positive suggestions for the improvement of the APA communications program. The program's critics, first Jane Loevinger (*Science*, 27 Feb. 1970, p. 1228), and now David Grant, seem—at least as reported—to be avoiding substantive discussion. Both display a surprising lack of knowledge of the way in which their association functions. Projects are not designed and put into action at the whim and fancy of staff members in *any* of APA's programs. In the communications program, for example, a ten-member governing committee duly elected by the council of representatives of the association reviews, criticizes, frequently initiates, and always authorizes the implementation of a project. It then continuously monitors and evaluates such projects. When major policy is involved, the issue goes to the board of directors for its decision, and all other major APA boards and committees are kept informed by briefings at their scheduled meetings.

Suggestions of dark and sinister plots (the machinations of "cabals," according to Loevinger) make titillating reading, as do denunciations of unspecified "half-witted schemes." As with most ad hominem arguments, however, neither is particularly useful in solving the manifold and important problems of scientific information exchange in psychology.

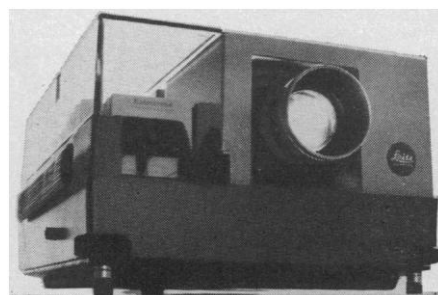
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