

MANPOWER TRENDS IN THREE MENTAL HEALTH PROFESSIONS

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IT is our purpose in this paper to examine manpower trends in psychiatry, psychology, and social work.

Before presenting material bearing directly on supply and demand in each of these disciplines, we will look at broader manpower trends in higher education in general. Because the trend in each of the professional fields to be discussed is dependent to a large extent on the pool of college graduates from which graduate and professional school students are recruited, we will present some data on trends in college enrollments and on considerations which may affect these enrollments. We will also touch on certain factors which may affect the competence and also the vocational choice of numbers of college students. We will then proceed to examine briefly trends in the demand for scientific and professional work in the field of mental health. Finally, we will present data on manpower supplies in each of the fields.

THE CRISIS IN EDUCATION

When we look at enrollment trends in higher education in the United States, two factors stand out. First, we are wasting enormous amounts of brain power because so many of our bright young people do not receive the training for which they are intellectually competent. The shortage of students now finishing college, together with certain other conditions we will mention, means that our country is faced for the next few years with a severe shortage of students in graduate and professional schools. Second, because of a marked rise in the birth rate beginning in the 1940's, we can expect a substantial rise in college enrollments within the next decade. While this prospect of increasing enrollments may appear to offer an eventual solution to the problem of shortages, we must keep in mind the increase in the country's population which will create greater demands for professional services. There is real danger that our educational system

will be so burdened and overtaxed by the increased enrollments that we will continue to waste, in the educational sense, large numbers of able young people who, if given encouragement, guidance, and the opportunity, could be the means whereby we might catch up with the demands of our society for highly trained specialists. Let us look briefly at these two facets of our problem in higher education.

Current shortages. A large proportion of bright young people in our society, for one reason or another, drop out of school before completing the twelfth grade. Of those who finish high school, many who have the ability to enter college do not enroll. Of those who do begin college, many do not graduate. Wolfe (38) tells us that of the brightest fifth of our young people only one-third finish college. Even among the most able one per cent of our young people, less than two-thirds finish college. The proportion of students with lesser, but adequate, ability who finish college is correspondingly lower.

The number of college graduates is dependent on the number who are able scholastically and financially to enroll, of course, but also this number is dependent on how many young people of college age there are in the population. This means that, other things being equal, the number of freshman college students is directly related to the number of babies born some eighteen years before. For the past eight years those reaching college age were born in the 1930's when there was an ebb in the national birth rate. There was an artificial rise in enrollment for several years after the war, but for the past few years the number of college graduates has been falling. In all probability we have now nearly reached the lowest point in numbers of college graduates, and the curve will begin to rise, slowly for a time and then more rapidly.

What do these facts mean for graduate and professional education? For one thing, they mean that there are fewer college graduates now than at any time in the past five years, and that this small pool of college graduates will rise only slowly for the next decade. This is serious because it means

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that there are, and will be, fewer students to go around to fill places in graduate and professional schools at a time when there is great social pressure to expand training programs.

One of the main reasons for the well-publicized shortage of engineers, teachers, scientists, and technicians is to be found in this short supply of college graduates. Naturally, the shortage also affects the recruitment of students by schools training personnel in the mental health professions.

A corollary effect concerns student quality. The elementary fact is that a decrease in the pool of prospective advanced students means increased competition among professions *and* among professional schools for the fewer college graduates, with the result that admissions standards are sometimes lowered in order to keep vacancies from developing beyond acceptable limits.

A final factor influencing the potential pool of advanced students is the present high prosperity level. We have all seen the pictures of industry representatives bidding for science and mathematics bachelors, and we have read the advertisements for science majors and technicians in our newspapers. But the job market is good for other college graduates as well. Many new college graduates who, in leaner years, might go on to graduate or professional school are swept off their feet by the pros-

pect of an early and painless short cut to suburbia.

Prospects for the future. Educators are losing sleep over the steadily swelling enrollments in the elementary schools and are trying desperately to patch the seams of bursting schools while they recruit hastily retreaded teachers to fill in the second shifts (48). Although many able students drop out along the way the large increase in school enrollments means that more students are now reaching high school than ever before.

The trend over the years has been for more and more high school graduates to enroll in college. At the beginning of the present century only one high school graduate in twenty started college. Today, roughly a third enroll in institutions of higher education. The American Council on Education (1) predicts that this trend will continue to increase and quotes the American Association of College Registrars and Admission Officers as predicting the proportion will reach 50 per cent in the next decade. Two years ago the American Council on Education (32) had this to say: "If added to the 70 per cent increase in number of college-age youth, we continue to admit into our colleges and universities an increasing percentage of high school graduates, we shall enroll in higher institutions in 1970, at least twice our present number of students."

Figure 1 compares the trend in numbers of col-

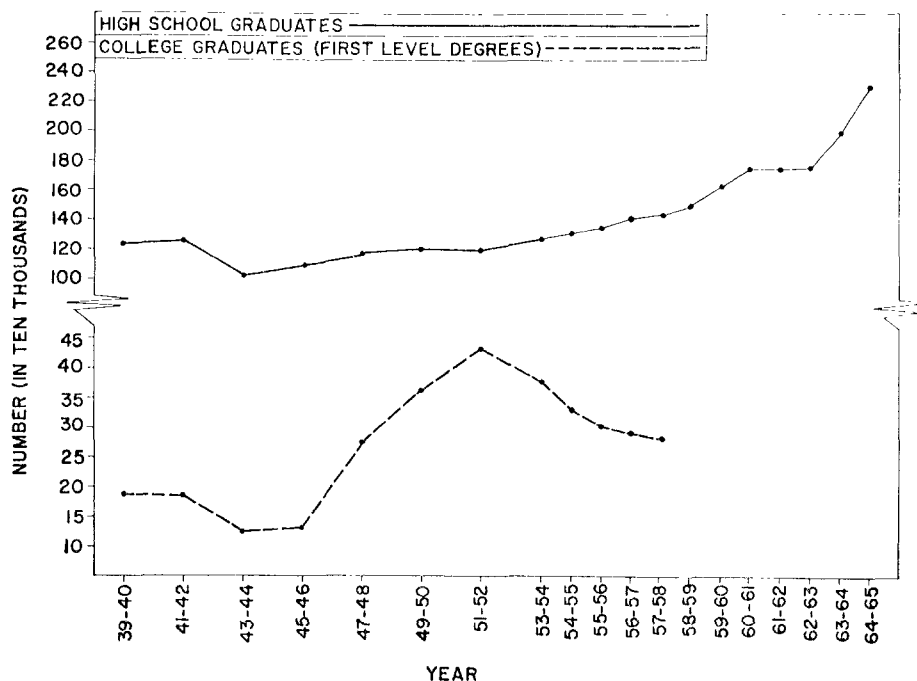


FIG. 1. Number of high school and college graduates in the U. S.

lege graduates with the number of high school graduates (in smaller scale) for the past fifteen years and for the next ten years.² It will be apparent from this figure that the drop in numbers of college graduates from the postwar peak is decelerating and that the curve will soon turn upward (with a four-year lag) to follow the rising number of high school graduates.

However optimistic this trend toward increased college enrollments appears, the fact remains that we could, if we chose, take steps to encourage large numbers of bright young people who now drop out before finishing high school to stay and graduate. This would still further increase future college enrollments. *We could, if we made a massive effort, nearly quadruple rather than double the number of college students by 1970, without any sacrifice in quality.*

As the situation stands, our colleges and universities, experiencing relatively lean years since the ebbing of the flood of students following the war, look with mixed feelings at the gradually rising numbers of freshmen now reaching the campuses. Looking ahead, institutions of higher education have, understandably, some satisfaction in anticipating the oncoming tide as a source of increased income from tuition. But they see too the problems to be faced in trying to educate students with, in too many cases, broad gaps in their preparation for college, especially in the areas of mathematics and the sciences (13, 49, 50). More importantly perhaps, the faculties who stand ready to face the doubled classes have been weakened by the loss of many of their number to the financial lures and fringe benefits of industry and government service (13).

To make the massive effort required to give educational opportunities to all those who are intellectually qualified, would require tremendous expansion and improvement of the whole educational system.

² Tabular material and raw data on which the figures are based, together with information concerning the multiple sources on which we have drawn in preparing certain figures, have been deposited with the American Documentation Institute. Order Document No. 5089 from ADI Auxiliary Publications Project, Photoduplication Service, Library of Congress, Washington 25, D. C., remitting in advance \$1.75 for microfilm or \$2.50 for photocopies. Make checks payable to Chief, Photoduplication Service, Library of Congress.

THE DEMAND FOR TRAINED PERSONNEL IN THE FIELD OF MENTAL HEALTH

There is no simple way to assess the present national shortages of trained personnel in the mental health professions. A number of estimates has been made for the separate professions and we will present some of these later.

From time to time a spokesman for one of the mental health professions, or an official of a mental health movement, or a foundation concerned with large social problems, speaks out about "the problem of mental illness." Usually, figures are quoted. Somehow, in this age, we have become blasé or bored with figures. Yet no one has found a better way to describe the dimensions of the problem. We all know, by now, that of every ten babies born this year, one will spend some time in a mental institution (24). We know that the Federal government is spending more for the care and support of psychiatric casualties among veterans than all the states combined are spending on the hospitalization of nonveterans (43), and yet we realize that the cost of our present care of people in state institutions, even though grossly inadequate, runs as high as one-third of the operating budget of some large and wealthy states (17). And we know that for every one of our 700,000 mental hospital inmates, there is in the community another serious case for whom there is no bed (17).

The demand for mental health personnel is not limited, of course, to those people whose disorders require separation from society. There are other vast numbers of seriously maladjusted people who need help, directly or indirectly. One in five young men of military age will enter the service with a juvenile court record; a million of our citizens are severe, chronic alcoholics, not to mention the problem drinkers; one in four of our marriages will end in divorce; untold numbers suffer from incapacitating neuroses or emotionally aggravated physical illnesses.

Perhaps we have quoted enough figures to give some indication of the dimensions of the present problem. For the future, the prospects are even grimmer.

As our population increases, the number of first admissions to state hospitals increases. We have, it is true, stepped up somewhat the rate of discharges from our mental institutions over the past twenty years (Figure 2), but any ground gained

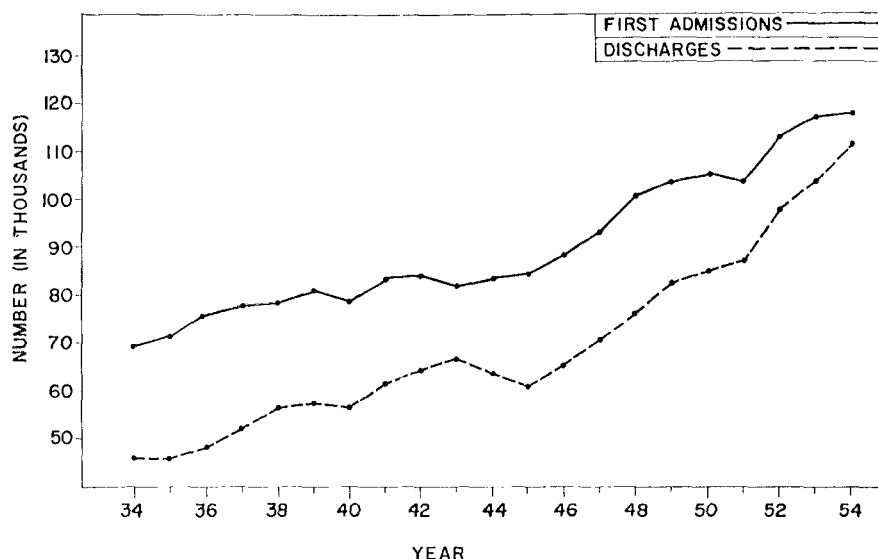


FIG. 2. Number of first admissions and discharges for mental hospitals in the U. S.

thereby is lost by the increasing rate of mental disorder in the population (Figure 3). We chose these data on admissions and discharges to state hospitals because they were easily available. But we can be quite sure that there are similar increases in the neuroses, in alcoholism, and in other forms of disorder as well.

So far, we have only quoted data which indicate the numbers of people who need, or will need, professional help. But if we are to avoid an endless treadmill, it will be apparent that an even more basic need is for research personnel. At present,

less than one per cent of our total expenditures in the field of mental disorder goes into research (25). Yet research offers the only hope for eventual relief of a share of this problem. Research means highly trained people, and again we meet a demand for personnel.

Let us now look at the supply of people available for work in the mental health fields.

PSYCHIATRISTS

There are, roughly, ten thousand psychiatrists in the United States. Everyone agrees that this is not

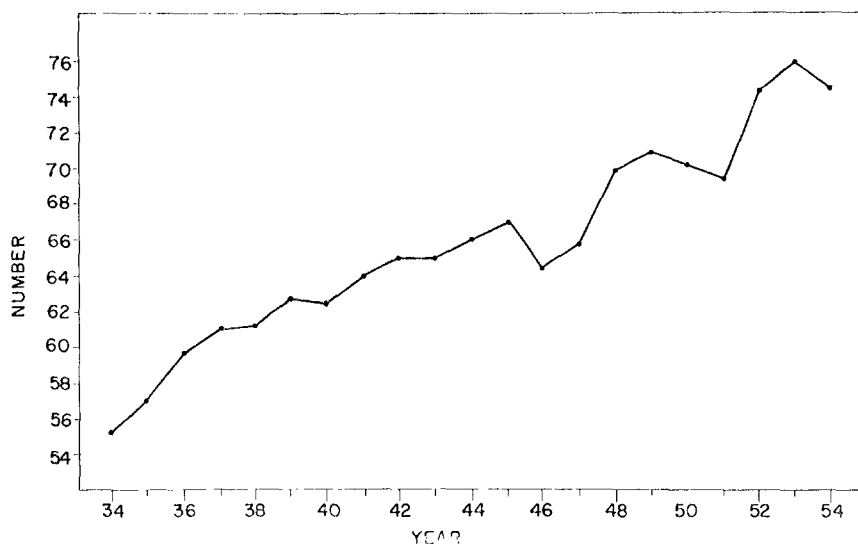


FIG. 3. Rate of first admissions to state mental hospitals (per 100,000 population) by year from 1934 through 1954.

nearly enough. For the country as a whole, there is one psychiatrist for every sixteen thousand people. Clearly this is an alarming ratio. In 1953 a Congressional Inquiry on Mental Illness (45) concluded with the judgment that we need twice as many psychiatrists at once. There is little reason to believe that we shall find them. Blain (3) points out that after allowing for loss due to death and retirement from the field, we are presently gaining about 450 psychiatrists a year. At this rate, he figures that it will be twenty years before we double the number of psychiatrists in this country. But as our population continues to grow too, and as the rate of mental disorder in the population continues to increase (Figure 3), the need rises along with the supply of psychiatrists.

There are facts which make Blain's figures on our rate of gain in psychiatry cause for even more concern. Gorman (17) calls attention to the following: "Of the approximately 450 doctors [each year] who complete the three-year psychiatric residency, an average of 250 go into private practice. This leaves public psychiatry with about 200 recruits, little more than enough to replace the older psychiatrists who die off or retire."

There is a further effect of the tendency of the new psychiatrist to go into private practice showing up in the shortage of research personnel in psychiatry. Research in psychiatry requires even

further specialized training and experience. The Group for the Advancement of Psychiatry (18) notes that: "Despite increased facilities and sums available for research in psychiatry, the present trend of psychiatric trainees is to enter into the private practice of psychiatry, with emphasis on psychotherapy and the shock therapies, rather than to undertake research."

There is another pessimistic factor to be considered. A sizable number (20 per cent to 25 per cent—see below) of residents in psychiatry are non-resident aliens who return home after their training, reducing still further the number of psychiatrists available for public institutions and agencies.

It is clear that we cannot help but fall behind even the present inadequate psychiatrist-patient ratios in our public institutions. One result is that, as states appropriate more funds to their departments of mental health, they begin to compete with each other for personnel. *Time* (47) quotes Indiana's Governor Craig: "Eventually we will have to stop this bidding against each other. There has to be some common ground of salaries and mutual consideration. . . . These interstate raids on mental-health institutions for personnel sometimes get to be like the raids to build up rival football teams."

In some areas of the country the shortage of psychiatrists is much more acute than the national average. Felix (12) has called attention to the

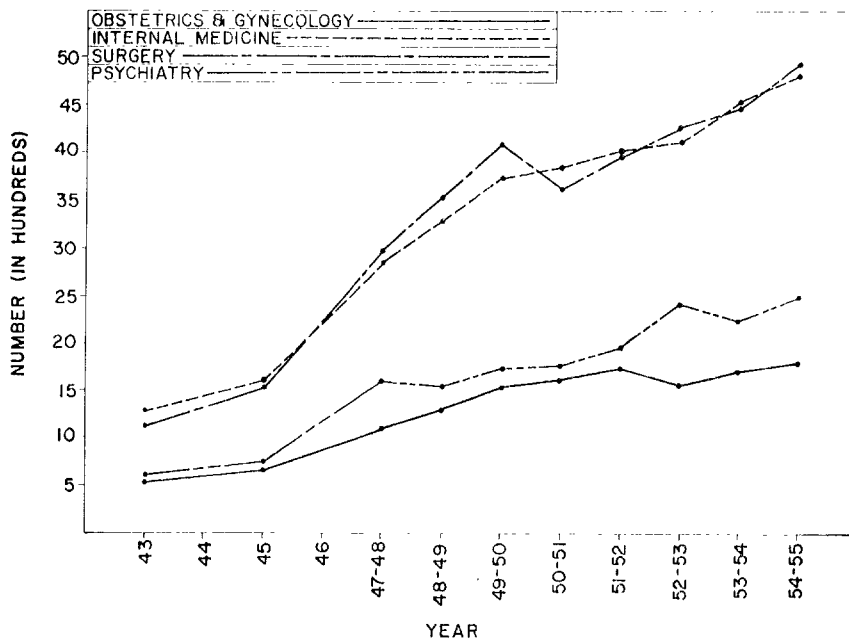


FIG. 4. Total residencies offered by selected medical specialties from 1943 to 1954-55.

situation in the southern region where a survey of sixteen states indicates an immediate need for five times as many psychiatrists as are presently available.

What possible approaches are there to alleviating this critical shortage? Among those most often mentioned is the suggestion that we expand our programs for training psychiatrists, and attract more physicians, especially new medical school graduates, into the field.

What are our chances of increasing, really significantly, the number of psychiatrists in relation to our need for psychiatric service?

The supply of psychiatrists is linked in a very real sense to the supply of physicians, and to the number of young physicians who decide to specialize in psychiatry. Despite strenuous efforts made in recent years to encourage more young physicians to enter into psychiatric residencies, there has been no proportionate increase and, in fact, there has been some ground lost in the past three years. Figure 4 shows the total number of residencies offered in four important medical specialties over the past few years, and indicates no relative gain by psychiatry. For many years the proportion of physicians indicating a limited specialty in psychiatry has remained quite constant between the limits of $5\frac{1}{2}$ per cent to 7 per cent (36).

Another indication of the fairly level output of trained psychiatrists is the number who pass the examinations of the American Board of Examiners in Psychiatry and Neurology each year. Figure 5 illustrates these figures and also shows the even lower level of output in neurology. The number who pass both specialties together is negligible.

Because the supply of psychiatrists is so bound to the supply of physicians, we may well look further at the latter. Few subjects are so loaded with potential for polemics as the question of whether or not there are enough physicians in this country and whether or not their numbers are increasing or decreasing in comparison with the growth of our population. One of the favorite arguments for advocates of either point of view is to engage in comparisons between "then and now." The problem is how to choose the most equitable "then." For example, Turner (33) argues that there are increasing numbers of physicians being trained. He says, "While the population of the nation has approximately doubled during this period [1900-1954], in

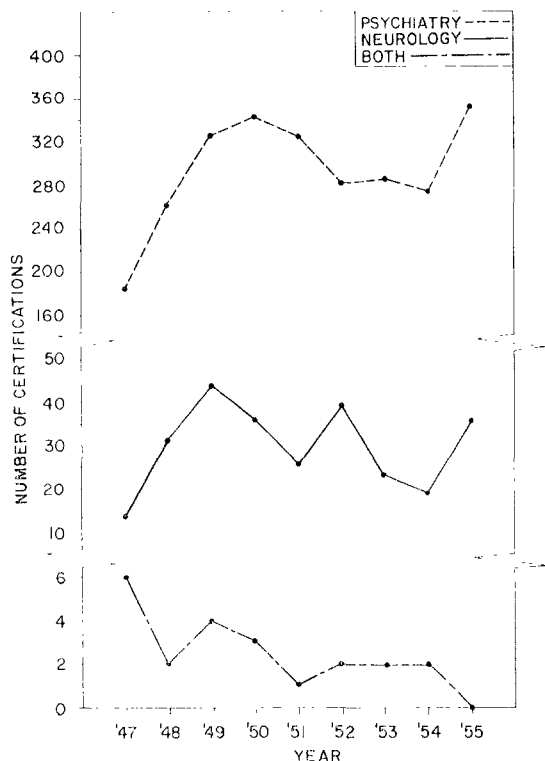


FIG. 5. Certifications in psychiatry and neurology by the American Board in Psychiatry and Neurology.

the 44 years since 1910 student enrollment in approved schools of medicine increased from 12,530 to 28,229, which represented a total increase of 125.8 per cent. In 1910 there were 3,165 physicians graduated from approved medical schools as compared to 6,861 in 1954, the latter figure representing an increase of 114.8 per cent."³

The trouble, if there is trouble, with Turner's argument is to be found in the expression "approved schools of medicine." In 1910 Flexner (14) published a monumental report of an investigation of medical schools. He classed 66 as Class A "Approved" schools and 65 as Class B and C "Unapproved" schools. The "Unapproved" schools had, that year, an enrollment of 8,996 students, which, if added to that in "Approved" schools, brings the total enrollment up to 21,526. This figure, if used as a basis for comparison, would mean an increase in enrollment of only 35.8 per cent instead of the 125.8 per cent (125.28 per cent) quoted above. The "Unapproved" schools graduated 1,275 physicians in 1910 making a total

³ The percentages quoted involve a misprint and a mechanical error. Read 128.28 per cent for 125.8 per cent and 116.7 per cent for 114.8 per cent.

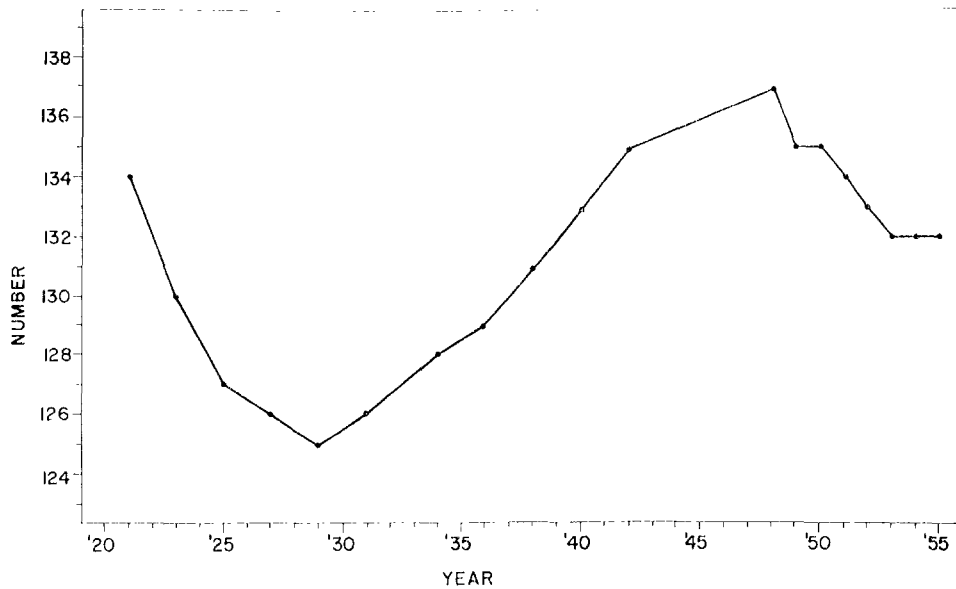


FIG. 6. Number of physicians per 100,000 population.

of 4,440 new physicians from all schools. The increase to 6,861 in 1954 would therefore be only 54.5 per cent rather than 114.6 per cent (116.8 per cent).

For those who wish to argue that graduates of Class C schools were not very well-trained physicians and were denied licensure in some states, let us look at only an A and B schools combination. Turner himself combines A and B schools in another article. With this combination as a base, medical school enrollments have increased 69 per cent and medical school graduates 89 per cent in the period when the country's population doubled. Few will argue about the doubling of the population during this period.

What is the justification for these alternative sets of percentage increases? The argument runs as follows. Graduates from the B and C schools were "doctors." Most graduates of the B schools, and at least some of the C school graduates, were accepted as doctors by the public, were counted as such by the census, performed as such in their practices, and as such joined the American Medical Association. In 1910 the AMA had a membership of 121,484. In 1950 the AMA membership was 201,277 (42). This increase then is about 66 per cent; somewhat less than the growth in the population of the country. Perhaps there were too many physicians in 1910, perhaps too few. At least we can be fairly certain that there has been no great gain over the years.

Wolfe (38) notes that the number of physicians rose somewhat faster than the country's population from 1870 to 1910. There followed a ten-year decline in numbers of graduates, and then there was a slow rise to 1930. The ratio of physicians to population was fairly stable from 1930 to 1950, varying between 126 and 135 per 100,000 population.

For the past five years we have not been gaining at all (see Figure 6 and Figure 7) and the prospects are that we will lose ground when the advantage of increased enrollments and the recent founding of new medical schools are offset by population increases.

For the future the medical schools are faced with the same low-tide manpower pool as are other areas of education. Some medical schools have been having trouble filling their freshman classes. The trend for the past few years has been for medical schools to accept a higher and higher proportion of their applicants. Figure 7 shows how the ratio of applicants to acceptances has changed. Many medical educators are concerned over this shrinkage in numbers of applicants, which very probably means some loss in over-all ability level. Ebaugh and Barnes (10) sound a warning: "Most of us have failed to be aware of the alarming fall in the number of applicants for admission to medical schools. For the year 1948-49, the height of the post-war boom in applicants, there was a ratio of applicants to admissions of 3.6 to 1. By the year 1953-54, the

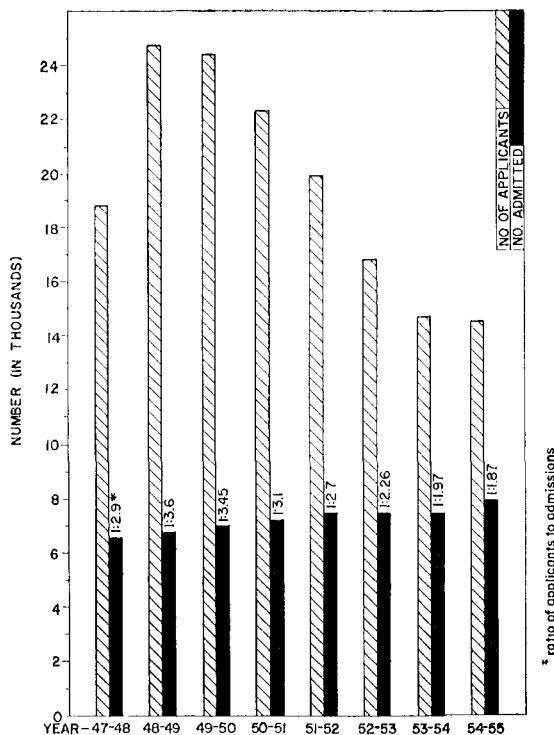


FIG. 7. Medical school applicants and admissions.

ratio was 1.97 to 1." They go on to point out that if the fall in applicants continues just a few more years there will not be enough people to fill medical school vacancies. Other medical educators, writing in the *Journal of Medical Education*, warn that "the caliber of applicants to medical schools is falling" (15), and that some schools with geographic restrictions "had to 'scrape the bottom of the barrel'" (31). We conclude that for the next few years at least, the prospects are not favorable for a major increase in medical school enrollments.

These facts and trends in the supply of physicians and medical school enrollments indicate that there is little likelihood of the kind of increase that would be needed to result in a substantial rise in the number of psychiatrists. Increasing just moderately the number of medical school graduates would only slightly affect the number of new psychiatric residents because, as a rule of thumb, the number of first-year residents in psychiatry each year is less than 10 per cent of medical school graduation figures.

There is, however, another source of psychiatric residents, and of residents in other specialties as well, which has appeared in recent years. Alien physicians, in increasing numbers, have been ac-

cepted as interns and residents in hospitals in this country. During the past five years the number of alien physicians in all residencies has increased from 8 per cent to 22 per cent. Most of these alien physicians have entered the U. S. under provisions of the U. S. Information and Exchange Act of 1948.

Some 20 per cent to 25 per cent of the physicians now in residencies in psychiatry are from abroad and will return home when their training is completed (7). While they offer service during their stay here, they do not represent any permanent increase in psychiatric manpower and actually their numbers inflate artificially figures on psychiatric residents in training.

PSYCHOLOGISTS

It is more difficult to define a psychologist than a psychiatrist and meaningful data are harder to obtain for psychology. While many persons employed as psychiatrists have not had as much specialized training in psychiatry as leaders in the field might prescribe, at least a specified minimum of training is required in that all psychiatrists are physicians and have had the extensive clinical contact with patients that medical training involves. Psychology, on the other hand, is a broader and more loosely defined field in which are employed people with various amounts of formal training. In this respect psychology is more like such specialties as chemistry or engineering than it is like psychiatry.

A second difficulty, for our present purposes, involves deciding what proportion of psychologists may be considered to be in the field of mental health. Should we include only clinical psychologists? Certainly people working in vocational guidance, in school psychology, and even some of those concerned with such areas as morale and motivation of military personnel, to cite but a few examples, may be thought of as contributing to mental health. There is no question but that a sizable number of psychologists would argue that they have no direct, and scarcely any indirect, concern with mental health. The scientist studying color vision, or the rodentologist with his T-maze, is not likely to welcome classificatory bedfellowship with the professional tester or counselor.

In some of the data we will present below we will use figures based on membership in the American Psychological Association. Our rationalization

is as follows: over half of the membership of APA is in clinical psychology or closely related areas (30). The total membership of APA is estimated to number about one-half of those employed in this country as psychologists (39). The reader should keep in mind that a sizable proportion of APA members have little or nothing to do with mental health, but that a sizable number of psychologists who are employed in the mental health field are not APA members. The exactness of the balance of these two groups is almost impossible to assess.

What sort of demands for services of psychologists exists in the field of mental health? Once again one has a choice of estimates (2, 3, 11, 12, 20, 28). It is probably safe to say that existing needs could absorb easily an additional ten thousand trained people.

Most studies emphasize the need for people at the doctorate level. The Committee on Specialized Personnel of the Office of Defense Mobilization (28) estimates that PhD's with research experience are in shortest supply, particularly in physiological and experimental psychology. On the other hand, the Veterans Administration, projecting its needs for the next decade, indicates a continuing serious shortage of PhD-level clinical psychologists (see Figure 8). Felix (12) says that the southern region (sixteen states) needs seven times as many

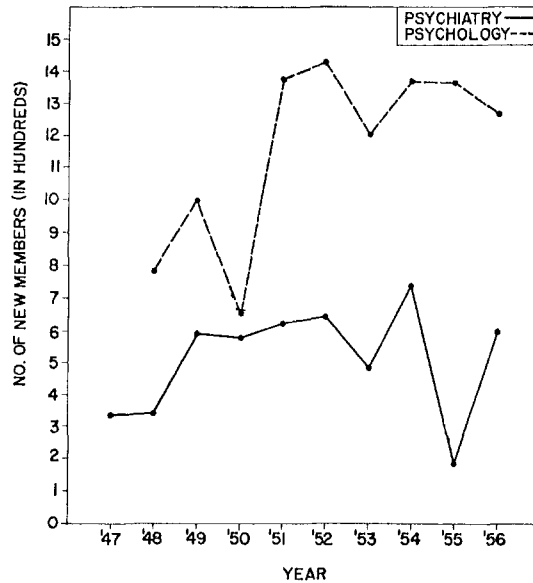


FIG. 9. New members by year: American Psychiatric Association and American Psychological Association.

clinical psychologists as are now employed, and that eleven western states need a total of 2,000 clinical psychologists.

There is a pervasive belief among psychologists that psychology is one of the fastest-growing fields of specialization. Sanford (29) noted in 1951 that the membership of APA increased nearly twenty-fold in a quarter century. He quotes the extrapolation of psychology's growth curve by Boring in which the latter predicts 59 million psychologists a century hence. Carrying the extrapolation further, Sanford notes that the number of psychologists will catch up with the world's population in less than 150 years! Fortunately, perhaps, there are signs that we are slowing down. Wolfle (39) has shown that the notion of very rapid growth in psychology is only partially true.

For each year of the past five years the number of new Associates of APA has remained fairly constant at about 1,300. Figure 9 illustrates the growth of the APA and, for contrast, the growth of the American Psychiatric Association. If, however, we look at the number of PhD's in psychology and the number of first-year residents in psychiatry we see no startling gain for either group (Figure 10).

Will our universities be able to turn out enough people to fill the present and projected need for psychologists? The best predictions are that for the next few years we will not step up the number

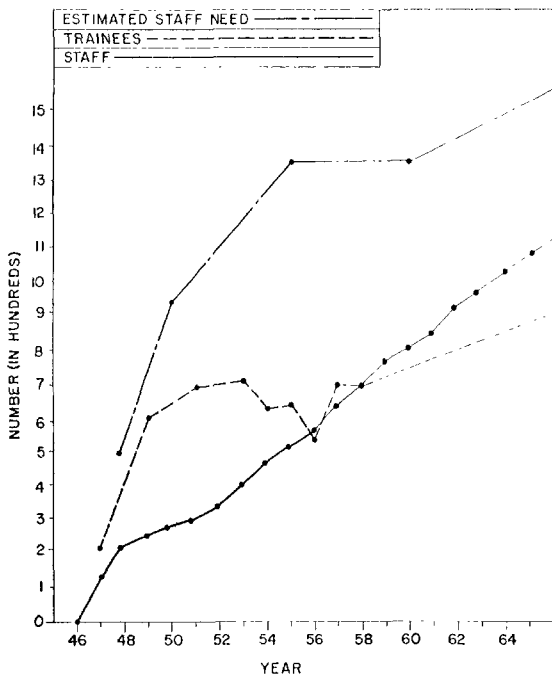


FIG. 8. VA psychologists, trainees, and estimated staff needs.

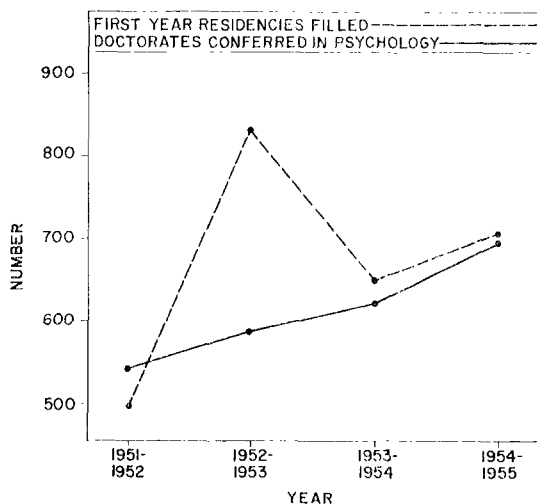


FIG. 10. First-year residents in psychiatry and doctorates conferred in psychology.

of doctorates (39). In fact there will probably be some decline for a time.

University training centers for psychologists enjoy a certain advantage over psychiatric training centers from the point of view of flexibility in expanding training programs. While psychiatry must depend on the supply of physicians for its recruits, and also must depend on specialists who are in short supply for its training supervisors, psychol-

ogy can expand training programs somewhat more readily as more qualified college graduates are attracted to the field. The more serious limitation on numbers of psychologists trained is the supply of college graduates forming the pool of potential graduate students, especially the number of psychology majors. Figure 11 contrasts the numbers of bachelor's, master's, and doctor's degrees conferred in psychology since 1947-48. It will be noted that while there has been a steady increase in the number of doctorates conferred in psychology, the number of bachelor's degrees has declined along with the decline in college graduates in general. It seems certain that the next several years will see a drop, or at least a leveling off, in numbers of doctorates as graduate school enrollments fall off with the shortage of college graduates we have noted.

A further problem that promises to affect psychology somewhat more than the other mental health fields is the oncoming tide of college students described above. The psychologist traditionally has been a teacher, and as psychology is one of the most popular undergraduate subjects there will be an increased demand for college teachers of psychology. This increased demand will follow a decade or so of fairly low-level production of doctorates in psychology.

What can the field of psychology do in the face of these prospects of shortages and static output? Is there any way to increase the number of trained psychologists? One thing which comes to mind at once is the value of taking steps now to get information about scientific and professional opportunities in psychology to students who have not yet chosen their career, and to students majoring in psychology who are not well acquainted with the possibilities of further training. The recent Public Affairs Pamphlet on psychology (26) is one small step in the right direction. Despite the low tide of college students now enrolled, psychology should be able to attract a somewhat larger proportion of able students. Psychology, it should be noted, is the only one of the mental health professions that has real continuing access to the attention of large numbers of college students *before* they have made firm decisions on their careers.

More psychology undergraduates might go on to graduate school if large university departments improved their contact with these students. Wolfe (39) notes that only 12 per cent of students who

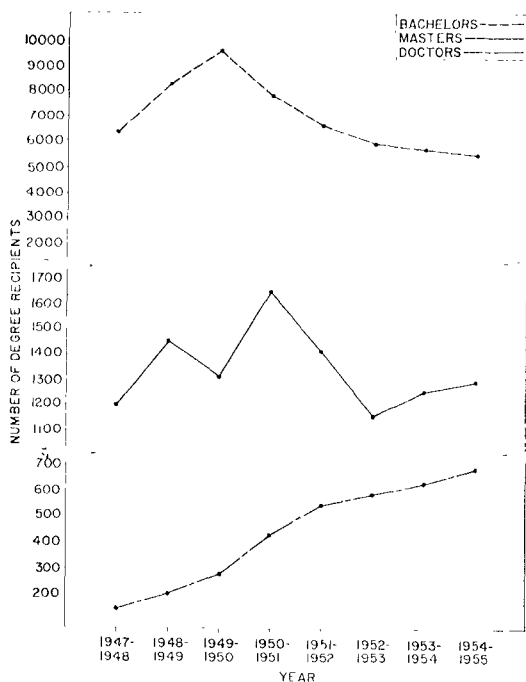


FIG. 11. Degree recipients in psychology.

major in psychology have become professional psychologists. But as psychology bachelors comprise a representative cross-section of ability of all those receiving bachelor's degrees, many more than 12 per cent have the intellectual ability to succeed in graduate school (39).

Whatever we do to increase graduate enrollments during the next decade the shortage of psychologists is likely to continue. Some ten to twenty years hence we should be able to increase sizably our output of doctorates. But as we have noted, demands increase as our population increases. There seems little chance that we will have enough psychologists even then.

SOCIAL WORKERS

It was harder to define who is a psychologist than who is a psychiatrist. It is harder still to define who is a social worker.

According to Kendall (21), "It has been estimated that there are approximately 75,000 persons employed in social work positions in the United States, of whom 16 per cent have completed two or more years of graduate study, 11 per cent have had one, but less than two years, 13 per cent have had less than one year, and 60 per cent have had no social work education."

We will be guided in our considerations of numbers of social workers, and trends in their number, by statements of leaders of the profession itself as to who are social workers. Youngdahl (41) says, "At present the established norm for professional training consists of two years of graduate professional training in an accredited school of social work." This definition agrees with the one used by the Health Resources Advisory Committee (20).

What is the present need for social workers in the mental health field? Let us turn once more to our sources and select some typical estimates. Blain (3) sees a need for 9,000 psychiatric social workers and figures it will take 20 years to find this number. The present shortage in state-supported mental hospitals alone is approximately 7,000 (2) which represents a 75 per cent understaffing (24). Gorman (17) counts only 800 psychiatric social workers in state institutions, which represents an even greater understaffing. At this rate, each social worker has, on the average, responsibility for six hundred patients. In 1952 there were 2,500 *budgeted* job vacancies for medical and psychiatric social workers in this country

and a projected need for 4,200 more within five years (20). In these two specialties alone it is estimated that there is a deficit of at least 1,000 each year even if every graduate goes to work (20). Comparable shortages exist in all other fields of social work (12, 16, 21). The Council on Social Work Education (5) estimates that 50,000 new social workers will be needed in the next decade, beyond those who may leave the field.

How many social workers are being trained? Figure 12 illustrates the ten-year trend in numbers of full-time students and graduates from two-year programs as compiled by the Council on Social Work Education. Once again we observe the postwar rise, but the decline has come earlier in social work than in the other two fields we have studied. From what we have said about the pool of potential professional school students, it will be apparent that the rise in numbers of social work students will be slow. Different specialties within social work show different trends. There has been a decrease in field placements in medical social work and in group work over the past four years and a slight increase in field placements in psychiatric social work during this same time. All other fields of social work have about held their own (6).

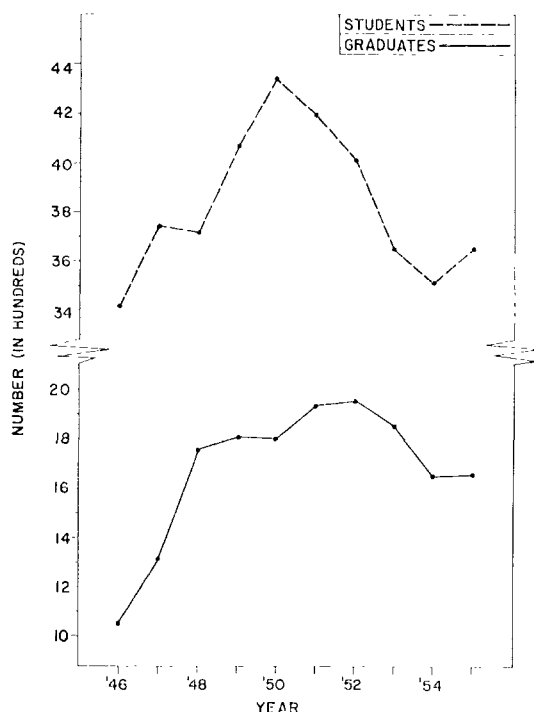


FIG. 12. Students and graduates of two-year social work programs.

A survey in 1952 of 24 schools of social work with approved medical social work curricula showed that the number of students enrolled in this specialty fell short of capacity by 42 per cent, while other schools without specialized curricula but with medical social work field placements were 58 per cent below capacity. It is estimated that these discrepancies between enrollment and vacancies still exist (20) and it is our impression that similar vacancies exist in other social work specialties. Kendall (21) notes that "many of the graduate schools are operating at less than full capacity."

Many reasons have been suggested for the difficulties in recruiting social work students and for the growing shortages in the field. One fact is that a high proportion of members of the profession are women (20) who leave the field. Other factors have been suggested by Eaton (9) and include low pay, prestige conflicts, and multiple identifications.

Leaders in social work are trying to step up recruitment activities. Among the more frequent efforts are programs of on-the-job training for college students during the summer, workshops for college teachers in sociology and anthropology, visits by social work faculty to career conferences on college campuses, and work-study programs for those who cannot afford to spend two years in full-time graduate school study. It should be noted that this last effort, work-study programs, does little to increase the number of social workers, as a majority taking part in these programs are already in the field.

Nothing in view leads to optimistic predictions concerning the problem of finding students for social work in the numbers that are needed. Leaders in the field are making all sorts of active and imaginative efforts, however, and the other professions can learn much from social work in this respect.

DISCUSSION

Let us review briefly the important points bearing on manpower trends and prospects in the three disciplines we have discussed.

We believe that there is wholehearted unanimity among knowledgeable people about the staggering dimensions of the mental health needs of the nation. From whatever viewpoint, be it humanitarian, economic, or scientific, mental disorder is far and away our number one health problem. It

is real, it is now, and it will not go away. It will only get worse.

Everyone who is aware of the problem agrees that the need for trained professional personnel in the mental health field is desperate. The stark reality is that we cannot even keep up present numbers in proportion to the population. We have not found a single optimistic voice. Occasionally someone suggests a crash program with recruiting drives, publicity, subsidized training, and special inducements to lure more students into training programs. If the mental health professions were the only ones where personnel shortages existed, such programs might be effective in increasing our output of trained people a few years hence. But shortages are not specific to our own fields. They are part of a more pervading shortage of scientific and professional personnel in general. Our pessimistic facts are duplicated in the shortages of teachers, nurses, engineers, and scientists.

But there *must* be other solutions to the mental health problem. Typhoid fever was not controlled by treating the disease. What about mental health research leading to prevention, or faster cures? As Hastings (19) puts it: "Without more basic knowledge than we have today or are now accumulating, the people who follow us fifty years hence will be struggling with the same problems that we are. The almost limitless future for the psychological sciences in the years ahead lies along the avenue of well-planned research activity done by many disciplines."

Psychologists probably receive more formal research training than do members of the other two fields. But it is our general impression, and this would be readily testable, that there is an inverse relation between the amount of time psychologists spend on basic research and their proximity to the field of mental health. The clinical psychologist all too often is loaded with service responsibilities, and his research, when he finds time for it, is likely to be concerned with evaluating or improving his skills and techniques rather than being a more basic attack on etiology or pathology. The social worker, too, is trained for service, and despite the growing emphasis on a research orientation in the social work curriculum, a scanning of the social work journals fails to turn up any really basic research. We have already noted the shortage of research-oriented psychiatrists.

In recent months there has been a wave of en-

thusiasm for the tranquilizing drugs as an aid to speedier and more effective therapy. These early reports would seem to be encouraging indications that research can be productive even at the present rate of expenditure. Let us hope fervently that the reports are all based on careful study, though experience warns us to be cautious about such enthusiasms. The memory of "focal infections" and "rest cures" and even electroconvulsive therapy bids us be careful. Worse still, if the new drugs fulfill even a portion of their promise we will be worse off than before, for most everyone agrees that the drugs are effective only in combination with psychotherapy. So hospitalized patients who formerly did not see a psychiatrist for long periods are now lining up outside his door.

Much is already known about mental disorder. Whether we agree about causes, at least we can agree that there probably are prophylactic and preventive measures which can be effective if used early enough. One of the important aspects of prevention is work with children, or with parents in order to reach children. Again, while there are notable exceptions, and in this area perhaps a few exceptional people can be most influential, we find the usual shortages and lack of interest. Blain (3) despairs at the trickle of child psychiatrists being turned out—some forty a year—and shows that at this rate of production it will take fifteen years to provide one child psychiatrist each for the 600 clinics needed today, not to mention the demands of children's residential homes, juvenile courts, school systems, etc. Similar shortages exist for child workers in the other mental health professions.

What is left? One fairly radical proposal has been made by Hastings (19) (though he credits the idea to Kubie and others). He suggests the creation of a new professional group, trained as psychotherapists, though not required to master all of the knowledge presently in the various professional curricula. These people, who could be trained much more rapidly than can a psychiatrist or a psychologist, would not take over completely the field of therapy but would augment present personnel and perhaps free more highly trained people for research. The obstacles to the implementation of this suggestion are enormous, as Hastings recognizes. Another profession on the scene might even increase present shortages in the established professions, and resistance from many quarters to such

infringement on sovereignty would be strong. But the suggestion is an intriguing one, and what we need (besides personnel, money, facilities, and skill) are ideas which can be implemented.

We can only conclude this survey with the prediction that our country will continue to be faced with personnel shortages in psychiatry, psychology, and social work for years to come. Barring the possibility of a massive national effort in all areas of education, or the possibility of a sharp breakthrough in mental health research, the prospects are pessimistic for improvements in the quantity or quality of service in the field of mental health.

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