- no consistent superiority of one style over (62, p. 280). Quinn and Kahn wrote (61, p. 448): "A style of leadership which affects may have little bearing on productivity; likewise a style which affects productivity may have no effects on attitudes."
- 64. If the change in supervision in the Relay Assembly Test Room had not occurred, previous habit and custom in the plant might have carried over into the experiment, thereby inhibiting changes in rate, as they probably helped do in the Bank Wiring Observation Room, 65. See S. E. Seashore, Group Cohesiveness in the
- Industrial Work Group (University of Michigan, Institute for Social Research. Survey
- Research Center, Ann Arbor, 1954).

 A. Chapanis, Research Techniques in Human Engineering (Johns Hopkins Press, Baltimore,
- 67. R. Sommer, Psychol. Bull. 70, 592 (1968)
- I am grateful to G. C. Homans, F. J. Roethlisberger, and W. J. Dickson, who helped with information when I began this investigation and read an earlier version of this article, although I do not wish to imply they agreed with my conclusions. To these principal expositors of the Hawthorne research let me say

that hindsight is easy, but I hope it will be tolerated when reexamination is timely. I am especially indebted to Dickson for putting me touch with Donald A. Chipman, and to Chipman for his first-hand evidence about the Relay Assembly Test Room. I am also indebted to Stanley Dodds, who first made me aware that I had never read the primary source material on Hawthorne. I gratefully acknowledge permission to reproduce Figs. 1 and 3 from the Division of Research, Harvard Business School, and Table 1 and Fig. 2 from the Harvard University Press and from F. J. Roethlisberger and W. J. Dickson.

NEWS AND COMMENT

U.S.-U.S.S.R. Exchange: Americans Split on Schizophrenia Program

The 20-month-old agreement between the United States and the Soviet Union to perform joint research on schizophrenia may be endangered because of growing doubts on the American side about the Soviet Union's motives in the agreement. Central to the doubts of the American psychiatrists involved with the exchange is their conviction that some Soviet psychiatrists deliberately misdiagnose political dissidents as mentally ill and confine them on orders from higher authorities seeking to quell the dissident movement in Russia.

Unlike the U.S.-U.S.S.R. accords establishing joint research efforts in cancer, environmental health, and heart disease, which have proceeded in a more or less straightforward fashion since they were signed during the rosy Moscow summit meeting in May 1972, the schizophrenia research agreement is still in the exploratory stage. Work protocols, which are detailed research plans, have been signed in the other fields-but none for schizophrenia has been signed by the Soviets. About a dozen U.S. researchers have visited the Soviet Union under the agreement, but no Russian researcher has come here.

Several factors are contributing to the psychiatrists' unease about the Soviet motives. The purpose of the agreements was to facilitate communications between the two sides. Instead, some of the Americans' proposals have generated only minimal replies, and some of their letters have seemed to disappear into Russia, drawing as much

response as if they had been sent into outer space. The American psychiatrists who have been to Russia express great admiration and respect for the younger psychiatric researchers they have met; but the leaders of Soviet psychiatry, whom the recently exiled novelist Alexander Solzhenitsyn and others have accused of acting as organs of coercion against dissenters, are viewed as suspect. There is also some evidence that the Soviet authorities use the mental health exchanges for propaganda purposes to whitewash their psychiatric system. Finally, the Americans debate how much they have to learn, scientifically, about schizophrenia from the Russians, after all. Interviews with most of the government and academic psychiatrists who have been to Russia under the agreement, in discussing these doubts, indicated that they have sometimes considered pulling

Today's Soviet mental health system is cited as a model of efficient national health care delivery. Nonetheless, charges that Russian psychiatry is abused for political purposes-made under the czars-persist. The best known recent case was in 1970, when the prominent gerontologist Zhores A. Medvedev was forcibly taken from his home, committed to a mental hospital, called a schizophrenic, and then diagnosed by a panel of psychiatrists (including some who are leaders in today's exchange with the United States) as a psychopath. According to a book he subsequently wrote about the experi-

ence, only a worldwide protest campaign conducted by Zhores' twin brother, Roy Medvedev, succeeded in winning Zhores' release 3 weeks later.* Both before the Medvedev case and since then, charges with considerable documentation have been made that this practice persists.

One American psychiatrist who was associated with the exchange program while in Russia says, "I did not see such cases. . . . I think they exist. I'm sure they do. It's a case of where their system of classifying people [as mentally ill] fits hand in glove with their political needs." Another psychiatrist echoed, "I don't think any of us doubt that it's going on."

Negotiating the schizophrenia agreement for the United States is Bertram S. Brown, director of the National Institute of Mental Health (NIMH). Brown says he has privately discussed the charges of abuse of Soviet psychiatry with the Russians "in every setting" he has been in. "I received assurances it wasn't so and remained skeptical." Nonetheless, he explained, for the time being the Americans will pursue their part in the agreement. "Even if it turned out that we had little to learn and ended up contributing more than we were getting, the end product would be better. The critical mass of work done on these problems would have been increased." But Brown, like the psychiatric researchers under him at NIMH who have been to Russia, cites scenarios under which they would withdraw. "If, when they do send people over here, the Russians only send second-rate researchers, or people who are politically safe, that would be a reason to withdraw."

The idea for a mental health research exchange was piggybacked onto

^{*} Z. Medvedev and R. Medvedev, A Ouestion of Madness: Repression by Psychiatry in the Soviet Union. Copyright 1971. First published by Macmillan, London Ltd., in Great Britain and Alfred A. Knopf, Inc., in the United States. (Random House, Vintage Books, New York, 1973).

other health agreements which were being discussed with the Soviets in the middle of 1971. According to Brown, the notion arose when Reuben Nadzharov, deputy director of the Academy of Medical Sciences' Institute of Psychiatry in Moscow, and another official, called on Brown while they were visiting the United States just before a meeting of the World Psychiatric Association (WPA) in Mexico City in November 1971. Brown was receptive, as were his schizophrenia researchers.

So schizophrenia research became a fixture on the list of possible joint research areas when the implementing body for the accords, the Joint Committee on Health, met in Moscow in March 1972, and when the accords themselves were signed during Nixon's world-heralded summit meeting in May. Brown led a seven-member NIMH delegation for follow-up talks with psychiatrists in Moscow, Kiev, Leningrad, and Tbilisi in September. Yet at the second meeting of the joint committee in March 1973, their joint work was still not formalized. Caspar W. Weinberger, Secretary of Health, Education, and Welfare, toured the Soviet Union in September. But at a subsequent press conference, schizophrenia received the briefest passing mention. Last November, Brown signed a work protocol which had appeared to be mutually acceptable to NIMH and Soviet psychiatrists the month before; he has yet to receive a Soviet signature so that work at last can start moving. Disappearing mail and minimal response to American proposals is taking its toll: "There is no exchange so far," says E. Fuller Torrey, an assistant to Brown and a schizophrenia expert who has been to the Soviet Union twice. "So far it exists only on paper."

But even if the Soviets appeared to be expediting an active, meaningful research exchange, the American scientists would still have to face the issue of political abuse of Soviet psychiatry. The fact is that many of the Soviet psychiatrists who have represented their country in working on the agreement are the very ones who have been accused of being state examiners of people who are politically troublesome. These leaders are named in the book by the Medvedev brothers and in a second authoritative source, the Bukovsky papers, a group of eight case histories of dissidents who have been locked in asylums, compiled by one of

Insurance Dominates Health Message

National Health Insurance (NHI) seems to be an idea whose time is coming, although the form and probable time of arrival of NHI remains very much in doubt. On 6 February President Nixon sent his proposal for a Comprehensive Health Insurance Plan (CHIP) to Congress, and on 20 February he followed it up with a second health message recommending a number of actions which would, in effect, buttress the existing health care system against the impact of NHI.

Medical schools have reacted negatively to a proposal in the message for a new health manpower training program. The program would implement the Administration's previously expressed intention to shift federal funds from institutional support to support of individuals in shortage categories. The principal aim would be to increase the number of "primary care" physicians and provide incentives for physicians to practice in rural and inner-city areas which are poorly served. Legislation embodying the changes will be submitted later. The message carried only a general reference to biomedical research, but it is evident that the President intends to continue the emphasis on research on cancer and heart disease reflected in the federal budget issued last month.

As for CHIP, even if Congress responds to Nixon's urging to deal with NHI this year, the Administration proposal faces competition from other starters in the legislative race. As not infrequently has been the case, the leading alternative to Nixon's plan is identified with Senator Edward M. Kennedy (D-Mass.). Nixon's CHIP would build on the existing system, with private insurance companies maintaining their current role. Employees would be offered private health insurance by their employers, who would pay 75 percent of the premiums. Persons receiving benefits under the Medicare and Medicaid programs would be covered in the new plan under separate arrangements.

National Health Security Act

The Kennedy "National Health Security Act" would be a completely public program financed by employer and employee payments to a trust fund and modeled on the social security system. Both plans would require additional payments of federal funds, but the Kennedy proposal in its present form would offer broader coverage and be considerably more expensive.

The new Nixon plan is regarded as being much more acceptable to Congress with respect to who and what it covers than was a proposal for a limited NHI scheme he made in 1971 that Congress allowed to die on the vine. Some observers think Congress might bypass both the Nixon and Kennedy plans for the option offered by a plan to cover only catastrophic illness which is backed by Senator Russell B. Long (D-La.).

Even if an NHI law is not passed this year, the Administration will no doubt argue that the measures asked for in Nixon's second health message should be enacted. None of these measures are really new, and most of them are designed to give the Administration greater leverage on costs, manpower supply, and organization in the health care system. Authority to extend economic controls over the health care industry is asked for, and further development of both Professional Standards Review Organizations (PSRO's) and Health Maintenance Organizations (HMO's) is requested. PSRO's are physician-operated panels which review the quality of care given in Medicare and other federal health programs. HMO's are the health care organizations providing prepaid service to groups.

In commenting on the message, Health, Education, and Welfare Secretary Caspar W. Weinberger and other Administration officials recalled the pressures on health costs and services caused by the passage of Medicare and Medicaid in the middle 1960's and argued that the proposed new measures would mitigate similar effects from NHI.—J.W.

them, Vladimir Bukovsky, who is now in a prison camp.†

The leading psychiatrist in the Soviet Union is A. V. Snezhnevsky, who holds virtually every top national post in the country. Although Roy Medvedev writes that, at one time, Snezhnevsky "very much disapproved of the compulsory committal of Zhores," nonetheless, the action against Zhores was taken with Snezhnevsky's acquiescence, and he later defended the diagnosis of Zhores as a psychopath. Likewise, Weinberger's counterpart in the Soviet Union, the Minister of Health Boris Petrovsky, appointed the psychiatric commission that examined Zhores.

Others are Snezhnevsky's deputy, Nadzharov, who sat on the commission that examined Medvedev; Nadzharov also sat on a commission in 1969 which found dissident artist V. Kuznetsov schizophrenic, too. A. A. Portnov, who hosted the NIMH delegation at a party in Moscow, was appointed to the Medvedev commission, as were two other leading psychiatrists, V. M. Morozov and G. Morozov. According to the Bukovsky papers, G. Morozov examined a former Red Army Major General Pytor Grigorenko and poetess Natalia E. Gorbanevskaya, both dissidents, and found them insane. Another psychiatrist known to foreign psychiatrists who visit Russia is D. J. Lunts. In a recent book on the Soviet secret police,‡ Lunts is alleged to wear the uniform of a KGB colonel when he is not at the Serbsky Institute of Forensic Psychiatry in Moscow, in a white coat, treating patients for political nonconformity.

Although convinced that the Medvedev and Bukovsky charges are at least in part true, the U.S. government psychiatrists who have been to Russia do not think people like this are characteristic of the profession there. "I think there are a few guys who act politically at the Serbsky Institute and elsewhere," says a senior researcher at NIMH. "... [T]here are others, like Snezhnevsky, who have to go along. . . But there is a third group which are the people in the middle and the younger people, who are good scientists. . . . And these

are the people [whom] we want to see."

American psychiatrists are also aware that the mental health exchange's existence conveniently serves the needs of Soviet propagandists. Brown said that he would feel misused if he learned of a propaganda statement which quoted him as whitewashing Soviet psychiatrists of the charges of abuse. No cases like that have been documented. However, some propaganda statements have certainly implied that foreign psychiatrists who seek détente and peace through international cooperation do not agree with the charges. For example, an 8 August 1973 Tass article attacked "anti-Soviet propaganda" on the abuse of psychiatry issue, and went on to say:

It is by no mere chance that neither the World Association of Psychiatrists nor prestigious foreign scientists-psychiatrists allowed themselves to be led by the organizers of the provocative anti-Soviet campaign, by having dissociated themselves from anti-Soviet slanderers. . . .

And the very propaganda ballyhoo which they are trying to stir up around this fabrication runs counter both to the interests of the efforts by psychiatrists for the mental health of people, the noble aims of medicine as a whole, and the interests of expansion of international cooperation and consolidation of peace.

A more explicit example was a release by Novosti news agency after some foreign psychiatrists, who were in Russia at the time, visited the Serbsky Institute of Forensic Psychiatry in Moscow to hear the Russians, G. Morozov among them, defend themselves against the charges. The NIMH psychiatrists who were then in the Soviet Union—Jimmie Holland, Loren Mosher, and William Pollin-trying to develop a work protocol with the Soviets decided that their presence at the Serbsky meeting might be misinterpreted and decided not to go. However, Alfred Freedman, president of the American Psychiatric Association (APA), who had pressed for a meeting on the allegations, went.§ Afterward,

§ The APA has been active on the abuse issue in the last 2 years. Many of the APA's officers and trustees are now supported by a liberal caucus of APA, the Committee of Concerned Psychiatrists, which seeks to make APA more socially and politically responsive. Freedman, of New York Medical College, cabled Snezhnevsky last September calling for a meeting to discuss the specific cases of alleged abuse of psychiatry. Freedman's telegram upset the Soviets, according to some later reports, and precipitated one of the few on-therecord discussions of the subject by the Soviets which took place at the Serbsky Institute on 15 October. By contrast, the WPA, both at the Mexico City meeting in 1971 and at subsequent deliberations, has steadfastly avoided meaningful action, despite the fact that many British, Australian, Canadian, and American members have repeatedly tried to move the organization in that direction.

however, Novosti conveniently forgot the distinction and assumed that all the foreigners visiting Serbsky "represented" their governments.

night, authoritative psychiatric specialists, representing Britain, the U.S.A., Sweden, Denmark, Switzerland, Mexico, Nigeria, and Japan, familiarized themselves with case histories, some of them hundreds of pages long. They could verify that the patients whose "rights" were defended by the Western press had been under psychiatric treatment long before committing antisocial deeds . . . [italics added].

The slowness of the Russian response to American initiatives, the cast of characters with whom they must deal, and the possibility of being misrepresented by Soviet propaganda have given the Americans pause in deciding whether to continue with the mental health exchange agreement. Irwin J. Kopin, one of the group, says he now believes that the exchange agreement is a "front" for both sides—for the Soviets to whitewash themselves and for Nixon to pursue his policy of détente. He, along with several others, says the group has "intermittently" considered pulling out. "It's a dilemma. If withdrawal would help them keep politics out of their psychiatry, then I would do that. But I continue in the hope that we will influence them in that direction."

One factor in the psychiatrists' thinking on withdrawal, inevitably, is what could be lost scientifically. Torrey explains that 2 years ago, when they first expressed interest in the exchange possibility, their ignorance—and the ignorance of American psychiatrists generally—about what Soviet researchers were doing was an important consideration. "We just didn't have any idea what we would find there. We knew so little that we didn't even have any illusions we would find something valuable."

Now, however, opinions vary on what the Soviets can offer. One trip report compiled by Holland on some psychiatry symposia in Tbilisi and Yerevan last year makes the devastating comment: "In general, in the scientific sessions, the Soviets did not appear to understand some of the 'foreign' papers and I think in general the non-Soviets didn't appreciate the Soviet papers. Besides their lower level of scientific discipline, their wordy presentations do not come across well in translation." Another psychiatrist estimated that the Soviet work in schizophrenia was 10 years behind that

[†] The so-called Bukovsky papers were made part of the congressional record when a subcommittee of the Senate Committee on the Judiciary [chairman, Edward J. Gurney (R-Fla.)] held hearings on the abuse of psychiatry in the Soviet Union on 26 September 1972. The transcript may be obtained from the Government Printing Office, Washington D. C. 1972, stock No. 527(b.1653)

ington, D.C., 1972, stock No. 5270-01653.

‡ J. Barron, KGB: The Work of Soviet Secret Agents (Reader's Digest Press, Pleasantville, N.Y., 1974).

in the United States. Kopin, one of NIMH's researchers, has a still different view of the Russian's position on the biochemistry of schizophrenia.

They know the literature, but they're at least 2 or 3 years behind. They ask good questions, but they are the same questions that should have been asked 2 years ago, and were asked... There are no procedures they can do that we can't do. We can do more because we are better equipped. Not that we're brighter, we're just better equipped...

Aside from differences in equipment and familiarity with the current literature, joint research in schizophrenia between the United States and the Soviet Union is difficult because of the gulf that separates the two countries' definitions of mental illness in the first place. The Soviets' great contributions to the field were made through the behaviorist I. P. Pavlov, and the ideological confines of Marxism have prevented Freud from being widely accepted. Hence, Soviet definitions of schizophrenia, for example, are oriented around the externally observed behavior of the patient, and do not consider his interpersonal relationships -information which would be crucial to an American psychiatrist. Hence the two cultures, each of which has its own concept of mental illness in general and schizophrenia in particular, disagree on who to call schizophrenicalthough there is a core group common to both.

Differing concepts of schizophrenia complicate the question of misdiagnosis of political dissenters. The Soviets define schizophrenia as a coherent, recognizable disease with a predetermined course, much as a physical disease follows a predictable course in the body. Hence, once a person is diagnosed as schizophrenic, he is considered schizophrenic for life. Many cases of alleged abuse have involved political nonconformists who are diagnosed as being in the early, or mild, stages of schizophrenia. A Russian psychiatrist can argue that these people will inevitably become sicker, and hence should be treated by confinement—while an American clinician would be much more cautious about diagnosing schizophrenia in the first place—let alone ordering confinement. In addition, the Soviet psychiatry and law enforcement systems tolerate much less deviance of all kinds than do their Western counterparts.

The American psychiatrists say that one of the most interesting aspects of the Russian work on schizophrenia has centered around their theory that it is genetically induced—a notion which an increasing number of Western psychiartists are beginning to explore. Hence the Soviets have collected, they say, a wealth of information about patients' family histories, which is of great interest. However, they add, the gap between the two countries' diagnostic criteria has to be bridged somehow before all this genetic information can be really useful to American researchers. Nonetheless, this is one area where the exchange has been interesting and rewarding to the Americans.

What then has held the exchange

agreement together and kept the Americans receptive? All of those interviewed mentioned the personal contacts they had made with what one termed the "third group" of middle level and younger psychiatrists, who were repeatedly described as "hungry" for new information and discussion in their fields. "They seemed so grateful to us for coming over there and talking to them," says one.

On the political level, too, the psychiatrists made compelling cases for remaining in the agreement for the sake of individual scientist-to-scientist contacts. Brown and others cited the fact that prominent Russian dissidents, such as Andrei Sakharov and Solzhenitsyn, in their writings have urged Western scientists to continue to attend meetings and stay in touch with their colleagues in the Soviet Union. "Many people there feel their contacts with the West are a form of life insurance,' explained one. Another added, "The more contact there is, the more visits there are, the better. There they have a tremendous effect, like throwing pebbles into a lake."

So the American researchers are proceeding with the mental health exchange agreement for the time being. But they are doing so only with great doubts and hesitations. Of all the science and health accords, this agreement appears to be the one where the professional and political differences between the two sides are most evident. As one of the participants summarized: "It's a microcosm of détente."

--- DEBORAH SHAPLEY

Sterilization Regulations: Debate Not Quelled by HEW Document

The release of regulations on sterilization of minors and mental incompetents by the Department of Health, Education, and Welfare has not resolved the controversy surrounding the practice. Since last summer's disclosure of the sterilization of two Alabama teenagers, the argument has extended

beyond the immediate issues into a full-dress debate over informed consent, medical ethics, and the rights of patients. The charge that Minnie and Mary Alice Relf, ages 14 and 12, had been sterilized without their own or their parents' understanding thrust the special issue of the sterilization of minors and the men-

tally retarded, long controversial with civil libertarians, onto the front pages of the nation's newspapers. Senator Edward Kennedy (D-Mass.) immediately called the Relf family to testify as part of his health subcommittee's ongoing investigation of the ethics of medical experimentation. After the hearings, Kennedy deplored the lack of any guarantee that patients are fully informed about medical procedures to be used upon them.

Meanwhile, HEW, faced with criticism from public interest groups and a law suit from the Relfs' attorneys, has temporarily suspended until 8 March the regulations which it brought forth for public view on 6 February.

Since the disclosures about the Relf case, a score of other cases of unin-