DOCUMENT RESUME

ED 035 929 CG 004 940

AUTHOR	PAYNE, JOHN.
TITLE	RESEARCH IN STUDENT MENTAL HEALTH. RESEARCH INTO HIGHER EDUCATION MONOGRAPH.
INSTITUTION	SOCIETY FOR RESEARCH INTO HIGHER EDUCATION, LTD., LONDON (ENGLAND).
PUB DATE	AUG 69
NOTE	39P.
AVAILABLE FROM	SOCIETY FOR RESEARCH INTO HIGHER EDUCATION LIMITED, 20 GOWER STREET, LONDON, W.C.1., ENGLAND (716, $.90 PER COPY)
EDRS PRICE	EDRS PRICE MF-$0.25 HC-$2.05
DESCRIPTORS	ACADEMIC ACHIEVEMENT, DROPOUT RATE, *DROPOUT RESEARCH, INSTITUTIONAL ENVIRONMENT, INSTITUTIONS, MENTAL HEALTH, *MENTAL ILLNESS, *PSYCHOLOGICAL STUDIES, *RESEARCH NEEDS, RESEARCH PROJECTS, *RESEARCH REVIEWS (PUBLICATIONS)

ABSTRACT

THIS MONOGRAPH OUTLINES THE PRESENT POSITION OF RESEARCH IN THE FIELD OF STUDENT MENTAL HEALTH. THE AIM IS TO PROVIDE A SELECTIVE REVIEW OF THE LITERATURE IN THIS FIELD, TO INDICATE THOSE PARTICULAR AREAS IN WHICH RESEARCH IS NOW BEING CARRIED OUT AND TO GIVE AN INDICATION OF THOSE AREAS IN WHICH RESEARCH COULD USEFULLY BE DONE. TOPICS COVERED ARE: (1) CAUSES OF PSYCHOLOGICAL ILLNESS; (2) THE INCIDENCE OF PSYCHOLOGICAL ILLNESS; (3) ACADEMIC DIFFICULTY AND DROP OUT RATES; (4) CAUSES OF WASTAGE AND DROP OUT; (5) PREDICTION OF ILLNESS AND DROP OUT; (6) THE INSTITUTION; (7) THE MEANING OF THE UNIVERSITY TO THE STUDENT; AND (8) AREAS FOR FUTURE RESEARCH INCLUDING THE INDIVIDUAL AND THE INSTITUTION, AND UNDERACHIEVEMENT. (KJ)

Research into Higher Education Monograph

RESEARCH IN STUDENT MENTAL HEALTH

John Payne

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by

John Payne

Society for Research into Higher Education Limited

20, Gower Street, London, W.C.1.

August 1969

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PREFACE

Originally it seemed that this monograph might be predominantly clinical in focus, but it became obvious that without knowledge of the physical world students inhabit and the social setting of their lives, an understanding of the causes of mental illness to which they were liable would be incomplete.

I make no apologies for giving a brief psychoanalytic formulation of adolescence and referring to relevant literature. It has been well said that adolescents (and students) have been too well documented and too little understood. Future research, if it is to be successful, will require an understanding of students as people, and a psychoanalytic viewpoint may help to enlarge this.

I would like to acknowledge the considerable help and guidance given by Dr. Anthony Ryle, and finally I would like to thank Mrs. Dorothy Kenefick for typing the manuscript.

J.P.

After spending several years in general practice Dr. JOHN PAYNE worked for three years in the Health Service at the University of Newcastle-upon-Tyne. He is now medical officer in the University Health Service at the University of Sussex. Dr. Payne has had psychotherapy training at the Tavistock Clinic and is at present engaged in research on the relationship between psychiatric illness in students and high and low achievement.

INTRODUCTION

The object of this short monograph will be to outline the present position of research in the field of student mental health. The aim will be to provide a selective review of the literature in this field, to indicate those particular areas in which research is now being carried out and to give a personal indication of those areas in which research could usefully be done.

It is perhaps not remarkable, in view of the English approach to education, that interest in the mental health of students is largely a post-war phenomenon. Until the middle of the 1950's only minimal research into mental health problems was undertaken in this country. As recently as 1959, Sir Alan Rook, writing on students suicides, concluded with the statement "information and statistics are the bricks and mortar of prevention, and until mental disease in university undergraduates is regarded in the same way as any other illness, as a misfortune and not something of a stigma, it is unlikely that much progress will be made in preventing its recurrence."

What is perhaps more remarkable is that relatively little research was carried out in America or on the continent, despite the fact that the importance and significance of student psychiatric illness was appreciated in the early part of this century. The Americans, however, much earlier than ourselves, appreciated that problems of underachievement, of laziness and of wastage, were possibly due to emotional causes and might be treatable.

In America, where the student wastage rate has always been around 50%, there has, for twenty years, been research into the factors concerned with underachievement and wastage, and the provision of adequate counselling and therapeutic agencies. In this country, there has until very recently been great emphasis on research aimed at defining the magnitude of the problem in epidemiological terms, but little attempt to look at the institution and the factors which may prevent it.

Research into student mental health must cover the whole life cycle of the student. It must look at selection as, for example, it is possible that we choose those who have not only shown ability, but have also exhibited conformity and compliance. It must look at those who become psychiatrically ill and those factors which cause it. It must look at those who underachieve, those who fail and those who drop out, as these people may reflect the imperfections of our selection system or the rigidity of our institutions. They represent a failure and add an economic burden to our educational system. Finally it must look at the institution in which the student operates, to evaluate those factors which provoke illness, underachievement or wastage, and those which prevent it. Very little research has been done upon the effect of the institution upon the student, either in terms of the general teaching and social environment, or of the support structures, such as University Health Services, Accommodation Services and Appointment Services, which are being strengthened and expanded.

CHAPTER 1. CAUSES OF PSYCHOLOGICAL ILLNESS

The definition of psychological illness and where to define its limits has been one of the besetting difficulties of incidence and prevalence studies. A recent textbook of clinical psychiatry, in laying down its own terms of reference, defines psychiatry as "that branch of medicine in which psychological phenomena are important as causes, signs and symptoms, or as curative agents." (57)

It is clearly important in assessing psychological illness to differentiate between formal psychiatric illness and symptoms of transient emotional distress. Both may need a period of treatment. Formal psychiatric illness may need treatment as a hospital in-patient and is likely to be of greater severity and may have a more serious prognosis.

Late adolescence is different from adulthood in that symptoms which might have serious prognostic significance to the adult can be transient in the adolescent. It also seems likely that some states of disturbance of late adolescence may be the strong reactions of vigorous developing personalities, and may be signs of health and not of disease, although temporarily uncomfortable or disabling from the point of view of academic work or social behaviour.

A number of prevalence studies of psychological illness in students have been undertaken in the past fifteen years. Comparison of these studies is difficult because of methodological differences, but they do all show that late adolescence presents the full range of psychological disturbances of adulthood with the addition of one or two reactions peculiar to this age group. These adolescent reactions are important because their presentation is often acute and disturbing. Their symptomatology may mimic that of other more serious conditions of adults, e.g. psychotic reactions but the prognosis of these conditions may be favourable when they are symptoms of a crisis in development. The range of psychological illness presented by students includes psychosis, the neurotic disorders of all types, personality development problems, which include the problems of sexual development, and acute adolescent reactions. The psychoses most commonly encountered are the affective psychoses, in which the illness is marked by a primary disturbance of affect, and schizophrenia. The percentage of those classified as severely ill varies according to the institution and the accessibility and availability of the psychiatric service provided.

Parnell at Oxford (64), in a review of the three-year period 1947–1949, found that a little over 1% of Oxford undergraduates missed at least one term because of psychiatric illness and, as he emphasises, this is probably a low estimate of serious disorder. Malleson at University College London (56) reported a 4% prevalence of severe disorder, while Davy at Cambridge (18) found that 2½% presented with severe disorder, but thought this an underestimate of the true figure. Still, at Leeds (83), gives a figure of 2·2% with severe disorder.

As regards milder disturbance, Malleson gives figures of 10 – 20% and Davy of 10 – 15%. Still, at Leeds (83), found 9·3% with moderate or trivial disturbance, while Ryle at Sussex University found that 10% of students are disturbed enough to need psychotherapy during the three year course. (72)

Two studies from American universities give figures of 12% and 11·5% of students for all degrees of clinical disturbance [77, 90]. In a New Zealand study, Ironside [42] found that 24% of medical students showed some evidence of disturbance.

Davy gives a breakdown of the student cases referred to a psychiatric clinic as psychosis 6 – 7%, schizo-affective states a further 6%, neurotic illness 40%, character or behaviour disorders 20%, severe sexual abnormalities 12%, long standing depression 12 – 14% and stammering 1 – 2%.

Studies of psychosis and schizophrenia have mainly emanated from America, perhaps because the student population, both nationally and institutionally, is much larger, enabling specific studies of psychosis to be undertaken. Farnsworth has estimated the annual incidence of psychosis in American students as 2 or 3 per thousand. [24].

The problem of suicide among students in Britain was first publicised in 1959 by Rook [67], who showed that the rates at British universities were greater than the rate for the same age group in England and Wales. He gives figures of the annual suicide rate per 100,000 at Oxford and Cambridge, derived from a ten-year study, as 21·8 at Cambridge and 30·5 at Oxford. He also gives the annual suicide rate at seven other British universities from an eight-year study as 8·5. This is compared with the annual rate per 100,000 for the 20 – 24 age group in England and Wales of 6·1. Rook was concerned with the high figures from Oxford and Cambridge as compared with other universities. He noted that the competition for places was more acute at Oxford and Cambridge than elsewhere, and the the number of students living in residential accommodation was much higher. He writes "the college staircase may facilitate study, but it can also lead to loneliness and can encourage brooding".

Following this, student and other morbidity rates were carefully analysed by Carpenter [12]. He noted that the suicide rate is lower in female students than in males, and that the rate for female students was the same as the national figure for females in the 20 – 34 age group. He also noted that the number of student suicides was greater in the spring and summer which coincides with the examination season, but that the increase at this time corresponds with the national rates.

In a recent paper, Atkinson [2] discusses the problem of suicide in student communities. He notes the high rates at Oxford and Cambridge and other universities recorded by Rook and Carpenter and infers that the small size of student communities may give falsely high rates. However, he ignores the fact that all of these annual rates are computed from eight or ten year studies. He argues that the higher suicide rate recorded for students may be due to the increased likelihood of student suicides being registered, while in other communities suicide as a cause of death is more likely to be concealed.

Atkinson concludes his paper by describing an interesting pilot study carried out on 50 students and designed to give some idea of students' attitudes towards suicide.

Other manifestations of psychological disorders.

It is the impression of many doctors working with students that pregnancy in the unmarried female student is often neurotically determined and evidence of emotional disorder. This has been confirmed in one careful study by Giel & Kidd [31]. They found that of 57 pregnant unmarried women, 45·6% had consulted their doctor with conspicuous psychiatric disability, compared with 15·8% of the same number of controls.

It is also the impression of many doctors working among students that the taking of drugs is, in many cases, a manifestation of psychological disturbance. Although a number of studies of drug-taking among students, particularly from America, have been published, there are no reliable statistics. There is, nevertheless, a strong impression here in Britain at least, that drug-taking is more common among the psychologically disturbed.

What are the causes of psychological illness in students?

Are they different from the causes of psychiatric illness in any other age group? Understanding an individual necessarily involves a detailed appraisal of the complex interaction of internal and external factors. The following factors are likely to be predisposing to illness: family history, family and personal stress, personality patterns, body build and institutional factors. The research in these areas will be enumerated.

Family history. On general psychiatric grounds one would suppose that those with a family history of previous psychiatric disorder would have a greater potential for psychological disturbance while they were undergraduates. One careful study has confirmed this (17). The family history of psychiatrically disturbed students was carefully looked at in three recent investigations, (17, 52, 47) Kidd (47) found no significant correlation between any family history and later disturbance. Davidson & Hutt (17) showed that students who broke down were more likely to have a family history of psychological illness, but this was not confirmed by Lucas et al (52) in their study of medical students.

Personal history and family stress. These two areas have been scoured by several investigators to see if they could find patterns predictive of psychological stress. Kidd (47) showed that coming from a broken home was significantly associated with psychiatric illness. Other factors in the history of those attending with psychological disturbance have been noted. Davidson & Hutt (17) showed that they had a poorer relationship with their parents than controls, more homosexual interests and were more likely to have had a previous psychological investigation. Gregory (32) investigating the effect of childhood loss of a parent before the age of ten, found no association between parental loss and subsequent emotional pathology. Both Kidd and Lucas et al found that students who attended with psychological disturbance were not all-rounders at school, and that they consulted more frequently for physical complaints while at university. Lucas et al found, in addition, that they reported sick more frequently while at school, had more absences during their last year at school because of illness and were more likely to have a special friend of the opposite sex while at college.

Personality. Investigators have used the Minnesota Multi-Phasic Personality Inventory (M.M.P.I.) the Maudsley Personality Inventory (M.P.I.) or its later version the Eysenck Personality Inventory (E.P.I.) and the Cornell Medical Index (C.M.I.) as psychometric measures of personality.

The M.M.P.I. according to the authors of this instrument (34) is designed to provide scores of nine important deviations of personality. Standard scores are used around a mean of 50 with one standard deviation equal to ten points. A score of 70 (i.e. the mean score plus 2 S.D.) is taken as a criterion of abnormality. Three investigators have used it as a means of identifying or detecting the vulnerable student. At Oxford, Davidson, Lee, Parnell & Spencer (16) in a study of patients and a control group, found that the M.M.P.I. differentiated all but 31% of patients from controls, taking as abnormal a score of 70 obtained on any one score. They found that using the M.M.P.I. in conjunction with somatotyping, that this differentiated all but 19% of patients from controls. There is doubt

about the predictive reliability of this study, however, as the M.M.P.I. was administered after breakdown had occurred. In America, Stone & West [84] confirmed the findings of Davidson et al, that 30 – 35% were misclassified on the M.M.P.I. using the same cut-off points.

In New Zealand, Ironside [42] administered the M.M.P.I. to 375 medical students at the beginning of their fifth year. Clinical scale T scores of 70+ were noted as a high score and significant. All the women and 50% of the men were interviewed after testing. The post-test interviews not only fully confirmed the high score profiles but showed that some students who had not scored significantly were nevertheless suffering psychiatric symptoms. He found that 24% of these fifth year students gave evidence of psychological disturbance, and 13·4% were clinically ill with clearly recognisable diagnostic labels.

The Cornell Medical Index was used in an investigation at Queen's University, Belfast by Caldbeck Meenan [10]. He administered this test to one year's intake of 975 students and found that a total C.M.I. score of 30 or more was significantly related to the subsequent development of psychological illness. He found that 18·7% of the men and 21·5% of the women were considered to have been psychologically ill during their first years. Using a total score of 30 and a score of 10 or more on sections M – R as a cut off point, 39·5% of men and 39·7% of women were regarded as having been psychologically ill.

The M.P.I. and its later version the E.P.I. measure two aspects of personality, neuroticism (N) and extraversion (E). Neuroticism is defined as "the liability to neurotic breakdown under stress" while extraversion is defined as "the outgoing uninhibited social proclivities of a person." Two recent studies have shown that the mean neuroticism score is significantly higher in psychological attenders than in non-attenders or controls [63], [73]. However, Ojha et al [6] noted that the overlap of distribution of scores in attenders and non-attenders is such that substantial misclassification occurs even taking extreme cut-off points. Ryle & Lunghi [73] thought it worthy of note that "even when these tests showed significant differences in mean scores, the differences are not in general large, and no test alone would be predictive to the extent of offering an opportunity for pre-symptomatic detection of the vulnerable students."

Intelligence. Two widely held beliefs about the causation of psychiatric illness in students are first, that super-normal or high grade intelligence is associated with a liability to neurotic breakdown, and second that psychological illness is provoked in those of marginal or poor intelligence by the stress of academic demands or competition.

The first belief was not supported by Davidson et al in their Oxford study [16]. They used the A.H. 5 test, a closed time-limited test of high grade intelligence standardised against university students as a measure of intellectual ability. They found that psychiatric patients as compared with controls were not significantly over-represented in the higher three grades on the A.H. 5.

The second contention is not supported by two studies in which intelligence was related to the occurrence of psychological disturbance [16, 44]. Davidson and her colleagues found that psychiatric patients were not significantly over-represented on the two lowest grades of the A.H. 5. Kelvin and his colleagues found that there were virtually no differences in the mean A.H. 5. scores of those who developed psychological symptoms and those who did not. They thought it worth emphasising "these results make it impossible to argue that psychological distress is especially prevalent among those who cannot meet the purely intellectual demands of university life."

Body Build. The association between temperamental traits and body build has been observed from earliest times. Mayer-Gross, Slater & Roth [57] quote the work of Kretschmer and Sheldon in this respect. Kretschmer divided types of body build into pyknic, athletic and asthenic. He found that pyknic individuals were more than normally liable to depressive psychoses. Schizophrenic individuals tended to be of asthenic physique and epileptics of athletic physique.

Sheldon and his collaborators, using large scale photographic studies, argued that one should think of variations from the normal rather than in terms of physical types. They chose as their main dimensions, endomorphy, mesomorphy and ectomorphy, high scorers on which, roughly correspond with Kretschmer's pyknic, athletic and asthenic types respectively. Sheldon found correlation co-efficients of 0·8 between variations along the physical and psychological dimensions. Parnell [65] using anthropometric tests, found that there was a significant tendency for mental distress in students to occur more often in endomorphic ectomorphs, that is in people of linear build with proportionately more fat than muscle (tall fat people.)

Course of study. Many studies from university have tried to associate the tendency to psychiatric illness with a particular course of study [47, 83, 54]. The results of these have been confusing and conflicting and possibly even worrying for individuals in particular institutions. There seems to be a higher incidence of psychological illness in Arts students as compared with Science students [70, 83] but these, and other differences, may well reflect differing personality patterns in students selecting different courses.

CHAPTER 2. THE INCIDENCE OF PSYCHOLOGICAL ILLNESS

It is important at the outset to define the terms used so as to enable comparisons to be made.

In a study of mental illness in an American community, Holingshead and Redlich [38] define *prevalence* as the number of cases of a specified disease present in a population aggregate during a stated interval of time. The number of new cases of a disease developing in a population within a specified interval of time is defined as *incidence.*

In order to give as clear a picture as possible, the prevalence studies from universities will be reviewed and then compared with general practice studies of the same age group.

Prevalence studies from universities

An annotated bibliography of student mental health [27] contains only one reference to a prevalence study. This is Parnell's pioneering article [64] in which he highlighted the problems of illness and its capacity to delay or prevent the completion of a university career at Oxford.

In a careful survey from January 1947 until December 1949, he showed that 145 of Oxford's 6,000 students lost one full term's residence on account of illness, and that of these students, 52·5% were suffering from mental illness. This represents approximately 1·5% of the student population with presumably moderate to severe illness, as it occasioned the loss of one full term. Two thirds of these returned to complete their course, but 21% went down without a degree and did not return. 12% of those who went down without a degree were stated to have had a psychotic illness.

Davy, reporting on the situation at Cambridge University [18] found that 2-4% presented with severe disturbance and 10-15% with moderate or minor disorder over a three year period, but he noted that this might be a low estimate as it was based on the number of students referred to a psychiatric clinic. In a study from University College London, Malleson [56] gave prevalence rates of 1-2% with severe disorder and 10-20% with moderate or minor disorder. Malleson also showed that the more severely ill presented earlier.

In a review of the American literature, Baker [4] showed that 5-10% of students attend with psychological symptoms in any one year, and that the four-year prevalence rate was between 10-20%. In a survey at Clark University over a 30-year period, Baker found that the number of students who attend the psychological clinics ranged from 4·1 to 10·4% per year, with an average of 7·1% per year for an 8-year period. Another careful American epidemiological survey [77] of one college class population studied over a one-year interval found that 12% showed evidence of clinical disturbance. The annual incidence rate was found to be 5%. This study also confirmed Malleson's finding that the more severely ill presented earlier. Other studies in both this country and New Zealand confirm these basic figures of 1-2% with severe disturbance and 10-20% with moderate and minor disturbance [42, 47, 53, 83].

One of the difficulties of comparing these prevalence studies is the differing criteria of

psychiatric disorder used. The number of people classified as attending with psychological complaints will also vary between centres according to the psychiatric sophistication and interest of the doctors manning the service. In an endeavour to overcome these difficulties, a comparative survey of psychiatric morbidity in two universities [48] was carried out using the operationally defined concept of "conspicuous psychiatric morbidity" described by Kessel [45]. His working definition of illness was that adopted by Backett et al [3] namely, "a disturbance of a patient's health that is reflected in at least one consultation."

The two universities were Edinburgh and Belfast, and they found a first-year prevalence of pyschiatric disorder of 9% and 9·1% respectively for men, and 14·6% and 13·6% respectively for women. At both universities it will be seen that the prevalence rate was significantly higher in women than in men. The prevalence of psychiatric illness to which clearly recognisable diagnostic labels could be attached was 4·9% at Edinburgh and 2·8% at Belfast.

Inception Rates at Universities

In his U.C.L. study, Malleson [56] showed that the more severely ill presented in their first term. In an American survey, Baker and Nidorff [5] noted that the highest inception rate was in the first year. They found that their inception rate decreased steadily from 9·7% in the first year to 3·8% in the fourth year.

Malleson also noted a rise in the inception rate during the examination season in the second and final years. There are no published inception rates for other institutions but Still [83] considered that examinations were a principal causative factor in 28·6% of those who presented with psychological disturbance in one year.

Are students specially prone to psychatric disorder?

(a) *Mild disorder.* A superficial look at these studies might suggest that students were a psychiatrically unstable group, but Malleson [56] comparing a sample with a group of young men coming for call-up in a London borough drew the conclusion that students were more stable.

A more appropriate comparison might be with prevalence studies from general practice. The results of these studies vary widely because of the differences in methodology. In a study of a single partnership practice, Shepherd et al [76] recorded a one-year prevalence rate for persons with conspicuous psychiatric morbidity, of 11% for women and 7% for men. In another paper amplifying certain aspects of these results, Kessel and Shepherd [46] showed that the one-year prevalence rates for people with conspicuous psychiatric morbidity in the 15 - 34 age group was 9% for women and 8% for men. Both these studies confirm the findings of university studies that neurotic illness is more common in females than males.

(b) *Serious disorder.* First admission rates to mental hospitals should give an indication of the prevalence of serious psychiatric disorder in the general population. In a survey of first admission rates to mental hospitals in rural districts of England and Wales, Barraclough and Kreitman [6] record first admissions by five-year age groups per million of population. In 1960, in the ten-year age group 16 - 25, they found a hospital admission rate of 1·6% for females and 1% for males. In another study of admissions to mental hospitals in England and Wales in 1958, based on the Ministry of Health's reports, Kessel and Shepherd [46] give annual admission rates for the same age group, as 2·5% for females and 1·5% for males.

If one assumes that the general practice studies record minor and moderate degrees of psychiatric disturbance, and hospital admissions record severe degrees of psychiatric disorder, one may attempt to compare these with student prevalence rates. It seems that the student rates may be higher for minor and moderate disorder, and lower for severe disorder. These discrepancies can probably be accounted for by the privileged consulting facilities to university students, and by the fact that some young people with severe psychological disturbance will have been prevented by it from reaching university.

Is psychiatric illness in students increasing?

In a review of prevalence rates in American colleges, Baker (4) found that over a 20-year period there was no clear discernable trend of increase or decrease in psychiatric illness. However, he was reviewing figures of different studies, in which different criteria had been used, so that no true comparison could be made. The Royal College of Physicians' report on University Health Services (68) asserts that "there is no real evidence that psychiatric disturbance has become more prevalent in students," but no data in support of this statement is cited.

One careful study at an American men's college (90) based on successive M.M.P.I. protocols, led these observers to the conclusion that the proportion of emotionally disturbed students was increasing. Weiss et al (90) found an increasing proportion of students with T scores of 70 or over on four or five scales of the M.M.P.I. over the six-year period 1958-1966. The findings of this one American study have not so far been substantiated by studies from other centres or other countries.

CHAPTER 3. ACADEMIC DIFFICULTY AND DROP OUT RATES

In this chapter, a selective review of the American and English literature will be undertaken, but it is important at the outset to note the differing attitudes to a university education, and as a consequence of this, to dropping out in America and Britain.

For at least forty years a substantial proportion of American youth proceeded from High School to university or college. The entry requirements for some American universities are as high as those in Britain, but for many others, entry is dependent only on getting the appropriate High School grades. A university or college career is for many Americans an essential part of education. In America it is less important than in Britain to complete the course within a specified period of time. There are two consequences of this approach. First a number of young men and women obtain admission to American universities and colleges who may not have the intellectual ability to complete the course. Some consistently fail and are required to leave. Second, dropping out to spend a year or two doing something different is acceptable, and for many is part of their education. A consequence of this philosophy is that the American drop-out rate is, and has always been, high.

Britain, on the other hand, has until recently provided a university education for only its intellectual (or sometimes social) elite. We provide a university education for a smaller percentage of young men and women than America and most countries in Europe. In this country, a university place has only been available for a small percentage of applicants. Entry requirements are high and a university place is a cherished possession. In consequence, British universities rarely select people who are intellectually unsuitable, and to be required to leave because of course or examination failure implies a loss of status. The drop out rate in this country is, in consequence, lower than America, and until very recently few university authorities would have considered that to drop out for a time was necessary or desirable.

American Rates

The rate of withdrawal from American colleges has been so high for so long a period that it has received considerable attention from educators, college physicians and reporters on education. In a review of the studies on this problem from 1913-1962, Summerskill (86) found that the number of those who failed to graduate from the college they entered remained remarkably steady at about 60%. In the 34 studies reviewed by Summerskill, the median percentage of loss was 50% in four years, while the median percentage who graduated from their own institution in 4 years was 37%.

In a survey published in 1958, Iffert (41) found that of 13,700 students entering colleges in 1950, 39·5% graduated from the college which they entered. He found in addition that 59% eventually graduated at some institution.

The reasons for leaving college were formerly sought mainly in terms of institutional and administrative difficulties, while the recent trend is towards the elucidation of psychological causes.

English Studies

No national English studies are available until the post-war period. The University

Grants Committee report for the 1947 - 1952 quinquennium stated that "a certain wastage of students at the end of the first year is inevitable, so we did not regard it as unsatisfactory to find, over the whole university fields, the casualty rate in the summer of 1951 was between 8 - 9%." This assessment is of limited value as it covers only the first years, and encompasses universities of many different kinds, offering courses of different standards and unequal duration.

Two institutional studies elucidated the problem further and in greater depth. In a study of a three-year student entry, Sir James Mountford [59] gives rates for failure and delay for all the different faculties of Liverpool University. Over the three years, 71·1% of the total entry made a satisfactory and undelayed progress through the university course. A further 15·8% graduated but were delayed, while 13·1% failed completely. Of these, 0·8% abandoned their course because of illness.

In a study of student performance at University College London, Malleson [55] gives figures for the four-year period 1948 - 1951. Over this four-year period, 73·5% of students graduated successfully on time, 8·4% were delayed by academic difficulty, 15·4% abandoned their courses and 2·6% left for non-academic reasons.

The University Grants Committee [88] has published a survey of all students who would have been expected to graduate from English universities in the summer of 1966. This group comprised people doing six, five, four or three-year courses. 35,386 students might have been expected to emerge with their first degrees. The results of this survey are as follows: 77·7% graduated successfully on time, 7·8% obtained their first degrees after a further year, 1·2% were re-admitted in October 1967, 13·3% left without obtaining a first degree, but of these, only 1·4% actually sat and failed their final examinations, and 0·5% left because of illness. This means that 11·4% left without completing their course.

These figures were broken down to give the percentages who left at different periods of their course. 0·4% left in the first term, 6·8% in the first year (approximately the same as Malleson's, University College London figures), 3·7% left in the second year, 2·1% in the third year, over half of whom sat and failed the final examinations. The report makes a comparison with previous University Grants Committee surveys, which were estimated on the fate of students who entered a university in a particular year. This shows very little overall change since 1952, when they reported that the number who left university without obtaining a degree was 16·7%. In 1955 it was 13·9%, in 1957 it was 14·3% and in 1966 it was 13·3%.

Where the U.G.C. report is weakest is where it attempts to classify those who left without obtaining a degree. 81·9% are said to have left for academic reasons, but no further study of these reasons is offered. Did they fail for lack of intelligence? Did they fail their exams? Were they producing an inadequate quantity of work? Were they dissatisfied with their course of study? Did they endeavour to change courses but were debarred from so doing and left in consequence? We do not know.

What the report does show is that approximately 3½ thousand students per year leave university after one or two years' training, most of whom probably have the intellectual ability to succeed. It is imperative that we try and discover the reasons for their failure, and whether it could be prevented by appropriate intervention at the right time.

There are two other aspects of this report which are significant. First, that over the country as a whole there is a greater failure and delay rate in those doing engineering and

technology – 68% in normal time, 76% by the following year, compared with Arts and Social studies with "80% graduating in normal time." Engineering and technology are progressive subjects demanding precise ground work knowledge before the next stage can be proceeded to. Is it possible that basic sciences are inadequately taught or the student's knowledge of them is inadequately measured, before he is allowed to proceed to the next stage of the course?

The othe important factor is the great discrepancy in failure rates between different institutions. The percentage leaving without obtaining a degree varies from 3·4% at Cambridge to 34% at Loughborough. These important aspects of institutional difference will be dealt with in a later chapter.

CHAPTER 4. CAUSES OF WASTAGE AND DROP OUT

1. Socio-economic factors, family background, schooling, social participation and previous medical history.

(a) *Socio-economic factors.* One English study (53) records that wasted and failing students come from a lower socio-economic background than successful ones. However, the reverse was found in an earlier English study (39).

(b) *Family background.* There is no evidence in any of the studies that parental harmony/discord is significantly correlated with subsequent academic achievement.

(c) *Previous medical history.* Two studies show that failing and wasted students have a poorer health record, both at school and at university (39, 53). It is of interest to note that this is also a characteristic of psychological attenders amongst medical students (53).

(d) *Social participation.* Few or unsuccessful attempts at social participation seems to be a characteristic of failing and wasted students. Hopkins et al (39) record that they made less successful relations with the opposite sex, while Lucas et al (53) showed that at university a greater proportion of them had no friends in other departments, as compared with successful students. They also recorded, however, that they had as many friends of both sexes in their own department, and in contrast with Hopkins' findings, that they frequently had 'a special friend of the opposite sex.'

(e) *Residence.* The two studies in which this factor has been investigated (61, 54) are in agreement in finding that students who lived in Halls of Residence were more likely to obtain a good degree or get good results in their first year examinations than those who lived in lodgings or at home.

2. Intelligence.

The relationship between intelligence and the previous academic performance of students who drop out has been recorded in a number of American studies. In his review of American drop out studies, Summerskill (86) found that in 10 out of 11 studies, drop outs had a lower average grade in secondary school than graduates, and that drop outs scored lower on the scholastic aptitude test.

In the English studies there is disagreement on this point. One study which specifically looked at this (53) showed that wasted students scored significantly lower on the A.H.5 test than those completing. The overall mean for the wasted students was 33·81 as compared with a mean of 40·94 for successful students. In another study, Ryle & Lunghi (73) compared students in academic difficulty and wasted students with controls. They found no differences between wasted students and controls on scores on a high grade vocabulary test and on tests of reasoning given at intake.

3. Personality.

Many American studies have attempted to ascertain the sort of people who drop out

by means of questionnaires. Drop outs have been reported

(1) to be more immature (Summerskill [86].)
(2) to be more assertive (Astin [1], Heilbron [35].)
(3) to be more aloof and self centred (Astin [1].)
(4) to be more subject to worry and anxiety (Summerskill [86].)
(5) to be socially inadequate (Summerskill [86].)
(6) to lack independence and responsibility. (Summerskill [86].)

In other studies, investigators have used the same psychometric tests of personality to study underachieving and wasted students as have been used to study the personality of those students who are psychologically disturbed.

In America, Stone and Ganning [85] used the M.M.P.I. and found that students with T scores of 70 or over on one or more categories obtained lower average marks than those who scored in the normal range on the M.M.P.I.

The M.P.I. or the later version the E.P.I. has been used in English studies. Lucas et al [53] found that the mean neuroticism and extraversion scores for wasted and delayed students were not significantly different from those of successful students, while in another study, Kelvin et al [44] related neuroticism scores to the class of degree obtained. They showed that, when tested during their first year at college, those who subsequently obtained firsts had a mean N score of 28·4 and those who failed or dropped out a mean score of 23·4. The equivalent scores for seconds, thirds and passes were 24·5, 22·5 and 22·4. On retest two and a half years later, the mean N score of those who obtained firsts had declined to 25·6 and the mean score of drop outs or fails had increased to 27·6. These differences do not, however, reach significant levels. The same authors also showed that the mean extraversion score was higher the worse the class of degree obtained. Ryle and Lunghi [73] using the E.P.I. found no significant differences on N or E scores between students in difficulty, those who dropped out and controls, and they confirmed an association between extraversion and poor class of degree (personal communications.).

4. Psychological illness.

(a) *Psychosis.* In a study of 35 Harvard undergraduates who became psychotic and had to leave college during the years 1955-1959, Carmen [11] found that only 17% graduated on time. 21, or 60% finally graduated but 43% were delayed from 1-5 years. In another study of 108 students who developed a schizophrenic illness, Kiersch and Nikelly [49] noted that compared with controls, the graduation rate, the years of attendance after the diagnosis and the level of academic performance and adjustment were significantly lower. They also noted that the drop out rate for their schizophrenic group was three times that of a control group.

In a study of Harvard drop outs, Nicholi [62] found that of all drop outs, schizophrenics were the least likely to return, but also the least likely to drop out a second time. He found that those with manic-depressive illness were the most likely to drop out a second time.

Both these studies reported that psychotic illness with an acute onset had a far better prognosis as regards a university career. Carmen found that 11 of the 14 students who graduated on time or one year later had had acute onsets of their illness. He also noted that of the 13 who did not graduate, all but one had gradual onsets of their illness. Kiersch and

Nickelly also noted that acute onset with lack of pre-existing schizoid features were facts of good prognostic significance. Carmen recorded that the period of hospitalisation was shorter in those with acute onsets. This emphasises the need for the speedy recognition and treatment of any student presenting with bizarre symptoms or suicidal attempts which may indicate psychotic illness.

The high incidence of psychotic illness in drop outs was noted by Farnsworth in his recent book [24]. He reported that of 179 Yale students who had left between 1947 and 1952, 30% of these were diagnosed as psychotic.

(b) *Neurotic illness.* Neurotic illness does not have the same serious prognostic significance for academic achievement as psychosis. In a study of those taking Finals at Oxford in 1963, Spencer [82] found that 57 neurotic patients under treatment at the Warneford Hospital were awarded approximately the same percentage of each class of degree as those awarded to the remainder of the university population. In another study at Oxford, Davidson and Hutt [17] found that the academic performance of 500 psychiatric patients as measured by degree class, was poorer than that of the university as a whole. Davidson and Hutt found their patients got as many first class degrees, but fewer second class degrees and more third class degrees and passes. It appears that while severe neurotic distress is compatible with high academic achievement, that it may be an important factor in provoking underachievement and wastage.

In a careful longitudinal study at University College, London, Lucas et al [53] record that 16% of 198 students did not get a degree in four years. Of these 32 wasted students, a third had severe psychological distress, and over half had moderate or minor distress. However, it is worthy of note that in a parallel study of University College, London, Kelvin et al [44] noted that two-thirds of those who obtained first class degrees reported some degree of psychological distress.

In a study of 1452 Harvard drop outs between 1955 - 1960, Nicholi [62] found that psychiatric disorder was four times as common among drop outs as among the successful student population. He found psychiatric disorder among drop outs in the following order of frequency: neurotic disorder, transient situational character disorder and psychotic disorder. He found that 83% of psychiatric drop outs were more likely to return to university compared to 72% of non-psychiatric drop outs.

CHAPTER 5. PREDICTION OF ILLNESS AND DROP OUT

Many British universities have recently looked at the possibility of predicting psychological illness. The present evidence on the various factors which might enable psychological illness in students to be predicted, will be outlined.

Family History.

The results of a number of studies so far have been so conflicting that no predictive value can be placed upon the findings. (17, 32, 52, 47).

Personal History.

The personal history of psychological attenders and those who underachieve or fail has been carefully looked at in a number of studies (39, 61, 47, 52, 53, 44). Both Kidd and Lucas found that psychological attenders were significantly less likely to be "all rounders at school" and two other studies (39, 52) found that both psychological and wasted students were less good than their contemporaries at social relationships. No significant correlations have been found in the case of the following variables: age, possession of grant, educational background, parental health, number of siblings, position in the family, living in digs or with parents, parental attitude to college or university attendance, motivation as estimated by reason for choosing the college, and subject of study.

Previous medical history.

Although a few studies (39, 47, 52) have shown psychological attenders and failing and wasted students to be significantly less physically healthy than their contemporaries, both at school and at university, the area of overlap is large. Such a history in a student may be suspicious, but has no predictive value.

Intelligence.

There is no evidence that levels of intelligence alone will enable one to predict who may break down or who may drop out or fail. (16, 17, 44, 53, 80).

Psychometric testing.

Many different psychological tests have been employed in an attempt to predict psychological vulnerability. When these tests have been administered after breakdown, one cannot, of course, assess their predictive value. It has been emphasised by Kelvin et al that the results of the M.P.I. should be considered as descriptive of the state of the student at the time of the test, and not predictive of behaviour throughout a subsequent university career.

In two American studies, the M.M.P.I. was administered at intake and the results later checked against subsequent outcome. Stone and West (84) found that 30-35% were 'misclassified' in terms of liability to develop psychological illness. In another study, Stone and Ganning (8) found that students with a T score of 70 or more were likely to do less well academically than those who scored in the normal range.

The Cornell Medical Index Health Questionnaire (C.M.I.) was administered by Caldbeck Meenan [10] at university intake, in an attempt to identify those students who would develop psychological symptoms. He found that selecting a cut off point of a total C.M.I. score of 30 or more, or a score of 100 or more on sections M – R, a significant number of students likely to develop psychological illness during their first year could be identified.

The M.P.I. and the E.P.I. have been used in studies which have examined psychological difficulty and problems of academic difficulty and wastage [52, 53, 73]. Lucas et al found that there were no significant differences in the neuroticism or extraversion scores between psychological attenders and controls, or between failing and wasted students and controls. However, they noted that the neuroticism scores of the severely disturbed were considerably higher than those of other categories. Ryle and Lunghi, found that the neuroticism scores at intake were significantly higher in those students who subsequently developed psychological symptoms.

Another psychometric test which is said to have some predictive value in psychological illness in students is the Nufferno Speed test, part of which is completed with time stress and part without. Normals score higher under time stress. Low or negative stress gain is said to be predictive of academic problems due to psychiatric troubles in university students. Ryle and Lunghi [73] in a study of psychological illness and academic difficulty showed that psychological patients with work difficulty had shown a significantly low stress gain compared with controls when tested at intake, but this finding was not replicated on a subsequent sample (Ryle and Lunghi: personal communication).

It seems that at present one cannot predict with any degree of certainty those who will develop academic difficulty, those who will drop out or those who will develop psychological symptoms.

At present the acceptance of a student by a university should be on academic grounds alone. The research already reviewed has shown that any attempt to select out those with a potential for psychiatric illness prior to admission, is unlikely to be fruitful [53]. it is, in any case, doubtful if personality variables should be afforded much weight at selection. According to Furneaux [28] neurotic introverts have a higher chance of breakdown, but they are also likely to show high academic achievement. Predictive powers are faulty, yet stress and difficulty are common. The solution must be in early detection of the vulnerable and early treatment of those in need.

CHAPTER 6. THE INSTITUTION

Selection of the intake.

Three factors appear to be crucial to achievement in higher education; cognitive ability, personality and emotional adjustment. It is now possible to measure cognitive ability with a fair degree of accuracy by a combination of previous academic performance and intelligence testing. The ability to measure personality and emotional adjustment so that we can decide who is most fitted and who is most likely to succeed at university or college is, at present, crude. If we could design ways of measuring these two aspects of people with greater precision, this might be a considerable contribution towards improving selection.

Three important questions about selection seem to be within the compass of this research review. First, is the pool of ability limited? Second, can we improve our selection procedures so that on grounds of cognitive ability, personality and health we minimise the likelihood of failure? Third, are our selection criteria appropriate?

1. *Are we recruiting too many?*

Some of the blame for the present wastage rate and the incidence of psychological distress among university students has been said to be due to the fact that higher education is now provided for those unfitted to receive it. However, as we have seen, the failure and wastage rate has remained roughly constant for fifteen years, so that the increasing number of adolescents gaining a university place has not been matched by an increasing percentage of failure (88).

2. *Are we recruiting too few?*

Two recent studies seem to indicate that at present we are not providing a university education for all those with the potential to benefit from it (89, 29). Professor Furneaux showed that in 1955 the proportion of those entering schools who left with at least two 'A' levels was 7-8% for boys and 4-5% for girls. In both these groups a disproportionate number come from Social Class 1. He suggests that if the overall social and environmental conditions could be improved, or these conditions could be equalised between the five social classes, the proportion of the present number who would meet university entry requirements could be improved by between 14-19%. This suggestion is supported by Professor Vernon who noted that individual I.Q.'s may be modified by as much as 20 points by favourable family and environmental conditions.

Professor Vernon noted four social and motivational factors determining the supply of students.

(i) The educational and vocational aspirations of the family.

(ii) The child's drives, interests and ideas.

(iii) Traditions and current attitudes in the schools the child attends.

(iv) The effectiveness of teachers and teaching methods.

3. *Are our selection criteria appropriate?*

There is even more controversy about the validity and effectiveness of selection procedures. In 1947, in a paper reviewing the literature concerned with student selection by psychological tests, Professor Eysenck [22] noted that there was a moderately high correlation between various psychological tests and examination results. He emphasised that most of the literature on the subject was American, and he noted the crudity and the relatively unsophisticated way in which many of the results were interpreted. He recommended that selection should be by psychological testing combined with an interview, and that records should be kept of the correlations between achievement and detailed test scores, and between achievement and opinions expressed on the basis of the interview. Only in this way, he felt, should we learn something about the active contribution made by the interview to the objective data. He concluded by emphasising that not only should a more professional approach be employed in selection procedures, but also in the psychological investigation of teaching courses and examinations, and other methods used to assess students by colleges and universities.

In a study advocating the increased employment of psychological tests in selection, Himmelweit [37] has written cogently on how the failure rate could be lowered by these means. She showed that there was no correlation between first degree performance and 'O' level results and interview assessment, and only limited subject specific correlation between class of degree obtained and 'A' level results.

In his study of student performance at University College London, Malleson [55], looking at those who dropped out, showed that only 6% of the 15·4% who could be described as academic casualties were detected and required to leave in their first year. He maintained that better selection could not have excluded many of these.

In 1963 Kelsall [43] published a review of university student selection in relation to subsequent academic performance. In this Kelsall reviewed all the evidence, and especially the work of Himmelweit, Furneaux and Malleson, and concluded that failure did not seem to correlate with absence of cognitive ability, and that more work needed to be undertaken in relation to tests concerned with non-cognitive aspects of personality.

Structure

One striking fact that emerges from the recent U.G.C. report on student progress, was the large discrepancy between wastage rates at different institutions. The rate varies from 3·4 to 34%. These are figures from institutions of differing structure, of different orientation (some predominantly technological) and offering courses of different length. It is noteworthy that of the four universities with the lowest wastage rates, three of them, namely Oxford, Cambridge and Sussex, rely heavily on a tutorial method of teaching. It is perhaps also of interest that an overlapping three, with the lowest wastage rates, namely Oxford, Cambridge and Durham, are collegiate.

It has already been noted that the percentage of those obtaining first degrees on time is greater in those studying Arts subjects compared with those studying Science and Technology. This may go some way towards explaining why those institutions offering predominantly technological courses have the highest wastage rates. Those with the highest wastage rates are the universities of Bradford, Loughborough, Salford, Surrey and The City University. [88].

The structure of the university affects the way that a feeling of identity may be aided or discouraged. Physical propinquity, provision for student residence and stratification of the university into departments and schools, the remoteness or approachability of the members of the teaching staff, all have some effect on performance and wastage.

Several of the new universities have tried to overcome the artificially imposed separation between subjects and between Science and Arts by institutionalising as much integration as possible from the beginning, e.g. Daiches [14]. Several too, have designed their courses so that it is possible for students to make a change in their major subject at the end of the first year. Many students having experienced university life and having time and opportunity to think for the first time in their lives, find their objectives and their attitudes have been changed. Yet it must often seem that the student must fit a procrustean bed in the way our institutions function. In an article examining ways of reducing student wastage in Britain, Dr. Gordon Miller [58] pleaded for more flexibility between courses and between institutions.

Little work has been done on the effect of the institution on the student in Britain, but at the Massachusetts Institute of Technology, Snyder is pursuing research aimed at illuminating this particular area. In an article reviewing the work done to date [79] he discusses how there will be a different reaction from students in a liberal Arts college from that of students at a college specialising in Science and Technology. He suggests that in the first type of institution people will look at themselves to find out what is wrong, and that in the second type of institution, people will tend to look outside themselves and look at the institution to find out what is wrong.

Teaching methods.

While teaching methods are strictly outside the scope of this monograph, the Hale report on University Teaching Methods [8] was critical of the fact that students who came to university straight from school find themselves with more responsibility than they had had previously. And in a companion monograph to this on research into teaching methods in higher education, Beard [8] stated "the usual response of teachers to failure by large numbers of students in examinations is to criticise the examination itself, or to demand that selection of students could be improved. It is rare that modifications of teaching methods is advocated or even considered, although evidence exists that these and the curriculum may equally be causes of failure." Dr. Beard studied the results from two Departments of Engineering in Birmingham and found that there was a predominantly negative correlation in one department between test scores of intellectual abilities and marks in first year examinations. The test data indicated ways in which the course could be evaluated, modified and improved [7].

Teaching methods and the structure of courses must clearly be considered when the institution itself is being examined.

Peer Group culture and values.

The student at college or university is subject to many influences that may modify his thinking, his habits, his behaviour and his pattern of work and social activity. While selection is probably the most important factor as a source of change among students, the next most important factor is probably that of peer group influence. Research on peer groups and peer group values in universities has received little attention in Britain, but has been the subject of considerable research in America in recent years.

Discussing the nature of peer group influences, Newcombe [60] describes the conditions

of peer group formation, and the conditions which facilitate peer group influence. He enumerates the conditions for peer group formation as pre-college or university acquaintance, geographical propinquity (living in the same College, Hall of Residence or hostel) and similarity of attitudes and interests. The combination of contiguity and common interests seems to occur from the beginning of most peer group relationships. Continuity of the peer group is fostered by continuing favourable attitudes towards each other, and similar attitudes to things of common importance.

Newcombe asserts that as the members of a group become more favourable towards each other, they come to adopt as their own, certain shared attitudes of the group. He maintains that the sharing of group values is important in educational terms. He enumerates four conditions which especially facilitate the influence of a peer group on its members. First, the size of the group, the group must be large enough for the formation of sub groups within it, but not so large that members are unable to recognise each other. Most Oxbridge Colleges, except the largest, are good examples of this. Second, homogeneity of age, sex, social class and religious affiliation contributes to the influence of the group because of the similarity of attitudes which goes along with this. Third, isolation. The more isolated the group is from the prevailing attitudes and opinions in which it finds itself, the more likely are its members to be strengthened in the conviction that they are 'right'. This is well illustrated by the extreme attitudes of some left-wing socialist or conservative university society. Finally, he describes the importance of group support for the individual, especially if the opinion of the group diverges from the larger student society to which they belong.

Peer groups seem, in some British universities, to have played an important role in institutionalising the taking of drugs. Drug taking is mainly a group activity, and the support of the group enables those who may be 'dropping out' from the larger university to feel that they are wanted and supported, thus supporting Newcombe's contention that the isolation of the group only confirms and strengthens its resolve to maintain its existing attitudes. This is one of the factors that make it difficult to get information about drug taking and enables the drug taker to continue for so long without apparently showing the more severe signs of psychological distress.

The support structures of the university: University Health Services, Counselling Services etc.

The increasing number of students and the increasing size of institutions of higher education, have diminished the opportunities for social contact and support for students from tutors in universities and other institutions. The intimate knowledge of students possessed by Dons at Oxford and Cambridge two or three decades ago may be less possible today. The structure and increasing size of provincial institutions make this sort of intimate contact both less likely and more difficult. However, several of the new universities have tried to design an institution in which the opportunities for contact between student and tutor would be increased, by introducing a tutorial system as at Sussex, or a collegiate system as at The University of Kent.

Immediately prior to World War II, and increasingly since, universities have seen the need to initiate University Health Services for students which would provide medical care within the framework of the National Health Service, and to provide an Occupational Health Service which would cater for their particular needs. In some respects, the development of University Health Services is a manifestation of institutionalised concern for individuals to complement the support of Dons and tutors. Increasing recognition of the importance of psychiatric difficulty as a cause of distress and as a factor in underachievement and wastage has stimulated the provision of Health Services equipped to deal with it.

The need for University Health Services providing medical care and also specifically orientated towards student problems, has been recognised by the provision of such services in the large majority of institutions. The size and sophistication of these services differs between institutions, but the recognition of the need to provide psychiatric help for formal psychiatric illness and emotional difficulties, is increasing.

Both the World Health Organisation [91] and the Royal College of Physicians [68] have produced special reports devoted to University Health Services. Both emphasise the importance of mental health and the provision of adequate services for its treatment, both within the University Health Service and by local arrangements with psychiatrists in the National Health Service. The W.H.O. report emphasised the probable emotional origin of much academic difficulty and failure, for in the chapter on Mental Health it says "academic performance and progress appear to depend not so much on innate ability as on the degree of success with which the developing adolescent manages the normal, if somewhat perplexing, phases and crises incident to his emergence as a mature adult with an individuality of his own."

The need for psychotherapeutic skills in the management of student psychiatric difficulties is implicit and emphasised in the Royal College of Physicians' report. They say, "although many Student Health physicians themselves acquire the necessary psychotherapeutic skill to treat students, the need for psychotherapy is usually so great that there should also be the non-medical as well as medical part-time psychotherapists available as part of the Student Health team."

In America and in Commonwealth countries, the provision of Counselling Services separate from, but related to the Health Service, is a factor which distinguishes them from the majority of British services.

The scope and development of these services and the problem of psychological forces at work in student communities is outlined in two books by D.L. Farnsworth [23, 24] and by Anthony Ryle [72].

CHAPTER 7. THE MEANING OF THE UNIVERSITY TO THE STUDENT

The growing size, number and diversity of British universities and the slowly increasing percentage of the adolescent population gaining a university place, is an important mirror of a changing social scene. In a more socially mobile society, the attainment of a university place and the acquisition of a degree are important symbols in the continued struggle of the adolescent to stake out a better place for himself. For many, getting to university and acquiring a degree, satisfies an important need to achieve goals and prove themselves.

Adolescence as a phase of psychological development has been greatly illuminated by the writings of E.H. Erikson [19, 20, 21]. Professor Erikson provides his own interpretation of the stages of human psychological development, the earlier ones corresponding to those of classical psychoanalysis. He describes adolescence as a distinct stage of psychological development with its own particular drives, goals and inevitable frustrations.

He describes identity as a characteristic of persons which implies a central control over themselves for which, in psychoanalytic terms, only the 'inner agency' of the ego could be held responsible. When this is impaired Erikson speaks of a loss of 'ego identity' or identity crisis. But he emphasises that an identity crisis need not be of pathological significance, but may be an undue prolongation of or regression to, a normal crisis belonging to a particular stage of individual development.

The adolescent needs to redefine himself in personal, social and occupational terms after the physiological revolution of sexual maturation. It is important that he makes this redefinition, or identity, relevant to the adult world. This may require the transient assumption of a number of different and divergent identities before deciding which is most appropriate. Some of these identities will seem inappropriate or disturbing to families or friends. For many people, as well as for themselves, it may be a time of turbulence. As Erikson has written "in their search for a new sense of continuity and sameness, which must now include sexual maturity, some adolescents have to come to grips with crises of earlier years before they can install lasting idols and ideals as guardians of a final identity."

The other important aspect of identity is that of acquiring a work role which will be relevant to adult life. To become a student may be to delay assuming this role, and for many, being a student is an unsatisfactory role as compared with many of their contemporaries in age who are working and have assumed this role already.

Many young men and women coming up to university expect it to mark an important transition in their lives. Some will have a fantasy that they are entering an institution which will contain fewer imperfections than the world they have encountered hitherto. When they find in reality that it only differs in degree from the world they have come from, some will experience a sense of frustration and disappointment.

At the same time these newcomers will be subject to the pressures of their peer groups and the pressure exerted by the aims of the institution to which they now belong. In an earlier chapter the way peer groups may support or provoke compliance or defiance has been shown.

For some who obtain a university place, the three or four years of their course provides a psycho-social moratorium which allows this experiment with identity to proceed in a sheltered setting. The rigid structure of some institutions may sometimes exacerbate identity difficulties. Erikson has written of the ideological significance of the structure of university life (20). He emphasises the need for flexibility in the institution and the need for some adolescents to do something different. Many will find that coming to university provides the change they require, but for others it may involve complying with parental expectations and values. A few may need to have a period of time away from university. They may need to be allowed to opt out in order that they may choose to 'opt in'. They may spend this time travelling, performing manual labour or assisting in developing countries. But whatever they do, it may be necessary that they should be able to choose to do it, and the university should be flexible enough to allow them – and they will be relatively few – a period of time away. In America, with a much larger intake and much higher drop out rate, this is more readily allowed, and American experience shows that drop outs who return to university subsequently perform well academically (86).

Erikson has also written of the need of some adolescents to assume a negative identity (19). This implies assuming an identity which is in conflict with those of parents or their social group. Where parental pressures are excessive or group demands inordinate, assuming a negative identity may be the only way of obtaining recognition as a person.

The institution may by its aims and structure ameliorate or provoke identity difficulties of many students. Snyder has written of how the social and psychological environment of the university defines and limits the possibilities for adaptation (79). He notes that when the course and social setting allow the individual to be stretched and yet allow him to modify his identity in safety, identification with the aims of the institution will occur. But if these conditions are not provided, the individual may need, or be forced to opt out and to challenge or ignore the institution's social and educational objectives. But the institution can, by its concern coupled with its ability to set limits, allow students some acting out of their problems of identity in safety. If the institution is too rigid, if it appears unconcerned or if it reacts in an authoritarian or hostile way, students who are dealing with identity problems will be forced to opt out. When this happens, rebellious and anti-academic values may become dominant, and negative identity is therefore confirmed. Behaviour designed to test out the adult world can become fixed in delinquent or psychopathic patterns.

CHAPTER 8. AREAS FOR FUTURE RESEARCH

The individual and the institution.

Psychological disturbance in adolescents, although intense, is often short-lived, and the presentation may mimic that of illness which would have serious prognostic significance in the adult. If the same individual suffers a second acute psychological crisis, the presentation may be quite different. There is a need for long-term longitudinal studies of psychological disturbance in students to assess the immediate and prognostic significance of various methods of presentation and symptomatology. We need to know if positive or negative identification with parents or authority figures provokes or ameliorates the ability to manage adolescent crises.

It is particularly in the field of interaction between the individual and the institution that research needs to be done. This may necessitate employing psychiatrists, social psychologists and sociologists in a multidimensional approach. Some of the questions that need to be answered are:

1. How does the structure of the institution affect behaviour and the liability to psychological distress?

2. Are differences in drop out rates between institutions predominantly caused by differences in selection, the personality characteristics of the students selected, or the structure of the institution?

3. What factors within institutions provoke under-achievement and a high drop out rate?

4. How does the structure of the institution modify peer group formation, and how may this affect the liability to psychological distress or the need to opt out?

It seems obvious that there may be different personality patterns in students selecting different institutions. If we could measure the non-cognitive aspects of personality with greater precision, we might be able to select individuals who would have the greatest potential for success in a particular institution.

Underachievement.

The interaction between personality, psychological disturbance and underachievement needs further understanding and elaboration. Two questions which need answering are:

1. What is the relationship between parental and sexual identification and achievement?

2. What is the relationship between aggression, submission and achievement?

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Printed by Direct Design, Christchurch, Hants.