THE PROMOTION AND MAINTENANCE OF MENTAL HEALTH IN THE MILITARY COMMUNITY

BY
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PART I

INTRODUCTION

The sphere of hygiene has expanded greatly in the last hundred years. This expansion has kept pace with the growing realization that every facet of our environment and daily life has its health aspect.

Thus the hygienist has found himself working in an ever-widening field. His work with regard to practical sanitation involved him in a study of engineering and chemistry.

The discoveries of Pasteur revolutionized his ideas on epidemic control so that, for a time, his speciality became dominated by the science of bacteriology.

His appreciation of the importance of the physical environment led him to a study of applied physiology and physics, and he added the Haldane Apparatus, katathermometer, photometer and radiation detector to his armamentarium of technical weapons.

During recent years the importance of what we describe as “social medicine” has become more widely appreciated; not that there is anything new in the study and practice of social medicine, but its domination of the sphere of hygiene is a comparatively recent occurrence.

It was the study of social medicine which led the hygienist into the field of mental health. In his investigations regarding man’s social environment he noted many factors which affected mental health, and he soon realized that he could do much to promote mental as well as physical well-being.

Today, mental ill-health is one of the main causes of inefficiency, human suffering and man-power wastage; evidence of this confronts us in every issue of the Daily Press, such as crimes of violence, juvenile delinquency, the incidence of divorce and the wider aspects of bad international relationships with wars and rumours of wars.

Perusal of the Statistical Report on the Health of the Army, 1943–45,
Promotion and Maintenance of Mental Health in Military Community

reveals the importance of mental hygiene in a striking manner; we read that "... psychiatric disorders are by far the largest cause of medical discharge among military personnel (Other Ranks). In 1943 they made up over one-third of all discharges with relation to disease, and in 1944 their contribution rose to two-fifths."

In the immediate post-war period the percentage of discharges on psychiatric grounds has remained approximately of the same order, as is shown by these tables:

Table I.—Medical Discharges on Psychiatric Grounds, British Army, Other Ranks, 1943–48

<table>
<thead>
<tr>
<th>Psychiatric disorders</th>
<th>1943</th>
<th>1944</th>
<th>1945</th>
<th>1946</th>
<th>1947</th>
<th>1948</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety neurosis</td>
<td>13.6</td>
<td>18.4</td>
<td>22.0</td>
<td>16.3</td>
<td>13.7</td>
<td>12.6</td>
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<tr>
<td>Hysteria</td>
<td>7.2</td>
<td>8.2</td>
<td>6.4</td>
<td>6.3</td>
<td>10.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Psychopathic personality</td>
<td>6.0</td>
<td>6.5</td>
<td>4.7</td>
<td>6.0</td>
<td>7.5</td>
<td>8.98</td>
</tr>
<tr>
<td>Mental deficiency</td>
<td>2.4</td>
<td>2.6</td>
<td>1.9</td>
<td>2.9</td>
<td>6.8</td>
<td>6.05</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>2.3</td>
<td>2.6</td>
<td>1.8</td>
<td>3.3</td>
<td>3.8</td>
<td>2.70</td>
</tr>
<tr>
<td>Manic-depressive psychosis</td>
<td>2.2</td>
<td>1.4</td>
<td>0.9</td>
<td>1.2</td>
<td>1.1</td>
<td>0.65</td>
</tr>
<tr>
<td>All others</td>
<td>1.2</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
<td>0.6</td>
<td>0.24</td>
</tr>
<tr>
<td>All psychiatric disorders</td>
<td>34.9</td>
<td>40.4</td>
<td>38.5</td>
<td>36.9</td>
<td>43.6</td>
<td>43.2</td>
</tr>
</tbody>
</table>

Table II.—Medical Discharges on Psychiatric Grounds, British Army, Other Ranks, 1943–48

<table>
<thead>
<tr>
<th>Psychiatric disorders</th>
<th>1943</th>
<th>1944</th>
<th>1945</th>
<th>1946</th>
<th>1947</th>
<th>1948</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety neurosis</td>
<td>2.57</td>
<td>3.80</td>
<td>5.71</td>
<td>3.89</td>
<td>2.65</td>
<td>2.78</td>
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<tr>
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<td>1.69</td>
<td>1.66</td>
<td>1.51</td>
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<tr>
<td>Psychopathic personality</td>
<td>1.13</td>
<td>1.35</td>
<td>1.23</td>
<td>1.44</td>
<td>1.44</td>
<td>1.97</td>
</tr>
<tr>
<td>Mental Deficiency</td>
<td>0.46</td>
<td>0.54</td>
<td>0.48</td>
<td>0.69</td>
<td>1.31</td>
<td>1.33</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>0.43</td>
<td>0.54</td>
<td>0.47</td>
<td>0.79</td>
<td>0.73</td>
<td>0.59</td>
</tr>
<tr>
<td>Manic-depressive psychosis</td>
<td>0.42</td>
<td>0.29</td>
<td>0.22</td>
<td>0.28</td>
<td>0.21</td>
<td>0.14</td>
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<tr>
<td>All others</td>
<td>0.22</td>
<td>0.15</td>
<td>0.21</td>
<td>0.21</td>
<td>0.11</td>
<td>0.05</td>
</tr>
<tr>
<td>All psychiatric disorders</td>
<td>6.59</td>
<td>8.36</td>
<td>9.98</td>
<td>8.81</td>
<td>8.40</td>
<td>9.48</td>
</tr>
</tbody>
</table>

These facts and figures indicate that the problem of promoting the mental health of the military community is a very real one, and that important opportunities of reducing man-power wastage exist in this branch of hygiene.

I have written this paper from the point of view of the Specialist in Army Health, who now has a definite and official responsibility for the promotion and maintenance of mental, as well as physical, health.

I have endeavoured to collect together and discuss all those basic facts which have a bearing on mental health, and have summarized the principles involved in promoting and maintaining it.

This paper is arranged in sections as follows:
SECTION I.—CONCEPTS OF HEALTH IN GENERAL

In recent years the term "positive health" has come into prominence, and, by frequency of use, has become a hygienist's catchword, almost a household word.

The advent of this term signified a changing outlook in the sphere of medicine; those who first used it suggested that we were too preoccupied with the study of disease and its prevention and treatment, and that it was time we paid more attention to the quality of health and its enhancement.

The term "positive health" is not easy to define. Some have defined it as a particular state of body and mind, a state of physical and mental perfection combined with a sense of positive well-being; a state of perfect attunement to the environment. But I suggest that the best term for such a state of perfection is "optimum health," and that the use of the word "positive" in this connexion is incorrect. Others do not talk of positive health as such but advocate a "positive attitude" towards health; this is a useful concept in that it lays emphasis upon those factors which increase physical and mental efficiency in addition to those important in the prevention of disease.

I suggest that the term "positive health" should be used to describe a phase rather than an exact state.

It is difficult, perhaps impossible, to define an exact boundary between the states of health and disease; and attempts to do so raise many controversial points. At once one meets difficulties in trying to decide what constitutes disease. For example, do normal senile changes constitute disease? They certainly interfere with physical and mental function; but they are considered part of the physiological process of ageing. One cannot put health in one "watertight" compartment and disease in another, as the two states overlap.

As Kennedy points out: "Disease and health are paired concepts; they are inseparable in thought, for it is impossible to think of one without thinking of the other" (Kennedy, 1947).

I suggest that health should be considered a quality which is possessed in some degree by every individual, and that an individual may be healthy in some respects but not in others. If we accept this premise, we must con-
sider that even an individual who is totally incapacitated by disease has a certain amount of health.

At first sight this may seem absurd; yet, even in a most advanced state of disease, as long as life is present some organ or system continues to function in a healthy way.

But, without a minimum degree of health life is impossible, and an individual who is diseased can be said to have progressed into the negative phase of health. When disease has been eradicated the influence of beneficial environmental factors can cause the individual to progress in the positive phase of health.

Whenever height, weight, intelligence or almost any other physical or mental characteristic is measured the scores, if obtained in respect of a large random sample, will be found to be distributed approximately according to the curve of normal distribution.

![Histogram showing distribution of selection grades as percentages of total intake into the British Army, 1943 and 1944. A normal curve is superimposed.](image)

Fig. 1.—Histogram showing distribution of selection grades as percentages of total intake into the British Army, 1943 and 1944. A normal curve is superimposed.

Selection Grades—These are based on scores obtained on intelligence tests to which troops are subjected.
The greater the influence of biological inheritance on the formation of the characteristic being measured the more closely do the scores approximate to the curve of normal distribution.

It is reasonable to suppose that the quality of health, if it could be measured, would be found to be distributed in the human race in a similar way.

Admittedly the sample would have to be very large in order to eliminate bias caused by particular social or environmental circumstances. Near one end-point of the curve would be found a minority possessing the optimum amount of health; near the other end-point would be found another minority possessing the minimum amount of health compatible with life; while in the centre would be a large average group, some individuals early in the positive phase, others early in the negative phase, and all having an admixture of health and disease (fig. 2).

Kennedy suggests this concept and says, "... thus it is in perfectly ordinary scientific usage to speak of an individual varying positively or negatively from the mean of a group in respect of any measurement" (Kennedy, 1947).
The distance to which an individual can progress in the positive phase of health ultimately depends upon his constitution.

A minority possess a constitution so impaired, by factors which may be either inborn or acquired, that they remain permanently in the negative phase of health however beneficial the environment may be. But it is to be assumed that, given favourable circumstances, the majority of individuals are capable of entering the positive phase.

In practising hygiene we should attempt so to enhance the quality of health in the community that every individual progresses so far towards optimum health as his constitution will allow.

We may find ourselves working in a community which, on account of a bad environment, possesses a degree of health which is below average; the distribution curve for health in such a community would be as illustrated in fig. 3.

Our aim in such circumstances is so to improve the constitution and environment of the community that the distribution curve for health assumes the form illustrated in fig. 4.

Health has two basic components, mental and physical.

This paper is concerned with the mental component.

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**FIG. 3.** Curve showing the hypothetical distribution of the quality of health in a community having a bad environment.

**FIG. 4.** Curve showing the hypothetical distribution of the quality of health in a community having a good environment.
SECTION II.—CONCEPTS OF MENTAL HEALTH IN PARTICULAR

There are five components of mental health, viz.:

(1) The ability to discharge mental tension with ease, comfort and in a normal way.

If mental tension cannot be discharged with ease, then the individual will be burdened with periods of accumulated tension which will disturb emotional stability and impair mental efficiency.

Inability to discharge mental tension with comfort renders the individual conscious of that tension which results in a state of worry.

The discharge of tension in abnormal ways produces behaviour disturbances which range from the more serious disorders of affect-conation, displayed by those suffering from the various psychoneuroses, to minor affective outbursts; the latter are common enough, such as kicking the cat or breaking one’s golf clubs, and may be considered “normal.”

(2) The efficient functioning of the mental process of cognition and memory.

(3) Intelligence.

(4) Morale: Morale is a state of mind which does not lend itself to easy definition. Rees states: “The word morale is somewhat indefinable, although to most of us it conveys the same concept” (Rees, 1945).

The criteria of good morale are self-confidence, self-respect, determination and identification with the group and its aims.

(5) Moral capacity: This depends upon the ability to distinguish between good and evil and requires the development and proper functioning of a conscience.

Our aim in the practice of mental hygiene is to assist every individual to progress as far as possible into the positive phase of mental health as his constitution will allow. This involves the eradication of the causes of mental ill-health as far as is possible and, by improvement of environment, the enhancement of mental function to the maximum potential of every individual.

The term “mental function” is used here in its very broadest sense; it concerns not only the mental activities of affect, conation, cognition and memory, but also conscience, moral and social sense, morale and those processes which produce in consciousness a sense of well-being.

In discussing general health I have stressed the fact that one cannot define an exact borderline between health and disease, and that these states overlap.

This consideration is especially true of mental health and mental disease; one cannot classify the human race according to two groups, the sane and the insane.

I have already suggested that the quality of health exists in mankind according to a normal curve of distribution.

“We know that intelligence is so distributed; the same distribution is stated to hold good for emotional stability also” (Carroll, 1947).

Thus we can consider that the distribution of the quality of mental health in mankind is as illustrated in fig. 5. Near one end-point of the curve would
be found a minority who are in a state of optimum mental health; individuals who are emotionally stable, whose mental processes function perfectly, who are of high intelligence and morale and who possess a well-developed moral and social sense.

Next come those who are above average with regard to the various components of mental health. In the centre of the curve is found the majority which forms a large average group, some in the positive phase of mental health, others in the negative phase. Below the average group come those who are emotionally unstable, and those in respect of whom one or other of the various components of mental health is present to a degree less than normal.

Below this group, and near the adjacent end-point, come the overt psychoneurotics and psychotics.

In relation to emotional stability this concept is described by Carroll who says: “The point of view taken ... is that a neurosis or functional psychosis is merely an exaggeration of tendencies or adjustment mechanisms which are common to all” (Carroll, 1947).

As Klein says: “there is a genuine possibility of successfully contending that the facts of mental health belong in one category and those of mental
disease in another, and that the quantitative graduations of the normal curve apply to each of these categories separately. This contention presupposes a dichotomy between health and pathology, and argues for a bimodal distribution if the extremes of the dichotomy were made the end points of a curve (Klein, 1944).

Section III.—Factors Which Influence Mental Health

Constitutional Factors

The ability of an individual to progress towards the goal of optimum mental health is conditioned by his mental constitution.

As Ewen says: “The establishment of positive mental health is largely dependent upon innate constitution, personality and the capacity for adaptation” (Ewen, 1947).

There is a good deal of evidence to show that subnormal mentality is biologically inherited. Tredgold states that the hereditary factor is responsible for 80 per cent of all feeble-minded persons. L. S. Hollingworth puts the figure at 90 per cent.

Further evidence has been provided by twin studies, such as were carried out by Hirsh and Carter (Hirsh, 1930; Carter, 1940).

It is probable that environment has some effect upon mental constitution. Burks and Freeman, who studied the effect on the intelligence quotient (I.Q.) produced by changes in environment relating to foster-children, found ultimate variations in the I.Q. ranging from 7.5 per cent to 17 per cent (Burks, 1928; Freeman, 1928). Skeels found variations as high as 30-5 per cent after an average of twenty-two months in foster homes (Skeels, 1940).

On the other hand, Goodenough and Maurer found that nursery school training had no appreciable effect upon the I.Q.s of the children receiving it (Goodenough and Maurer, 1940); in addition, Hildreth’s studies in Lincoln School produced a similar conclusion (Hildreth, 1940).

It appears, therefore, that heredity is the most important factor determining mental constitution, and that there is evidence suggesting that environment also plays a part in shaping the mental constitution of children.

It is unlikely that we can do anything to improve the mental constitution of the soldier, since by the time a man is old enough for military service his mental development has been completed. Yet it is important that all those who manage and administer men should understand that differences in mental constitution do exist and that they should act accordingly.

An individual with a defective mental constitution, however slight the defect may be, is more likely to break down under stress, particularly the stress of battle, than is an individual with a sound mental constitution. On the other hand, an individual with such a defect is usually capable of useful work provided that his employment suits his mental constitution, and provided that he is properly managed.

However, the importance of the hereditary constitutional factor in mental disorder must not be overstressed. Ewen points out that, although genetic
factors are of much importance in mental health, the role that may be played by environmental influences is becoming more and more appreciated (Ewen, 1947). This is of practical importance, since environmental stresses may be lessened, but the innate constitutional make-up is difficult to alter.

**Environmental Factors**

*Psychological Environment.*—The psychological environment is made up of adverse and beneficial factors. The adverse factors are those which create mental tension and tend to propel the individual into the negative phase of mental health. The results of this tension vary according to the mental constitution of the individual. A perfect mental constitution will enable the individual to tolerate certain amounts of such tension and to discharge it normally without impairment of mental health. The individual with an imperfect mental constitution tolerates lesser amounts of tension, is apt to suffer from accumulations of it and is prone to discharge it in abnormal ways.

The beneficial factors are those which afford opportunities for the normal discharge of mental tension, and, such discharge being completed, tend to propel the individual into the positive phase of mental health thereby contributing sensations of well-being.

Hence the perfect psychological environment is one in which only beneficial factors exist; there are no adverse factors to confuse, frustrate and preoccupy the mind, or to distract it from the business in hand; while from the beneficial factors spring comfort, contentment and encouragement.

A good, but not perfect, psychological environment is one in which the adverse factors are offset by those which are beneficial; opportunities for rest, relaxation and the discharge of mental tension exist. The effects of the adverse factors are made bearable by the knowledge that relief is at hand.

A bad psychological environment is one in which the adverse factors outweigh those which are beneficial; the "atmosphere" is one of worry, frustration and perhaps fear; mental tension accumulates, and the opportunities for its discharge are inadequate or entirely absent. In such a situation mental tension accumulates until, sooner or later, some crisis may precipitate a breakdown.

The beneficial factors in the psychological environment are those which build up the individual's basic convictions of competence, power and worth, which fulfil the need for security and which enable the individual to identify himself with the group.

*Competence.*—This is the conviction of personal ability and skill to pursue a group aim. Any factor in the psychological environment which enhances this conviction is beneficial; to this end, encouragement and stimulation of a man's pride in his skill and interest in his job is far more useful than criticism.

The conviction of competence brings with it the beneficial feeling that a job has been well done, which is an important incentive to good work. If this conviction is to be successfully attained, training must be expert and
thorough; moreover, the individual must be made to feel the relevance of his training to the tasks of the group.

Closely linked with the need for the conviction of competence is the need for adequate means of expression for creative instincts. Creative instinct is a basic trait; lack of opportunity for its expression leads to frustration and, eventually, either apathy or increased mental tension. It is a driving force which, if used to the full, can be a powerful stimulus to good work. The “browned-off” soldier is often one whose creative instincts are continually being smothered by too much supervision and regimentation.

Power.—Power must be real if competence is to count. Aspects of power which are important to the soldier include the power to march long distances, to endure lack of sleep, to carry heavy loads and the power and efficiency of weapons. A conviction of having power in one’s own sphere is an important factor in mental health.

It has been said in the past that “the soldier’s best friend is his rifle”; the veteran lavishes affection on his weapon with “a devotion tantamount to idol worship” (Kardiner, 1947); to him it is a symbol of power without which his competence is useless.

Worth.—An individual must feel valued by himself, his group and his leaders. The value of his job to the group must be known to him, and he must feel that his skill is being used to the full.

The amount of reassurance of worth which an individual requires varies according to his personality; some require more reassurance than others, and this fact should be appreciated by all who manage men.

It is important that credit should be given where credit is due; no matter how humble a task may be, its conscientious and efficient performance must receive adequate recognition from time to time. A feeling that one is overlooked or not appreciated is most damaging to mental health; some individuals are more susceptible to this mental trauma than others. Similarly, bad work should not be allowed to go unnoticed; the slacker must not be allowed to “get away with it,” otherwise the mental health of others in his group will suffer.

The need for the conviction of worth is closely linked with the need for status. All men seek status of some kind, although some are more easily satisfied than others. This need for status is recognized by the custom of making honours and awards which are of no material value to the recipient. An important principle in this connexion is that every individual must be given the status he deserves; errors made concerning this principle inevitably result in damage to the mental health of the group, and often to that of the individual himself.

Security.—The need for security is a basic requirement of good mental health, and a sense of insecurity is a powerfully adverse factor.

In industry it has been shown that insecurity is a common cause of unhappiness and inefficiency. During the past fifty years much has been done to give the industrial worker greater security, such as social legislation, Trade
Unionism and special sickness benefits as arranged by some firms. But, whereas for the industrial worker the most potent cause of insecurity is interruption of earning capacity, either by unemployment or sickness, as far as the soldier is concerned this is not so. The soldier’s earning capacity is not interrupted by sickness, unless he becomes unfit for further service; neither is he at risk with regard to unemployment as long as he remains in the military community.

Apart from insecurity arising from the danger of partial or complete destruction in battle, the soldier’s need for security is mainly associated with the need for the security of the family group to which he belongs. No matter how good the emotional ties made in the Army may be, they do not displace the soldier’s home ties. It is true that exceptions to this rule may exist, and that the Army ties of the Regular Soldier are usually stronger than those of the National Serviceman; but it is also true that family troubles upset the soldier’s sense of security more commonly than any other factor.

The period of adjustment to a new situation, or adaptation to a new environment, is usually accompanied by a temporary sense of insecurity; this may be regarded as a normal reaction. It must be realized that such situations abound with adverse psychological factors which tend to propel the individual towards the negative phase of mental health. A new situation is apt to produce in the individual mental tension which results in a feeling of being ill-at-ease which is experienced in some degree by all men. It is important that those who manage and administer men should understand that individuals in that state should be shielded from avoidable stresses until they have had a chance to settle down. All too often newcomers to a particular environment are treated in exactly the opposite way by their superiors, equals and inferiors alike. Examples are easy to quote; the “ragging” of the schoolboy during his first term; the “initiation ceremonies” practised at some universities and factories; the practice of “taking it out” of newcomers by school prefects, N.C.O.s and senior soldiers, charge-hands and foremen. It is true that most individuals have mental constitutions tough enough to weather the storm; it is also true that some individuals who possess exaggerated ideas of their own importance may deserve such treatment. However, although it is a mistake to “molly-coddle” newcomers, such practices are not consistent with a good mental hygiene, and inevitably produce a certain number of psychiatric casualties among less stable and emotionally immature individuals.

In recent years the community at large has become more humane and enlightened regarding these matters, so that newcomers, particularly in the school and military communities are persecuted, if at all, much less than they used to be.

These considerations are of practical importance with regard to the young National Serviceman’s introduction to Army life. A certain proportion of these young men are emotionally immature as the result of maternal over-solicitude due to disrupted homes and the absence of the father during the war. The stress of separation from the security of the home environment
tends to precipitate a breakdown of varying intensity in these unstable recruits; such breakdowns have been termed "separation anxiety," a state of pathological home sickness due to a failure to make new ties and hence to find security in the new environment.

Hence special attention needs to be paid to the problem of aiding the National Serviceman to settle down, in order that their military service may be of maximum value. This matter is even more important now that the duration of National Services is so short.

Identification with the Group and Its Aims.—A sense of "belonging" is a prerequisite of good mental health, and this involves being identified with a group and its aims.

This sense of identification with the group is based upon the individual's personal conviction of his competence, power and worth in relationship to that group, as already described. These three criteria also influence the mental health of the group as a whole.

The individual must feel that the group to which he belongs has competence, and that it is well trained, well equipped, skilled and functionally efficient.

The individual must also have confidence in the power of his group; he must believe that it is powerful enough to overcome difficulties and to endure and suffer loss without breaking.

The individual's conviction of group worth is concerned with his satisfaction with the declared ambition of the group. He must feel that right is on his side, and that the cause of the group is worth fighting for. This involves war aims in times of war, which must be replaced by some definite group purpose in times of peace.

In order that the individual shall be properly identified with the group and its aims, and in order that he shall be convinced of its competence, power and worth, it is important that he shall understand the nature and functions of the group as a whole. He must be kept "in the picture" at all times, so that he can understand how he fits into the scheme of things and how his efforts contribute towards the attainment of the group aim.

Some interaction, and perhaps rivalry, with other groups is an important aid to fostering the conviction of group worth; the possession of customs and traditions is a valuable asset in this connexion.

The group's assessment of the competence, power and worth of the leader plays an important part in the maintenance of the mental health of that group.

As far as the group is concerned, the outward and visible signs of his competence are, firstly, the success of the group due to his leadership, secondly, the smooth functioning of the group due to his planning and control, and thirdly, the physical and mental comfort of the group due to his provision and provision.

The group sees the power of the leader reflected in his physique, intellect and character; the group's opinion regarding the stature of its leader compared with the leaders of other groups is also important. The group's assessment of the worth of the leader is based on the agreement of the group regarding his
value, and a conviction of his personal interest in each individual; it is based also on agreement with his motives and basic philosophy.

Physical Environment.—Physical health: The body is part of the environment of the mind, therefore an individual’s mental health is conditioned by his state of physical health. The reverse of this statement also holds good; an individual’s physical health is conditioned by his state of mental health, and from this we can infer that the mind is part of the environment of the body. It is well recognized that all physical diseases have their psychological aspects, and not merely his disease, is stressed. In striving to promote and maintain mental health we cannot neglect physical health. “Mens sana in corpore sano” is a well-worn tag; the truth is, however, that “mens sana” cannot exist without “corpus sanum,” neither can an individual attain optimum physical health, unless he also attains optimum mental health.

In recent years increasing attention has been paid to the somatic manifestations of mental ill-health; the part played by adverse psychological environmental factors in producing physical ill-health becomes more and more apparent as our study of the subject continues.

We now realize that mental stress is an important factor in the etiology of many physical conditions, notably peptic ulcer, cardiovascular disease and a large number of dermatological afflictions. The fact that this psychosomatic process can, and does, operate in the reverse direction must not be overlooked. The individual suffering from the manifestations of peptic ulcer may be propelled towards the negative phase of mental health by his unhappy experiences due to his physical condition. The mental ill-health produced by skin conditions, especially if the face is affected, is noteworthy.

We can conclude, therefore, that mental and physical health are interdependent, and that the goal of optimum mental health cannot be reached unless measures are taken to enhance both mental and physical health simultaneously.

Basic Physical Requirements.—There are four basic physical requirements necessary for good mental health, viz. food and drink, shelter, rest and relaxation, and sexual adjustment.

On account of the various exigencies of military service it is frequently impossible to provide for the soldier the means whereby these requirements may be ideally fulfilled. But provided that the soldier understands, and accepts as valid, the reasons for any inevitable privations, very little harm may be done as far as mental health is concerned. The soldier’s physical environment should be made as comfortable as circumstances allow; a policy of “roughing it” for its own sake is senseless and bad man-management.

The danger lies in a physical environment in which avoidable privations exist; privations due to incompetence, inefficiency, lack of foresight or lack of interest on the part of leaders and administrators. Hence the part played by leaders and administrators in maintaining the mental health of the military community is an extremely important one.

Food and drink: One of the first duties which the young regimental officer
learns to perform is concerned with attendance at the men's mess while meals are in progress. This duty has a deep psychological significance quite apart from considerations of discipline, nutrition and general hygiene. If a soldier makes a complaint concerning his food it is often impossible to remedy the matter on the spot; it may be too late, all the rations may have been cooked and distributed, so that action can only be taken in respect of future meals. Yet the very presence of an officer advertises the fact that the administration is interested in the soldier's physical requirements, and is one of the many details which influence the soldier's mental health.

The need for food and drink is the subject of one of man's most primitive urges. A community will tolerate a good deal of hardship provided that it is well fed, and the soldier's opinion as to whether a unit is good or bad is frequently determined by the standard of messing. Good messing is often the "saving grace" of a unit; the "glue" which keeps the unit sticking together. The work may be tough, or boring, or both, the Commanding Officer may be considered a bit of a tyrant; the accommodation may leave much to be desired; yet if the standard of messing is high the level of morale can also be high in spite of the adverse factors.

**Shelter:** The provision of adequate shelter from the weather by good housing and suitable clothing does much to enhance mental health; avoidable hardships in this connexion inevitably lead to unrest and discontent.

**Rest and relaxation:** Physical exhaustion, fatigue and lack of sleep all contribute to mental ill-health; monotony and boredom are associated factors. The antidotes are careful supervision of duty rosters to ensure adequate opportunities for rest and sleep, and proper arrangements for leave and recreation.

To be really effective, facilities for rest and relaxation must be combined with opportunities for variation of activity. Hence arrangements for rest pauses during working hours, and for leave, must be combined with measures to combat the unavoidable monotony of necessary routine tasks and with organized recreation and welfare.

**Sexual adjustment:** Freud has taught us the importance of the sex drive with regard to mental health, and we now realize that frustration of sex needs may result in serious neurotic disorders.

Problems relating to sex are liable to occur in the military community more often than in civilian life on account of the unavoidable segregation of the sexes, particularly in overseas stations.

An important measure for combating these difficulties is the provision of family quarters wherever possible. With regard to overseas stations in wartime this can seldom be done, for obvious reasons; but in peace time it should be possible to supply an adequate number of family quarters in all but a very few stations.

Signs of frustration of the sex needs become more obvious when the soldier is bored and has insufficient means of occupying his spare time. Hence organized sports and games, libraries, cinemas, study groups and clubs of all kinds are important. It has been noted in the past that units which had the best
organization for welfare and recreation had the lowest incidence of venereal disease.

Other Physical Requirements.—A variety of other physical factors have a bearing on the soldier’s mental health, such as thermal comfort, ventilation, lighting and the design, decoration, furnishing and equipping of barracks.

These details are discussed at length in a paper entitled “A New Life for the Soldier” which has been circulated within the Army by the Directorate of Army Health.

Section IV.—Personnel Selection

“Fighting is not a civilian trade, and not everyone can adjust himself, even with the best philosophic understanding, to the necessities of killing, even if he has been able to face the possibilities of future mutilation or death for himself. He may have found himself, once his basic training was completed, posted to an occupation which needed much greater ability and comprehension than he possessed; and he may equally have found himself set to tasks which gave him no scope and which made little use of very good intelligence” (Rees, 1946).

The rock on which good mental health in the military community is built is personnel selection. Moses appreciated this fact, and in Chapter 20 of the Book of Deuteronomy he made several points concerning the selection of personnel for military service. He realized that men with domestic worries did not make good soldiers. “And what man is he that hath planted a vineyard, and hath not eaten of it? Let him also go and return to his house, lest he die in the battle and another man eat of it.”... “And what man is there that hath betrothed a wife, and hath not taken her? Let him go and return unto his house, lest he die in battle and another man take her” (Deuteronomy, Ch. 20, verses 6 and 7).

The British War Office Committee of Enquiry in Shell Shock, whose report was published in 1922, stressed the importance of personnel selection in mental hygiene. This report states that officers engaged in the medical examination of recruits did not pay sufficient attention to “conditions of the nervous system” and, as a result, “a great number of men who were ill-suited to stand the strain of military service, whether by temperament or their past or present condition of mental and nervous health, were admitted into the Army.” The Report goes on to say that “There is no doubt that such men contributed a very high proportion of the cases of hysteria and traumatic neuroses commonly called shell-shock” (Report of the War Office Committee of Enquiry into Shell Shock, 1922).

In spite of the Report of this Committee we in Britain were slow to use systems of mental testing in the selection of our recruits. The United States had already used massed intelligence testing for selection in the period 1916 to 1918.

Sir Ronald Adam tried to introduce mental tests into our selection procedure in 1921, but his suggestions were not adopted. The German Army commenced to use such tests in 1926, and, after a visit to Germany, General Thorne made an attempt to introduce similar tests into our Army but did not succeed.
However, early in World War II we discovered that the mental aspect of personnel selection was vital. In 1939 two consulting psychiatrists were appointed to the Army, one for the British Expeditionary Force and one for the Home Forces; they found that many men suffering from psychiatric breakdown were mentally defective. This was confirmed by Command and Area psychiatrists appointed in 1940. It had become obvious that the modern infantry soldier would probably break down unless he was of a certain mental level.

After 1940 our procedure for personnel selection developed rapidly. The Directorate for the Selection of Personnel was set up in 1941, and the General Service Corps intake scheme was introduced in 1942. This scheme involved the posting of all recruits to the General Service Corps for a preliminary six-weeks' period of basic training; complete selection procedure took place during this period. The recruits were subjected to a battery of tests, abstract, verbal, practical and educational; they completed questionnaires giving all the details of their careers prior to joining the Army; they were interviewed by personnel selection officers, and, when indicated, by psychiatrists; and they were physically examined to determine their appropriate medical category. At the end of this six-weeks' period of preliminary training they were posted to the Corps or Regiment for which they were most suited.

The technique of group testing for the selection of officers by War Office Selection Boards was introduced a little later.

Thus was our modern system of personnel selection born. It exists in a similar form today, although it has been modified by the replacement of the General Service Corps procedure by that of Army Basic Training Units in 1948.

The introduction of the Pulheems system of medical classification, which superseded the old system of medical categories, was an important advance from the point of view of mental health in that assessment of the qualities of mental capacity and emotional stability was introduced.

By means of a thorough and scientific method of selection procedure, which we now use, we can weed out a large proportion of those men who are likely to break down, and who therefore require "sheltered" employment or discharge from the Army. These men who are filtered out by the mesh of selection procedure are referred to a psychiatrist, and they fall into the following groups:

(1) Men of low intelligence.
(2) Stammerers.
(3) Illiterates.
(4) Men educated at Approved Schools.
(5) Men with a history of psychiatric illness.
(6) Men with a history of delinquency.
(7) Men showing psychiatric symptoms or abnormal behaviour.
(8) Men producing incongruous results in the battery of tests.
(9) Men apparently lacking in "combatant temperament."

The psychiatrist recommends the suitable disposal of such men; the recommendations which he may make are as follows:
(1) No psychiatric recommendations necessary.
(2) A specific type of employment.
(3) Lowering of the Pulheems "S" rating ("S" = emotional stability).
(4) Admission to a military neurosis hospital if rehabilitation for further service seems possible.
(5) Discharge by a medical board on the grounds of neurosis.
(6) Admission to a military mental hospital for psychosis.
(7) Discharge by a medical board on the grounds of mental defect.
(8) Discharge from the Army as physically unfit for service under present standards, but fit in the case of Emergency. This applies to men who have more than sixteen weeks' service (King's Regulations, 1940, Para. 390, 16 (a)).
(9) Discharge from the Army as unsuitable for military service on medical grounds. This applies to men who have less than sixteen weeks' service (King's Regulations, 1940, Para. 390, 6 (a)).

In addition to the detection and disposal of men likely to break down, such as I have described above, our personnel selection procedure does much to ensure that a normal individual is not employed on work for which he is not suited. This in itself is a most important factor in the promotion and maintenance of mental health.

SECTION V.—THE EMPLOYMENT OF INDIVIDUALS WHO ARE POTENTIAL "MISFITS"

Dullards.—These are men who score low marks in the Matrix Test and in the battery of tests which measure specific abilities. Men are grouped in various Selection Grades (S.G.) according to their scores in the Matrix Test; these grades range from S.G.1 (High intelligence) to S.G.5 (Low intelligence). In addition, the sum of the scores of all the tests, both Matrix and specific abilities, are worked out to give the Summed Selection Grades (S.S.G.).

The spread of intelligence in the young adult male population in this country is approximately as follows:

- S.S.G.1 10 per cent High intelligence
- S.S.G.2 20 per cent Good intelligence.
- S.S.G.3 + 20 per cent Above average intelligence.
- S.G.G.3 - 20 per cent Fair intelligence.
- S.S.G.4 20 per cent Rather dull and backward.
- S.S.G.5 10 per cent Very dull and backward.

Individuals who score S.G.5 and S.S.G.5 are known as "double fives." Such men are automatically referred to a psychiatrist at intake, and are not accepted as volunteers for the Regular Army. Whether or not they are accepted for National Service in the Army depends upon physique and emotional stability. Unstable dullards are discharged on medical grounds.

Approximately 60 per cent of all S.G.5 recruits are recommended for normal military training in the units into which they have been enlisted. The remaining 40 per cent represents those of poorer quality, some of which are recommended for simple administrative and domestic duties, others are recom-
recommended for transfer to the Royal Pioneer Corps. Unfortunately, some find employment in messes, kitchens and dining halls. This is not good policy as food hygiene suffers; particularly as such men are liable to show a low standard of personal hygiene, and may be chronic or "healthy" carriers of pathological organisms. Men recommended for the Royal Pioneer Corps must be fit for labouring work in any part of the world and to bear arms in self-defence.

Men of lower intelligence, who are so dull and backward as to be unfit to bear arms, used to be recommended for the unarmed section of the Royal Pioneer Corps; this Section has been abolished since World War II, therefore such men are now recommended discharge under King's Regulations, 1940, para 390, as quoted above.

Those with degrees of mental defect lower than dullness are also recommended discharge.

There are two rules of importance relating to the employment of dullards who are retained in the Army. Firstly, they must be employed on work which is within their mental capacity, and secondly they must be employed in company with other individuals of the same intellectual level. If these rules are complied with, the dullard can be a useful, stable and happy member of the community; but if they are not complied with, the dullard's morale sinks, he becomes unhappy and increasingly inefficient, and is liable to get into all sorts of disciplinary trouble and to break down completely.

As Rees has pointed out, there has been a popular tradition in the past that the dull man makes a good soldier. But the modern soldier has so many weapons to learn, and so many skills to master, that an impossible task is presented to the dull man; in addition, the dullard is apt to break down under the stress and increased tempo of modern war (Rees, 1946).

Psychopathic Personalities with Anti-Social Trends.—These men are a great source of trouble in the Services, as indeed they are in the community at large. They do not have specific signs and symptoms of illness as do psychotics and psychoneurotics, but instead their disturbance is one of action and social behaviour.

The legal definition which is applied to this condition is "moral defective," but a better medical term is "psychopathic personality with anti-social trends."

Their outlook is characterized by short-term values, and they demand immediate satisfaction for their impulses and desires (Chevens, 1949).

Throughout their development, the conduct of these psychopaths gives cause for alarm owing to its wayward, impulsive, violent and undependable nature. They show a coldness, a hardness, and insensibility to the feelings of others and an absence of remorse which makes them exceedingly difficult, if not impossible, to reform. Very often they show a previous history of juvenile delinquency and crime, and of a "rake's progress" via Approved School and Borstal Institution to H.M. Prison.

They are often supposed to be good fighters in a "tough spot." This may be so provided their anti-social trends can be projected against the enemy:
but they are usually more trouble than they are worth, since more of their time is spent training or living behind the "front line" (Rees, 1945).

Such men exert an extremely bad influence in a unit, particularly on suggestible and poorly adapted soldiers and those of low intelligence. They cause an increase in disciplinary troubles and a deterioration of morale. They are consumers of man-power rather than contributors, since they are constantly getting into trouble.

These men are of no value to the Army, and should be disposed of with the help of the nearest Army Psychiatrist.

It is sometimes said by Commanding Officers and other leaders that such men deliberately seek discharge from the Army on account of their behaviour, and that they should not be allowed to "get away with it." This is a very understandable point of view; however, experience has shown that the psychopath with anti-social trends should be removed from the military community as rapidly as possible.

The question of exclusion of the potential psychopathic delinquent from military service by paying special attention to the problem during selection procedure is a difficult one. For obvious reasons, one cannot exclude all who have a bad civilian record of crime and juvenile delinquency.

As further experience is gained with regard to these cases it may be possible to exclude a great deal more of them than are being excluded at present. The use of the electroencephalogram as a diagnostic aid is promising; there is a similarity between the electroencephalograms of these aggressive psychopaths and those of young children and epileptics (Rey, Pond and Evans, 1949).

As the aetiology of this condition has its roots in heredity and childhood environment, preventive measures lie within the sphere of the civilian health services. The importance of bad home and childhood influence have been strikingly revealed by investigation into the histories of psychopathic delinquents in the Army.

The amount of serious crime perpetrated by these psychopaths in civilian life must be considerable; yet, with the Law as it is at present, very little can be done to protect society against these dangerous men. Even long terms of imprisonment appear to have but little reforming effect, so that they constitute a menace whenever they are at large. I suggest that there is scope for improvement of the Law with regard to these cases, so that society may be more adequately protected.

Other Unstable Personality Types.—It is often difficult, in any sphere of medicine, to distinguish between the normal and the slightly abnormal, and between the physiological and the slightly pathological. Such distinctions are exceptionally difficult to make with regard to considerations of personality and behaviour.

In medicine and the allied sciences the word "normal" is often synonymous with "average"; this can be said to be true of such characteristics as height,
weight, pulse-rate, blood pressure, etc. With regard to personality and behaviour, "normal" can be said to be synonymous with "usual" or "conventional."

As Pozner points out: "The authenticated eccentricities of military genius make fascinating reading, and raise an interesting point as to whether our great leaders became so because of their biases, mannerisms or peculiarities, or developed them in order to emphasize the isolation of command to cloak its vulnerability... it is an interesting commentary on the modern trend towards universal standardization that many of our great captains, now legendary and dead, would have, by reason of their obvious instability and unequally balanced characters, failed to clear the first obstacle on the road to the present-day Officer Cadet Training Unit" (Pozner, 1950).

Opinions differ widely as to those personalities which are within normal limits and those which are not. Concepts of normal behaviour vary according to individual ideas, nationality, tradition, upbringing, education and the period in history. It is therefore impossible to give an exact description of a normal personality, and such a concept must remain a matter of opinion.

There are, however, certain mental traits which, although present to some degree in all individuals, may be exaggerated yet not pathological in others. Such exaggerated traits produce unstable personality types which we may consider to be within the normal range.

It is important that all those who manage and administer men should recognize the existence of these different types of unstable personality, and that they should understand how men with such personalities are best employed and handled. The importance of this is twofold. First, an individual with an instability of personality, however slight, is more likely to break down under stress, particularly the stress of battle, than one with a stable personality; and second, the individual with the unstable personality is usually capable of useful work, sometimes work of outstanding merit, provided his employment suits his mental constitution, and provided he is properly managed. If he is not so employed and managed he works less efficiently and may break down completely; if, and when, he does break down the illness which he develops is usually that which is appropriate to his already exaggerated personality traits.

Individuals with marked traits may have been perfectly adjusted to their environments in civilian life; yet, despite any assistance we may give them, they may find adjustment to the military environment impossible. Others, provided care is taken to employ and manage them suitably, may adjust successfully and settle down to become useful members of the community.

There is no doubt that if a prospective recruit shows evidence of instability which makes his adjustment to military life a matter of doubt, he should not be accepted for service. However, consideration of man-power economy, especially during wartime, make it necessary for us to accept a certain number of "border-line cases."

It is important, therefore, that we should do everything possible to assist
these men to adapt themselves to military life. If we do not do this, much time, money and effort is wasted training men who are ultimately discharged on psychiatric grounds, and, in addition, we should be failing in our duty to the men themselves.

The main unstable personality types are as follows:

1. The obsessional.
2. The hysterical.
3. The overanxious.
4. The paranoid.
5. The cycloid.
6. The schizoid.

The obsessional personality: The obsessional personality is orderly, neat, meticulous and punctual. He is interested in details and is over-scrupulous. He shows a tendency to sarcasm and destructive criticism which may be sublimated to an analytical outlook.

It is obvious that all of these traits may be found in a completely stable personality; in fact, many painstaking pieces of research could not have been carried out unless the worker concerned possessed these traits. On the other hand, an individual may display these traits to such a marked degree that a diagnosis of obsessional neurosis is merited.

The man with the obsessional personality should be given employment which exploits these traits. The work of the storeman, for example, affords great scope for those who insist upon orderliness and neatness. Some types of research, and work which requires meticulous care, are suitable for the obsessional. But it must be remembered that he cannot be hurried, and must be allowed to work at his own speed, hence he finds it difficult to work in a team.

Employment unsuitable for the obsessional is that which calls for elasticity of thought, adaptability and frequent change. Obsessionals are not likely to make good employers, leaders or administrators unless they possess other compensating qualities. They are apt to become involved in too much detail, and are loath to delegate work to others. They are prone to harass and irritate their subordinates, and show a stubborn inability to see other people's points of view.

The hysterical personality: The hysterical personality is emotional, theatrical and attention-seeking. He shows a contrast between shallowness of thought and intensity of expression, and is usually somewhat naïve and suggestible.

The individual with a hysterical personality is intolerant of mental tension, so cannot be depended upon in a crisis; hence he should not be employed in the "front line" (wherever that may be in this age of atomic and hydrogen bombs). He tends to lack determination, but will work well provided he is made to feel that he is accepted and approved of by his superiors and associates. Praise is one of the incentives he values most, and he responds well to encouragement.

The overanxious personality: The overanxious personality is apt to be pre-
occupied with possibilities rather than probabilities. He tends to “cross his bridges before he comes to them” and is a chronic worrier. He is characterized by a general air of tension and anxious expectancy. When making a request, an explanation or an excuse, he tends to be overanxious lest his case should not be understood, so that he loses himself in a mass of detail.

He is prone to attempt escape from difficult situations by developing mild "illnesses," which are real enough to him, such as headaches, "dyspepsia," or "rheumatism." He may over-dramatize worries concerning his home and family, or the discomfort of his immediate surroundings.

The man with this type of personality breaks down more easily than most, and may develop an anxiety neurosis.

The change from military to civil life frequently enhances the traits of the overanxious personality, and is liable to produce a condition known as "separation anxiety." Separation anxiety is often seen in the military community because of the enforced separation from home. The stress caused by removal from the protection and security of the home environment precipitates a breakdown of varying intensity in unstable recruits. The condition is stated to have accounted for more mental breakdown in World War II than battle stress (Chevens, 1949). It is prevalent among National Servicemen today because they are emotionally immature as the result of maternal over-solicitude due to disrupted homes and the absence of the father during the war.

Separation anxiety may be described as "pathological home-sickness." The individual suffering from this condition may show any of the abnormalities described above in relation to the overanxious personality; these abnormalities may be comparatively mild, or they may be severe and disabling.

The young soldier with the overanxious personality requires careful handling during the first six months of his military career. If he is going to break down at all, he often does so either before or soon after his primary training is completed. If he can be shepherded through this initial period of adjustment to Army life, he usually settles down and develops normal independence, maturity and individuality.

The handling of such men requires great patience and understanding, and the medical officer has an important part to play in this; this matter is discussed further in Section VI of this paper.

The paranoid personality: The paranoid personality is suspicious, morbidly sensitive, and prone to grievances. He is a stickler for his rights, and is apt to go out of his way to seek an insult where none is intended. He is usually a solitary and egocentric person, and is rather prone to consider himself misunderstood.

As a rule, these traits do not become obvious until the individual reaches middle age. This state is the pre-psychotic personality of paranoia, although the development of the overt psychosis is comparatively rare.

Individuals with paranoid personalities are often extremely intelligent and forceful; they can achieve success in business and high rank in the Services.
For obvious reasons they are not good team workers, and are usually difficult to work for and to administer. They are not lacking in drive and initiative, and usually do well if employed on tasks demanding these qualities, provided they are subjected to the minimum of outside interference and criticism.

The cycloid personality: Typically, the cycloid personality is extraverted and shows a greater liability to mood-swings than is normal. He is a good “mixer,” and has been described as “infinitely clubbable.” He seeks and enjoys company, and, as likely as not, he is the “life and soul of the party.”

This type is the prepsychotic personality of manic-depressive psychosis, although the development of the overt psychosis is uncommon.

Kretschmer describes a correlation between this type of personality and physique; the cycloid personality he describes as having the “pyknic” physique, with large head, broad face, broad chest, large body cavities and a tendency to be short and stout.

Such individuals are good team-workers, and usually possess organizing ability which is above average.

They do not do well at tasks which involve working alone for long periods separated from their fellows, and are apt to become unduly moody and depressed under such circumstances. They tend to be somewhat unpredictable, over-elated by success and over-depressed by adversity. Hence they tend to lack determination in the face of difficulty.

The schizoid personality: Typically, the schizoid personality is solitary and intravered. He has a “shut-in” mentality, does not make friends easily and prefers his own company.

He is shy, keeps out of the way, and rarely causes any trouble. He is timid and relatively unemotional, and finds it difficult to adapt to changes in environment. This is the pre-psychotic personality of schizophrenia.

Kretschmer describes a correlation between this type of personality and the asthenic physique; lean and long, with flat chest, narrow shoulders and thick, low-growing hair.

Individuals with this type of personality are difficult to place in employment, as they tend to be unadaptable and apathetic. They need a quiet and protected environment. Once they are doing work which suits them they should be left to get on with it with the minimum of interference.

(To be continued.)