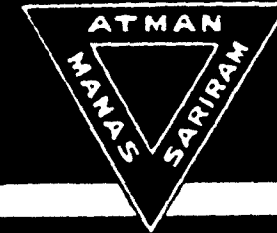


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VYAYAM

A Quarterly Journal of Physical Education.



1098

AUGUST 1936

The Third Provincial Physical Education Conference
Character Building Through Play

AN APPRECIATION BY C. G. MACARTNEY

"Governor General" of Cricket.

Madras,
5/2/36.

Dear Sharmar Sir,
Madras,

Dear Sir, I was delighted to visit
your premises this morning, & to
see the goods which you are
manufacturing for the sports trade.
The quality was first class, and
can recommend them to any
players requiring first class
material.

With all good wishes, &
many thanks for your kindness.

Yours sincerely,
C. G. Macartney

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Mount Road, Madras.

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VYAYAM .

ISSUED FEBRUARY, MAY, AUGUST AND NOVEMBER

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Management :

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[August 1936]

*Letter from N. K. Mia, with the Indian Athletes
in Berlin **

OLYMPISCHES DORF, den

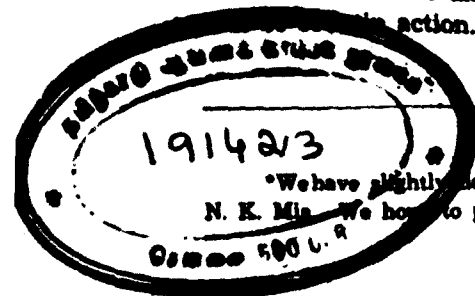
Berlin,

25th July, 1936.

Since the time I arrived here there has been no rest for me. We are so far out from the city that if once one is out on business it will take at least three hours for him to return back to the village and that too if he is lucky enough to finish the job in the city at once, otherwise it may take anywhere from four to five hours. However I am enjoying the whole show and getting to learn a good lot of new things.

Our journey from Munich to Berlin was a most pleasant one. The countryside was simply wonderful with vegetation and cultivated fields. The whole country is like a picture, everything seems to have been placed in its right place by some great Artist. The country in spots is green otherwise everything about the harvest time looks brown with the ripe corn and other grains. The railway officials and the custom people were very good to us, nobody troubled us with our luggage and on German line we were given 2nd class ride although we had only 3rd class tickets. On arrival we are all treated like Maharajas. The whole station staff was in attendance, and the army transport corps to take care of our transportation to the villages. Beside the army people a band of young boys are always in attendance and they do a good deal of donkey work for us. On arrival at the village the teams are marched off to respective quarters to the accompaniment of a German band, and for the last 3 days one hears nothing but bands playing in the village throughout the day.

Today came the Americans. They were given a great reception both in the city and in the villages. They are about 400 strong. Immediately on their arrival they were seen in action. We saw Wykoff, Owen, Metcalf all in action, and I hope to see more of them during the coming few days. There are 8 coloured boys in the group and they are all A-1 in the different items in which they are taking part. But there are some very good athletes from other countries too and we are looking forward to the great day when they will be in action.



*We have slightly delayed this issue, in order to include the interesting letter from N. K. Mia. We hope to publish further news from him in our next issue.

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N. 26

August 1936]

I think it will be of interest to know something about our village life here. All the nations are housed in different cottages, very similar to our College Cottages, the difference being that every cottage is self sufficient, having its own bath and toilets together with a common drawing room and there are heating arrangements in every room. Of course there cubicles on either side of the passage ways. Each cottage is named after a German town with her emblem marked and drawn up right at the entrance. The nations are put up in such houses, named after the German town that does most business with them. For example, we are put up in Elbing house and the town of Elbing is famous for the manufacture of locomotives, and there are a good many of them on the Indian rail roads! So you will notice whatever they do here has some meaning behind it. We have no language problem here at all, each nation is looked after by a young officer of the German army who speaks the language of the particular country to which he is attached, and so is the case with the stewards. Hence all are feeling at home in spite of the fact that life is so very quiet here, away from the city turmoils, but there is of course turmoil of our own but not from the public and the difference is there. We all live a sort of prison life, nobody is allowed to leave or come into the village without the identity card and I think this has saved the athletes from the autograph hunters. One will notice, how many men, boys and girls are awaiting every day to secure some autographs and one gets so tired of writing them. They are just like the giving of alms in India. If you once start this game you are sure to miss the bus or being late if you have some urgent business to transact. However I have stopped getting out of the village at any odd hours. If I have any business in the town I wait till the last minute for the motor bus to leave our place and then make a dash for the stand and thus I save myself!

The Indian team is a very small affair but they get good publicity in the press, perhaps because of their Hockey tour programme in Germany. It is a very good piece of propaganda work. The climate here is not cold at all. The days are hot specially when there are clouds in the sky, but the nights are very pleasant. To-day is the first day that I had been to the Stadium and I am going there once again on Monday with Indian athletes to show them, what they must do when they get there. The whole thing is a huge affair and when one compares the ground with the surrounding superstructure the whole field looks like a small basket ball court. I am trying to get the plans of the sports field with the actual measurements but have not been able to get any as yet. There are many sketches but no measurements are given. However I will see what can be done. In a couple of days' time I am going to see the leader of the German sports and if possible get his help. There is so many things here to observe and learn that I can hardly find time to attend to them all.

It is simply lovely. Everything is clean and the streets all look like pictures.

Glimpses into the 3rd Provincial Physical Education Conference Salem.

By

DR. G. F. ANDREWS, M.A., PH.D.

Assistant Physical Director to the Government of Madras

The Provincial Physical Education Association under the guidance of its office-bearers, Mr. H. C. Buck, the President and Mr. C. A. Abraham, the Secretary-Treasurer, organised the 3rd Provincial Physical Education Conference at Salem, under the auspices of the 26th Provincial Educational Conference.

The 3rd Provincial Physical Education Conference was held on 7th May, 1936. The Conference was fortunate in having Mr. G. F. F. Foulkes as the President, for he struck the right note in insisting on the need for more open places to be used as playgrounds and on more personnel for works to be done. The papers presented were of a high order, the contributors being Messrs. C. C. Abraham of the Y. M. C. A. College, Henry Lall of the University of the Punjab, L. N. Gubil of Trichy and C. Satyanandam of the Teachers' College, Saidapet. The titles of their papers were, (1) Character Education through play and Games, (2) Some Aspects of Physical Education, (3) the Aim and Type of Physical Education for Modern India, (4) Physical Training in Training Schools at present, respectively. The discussions were very illuminating and instructive and one wished there were more workers in the field of Physical Education who could have contributed to these discussions.

The outstanding feature of the Conference was the absence of resolutions, while as usual a demonstration of Physical Activities found a place on the Programme. The exhibits and books on Physical Education in the careful hands of Mr. M. A. M. Muthuswamy were well used and of immense value.

The revised constitution of the Association was adopted at the business meeting when the following office-bearers were elected:

President:—H. C. Buck.

Vice-President:—V. Saranatha Ayyangar.

Secretary:—G. F. Andrews

Joint Secretary:—C. Satyanandam.

Treasurer:—C. A. Abraham.

With Messrs. D. Santiago, G. Samuel.

as the other Committee members it should be possible to the Association to make headway and also make place for itself in the educational institutions of the Presidency.

The 3rd Provincial Physical Education Conference is now a thing of the past. The 4th one is looming ahead. If the invitation of Tanjore District

Teachers' Guild holds good, the next Conference will be over there alongside of the Provincial Educational Conference. Mr. Physical Director, what are you going to contribute to the Conference? Will you join the Association and strengthen its ranks, and be present at Tanjore to take part in its deliberations? Bring Charts, Exhibits, Models, in fact everything or anything of value in broadcasting abroad Physical Education. Bring yourself, bring your friends and let us take away with us when the Conference is over the consciousness of successful achievement in furthering the cause of Physical Education.

How Can Schools Make Physical Education Vital in the Educational Curriculum?

By

H. C. BUCK, M.A., M.P.E.,

1. Plan the entire school programme in such a way that every pupil in the school shall participate daily in a purposeful, meaningful, well organized and well supervised physical education programme. This may require drastic revision of general time-tables to permit an adequate number of physical education classes per day and per week. But if education is really meant for the child a way can be found.

The whole child goes to school. He takes with him his physical life, physical interests, and physical needs. These must be catered to every day in the week and not only on one or two days. School life as it is organized to-day does not give due consideration to the physical aspects of life and may even be detrimental to health, physique, physical skills and moral character. Since the physical life is basic from the point of view of health, and since it is through physical activities that much real education is possible, all educators should seriously consider ways and means of re-organizing school programmes for education of the whole child.

Physical activity is a biological necessity. Therefore, physical education activities should form the foundation-stone of all education; and a willingness to face facts might bring us to the point of making first provision for physical education and building the other school work around it.

2. Each physical education class period should have a duration of not less than 40 to 60 minutes. Some time is required for coaching and improving skills and technique, and some time for competition between groups. A shorter period than this does not permit mental or physical satisfaction for the class or the teacher. Further, if there is a change of clothing for physical activities, (and there should be for obvious hygienic reason) a shorter period allows very little time for physical activities.

3. Plan and conduct physical education in such a way, that not more than 30 pupils shall report to the physical education teacher at a time. Classes

with a strength of not more than 30 pupils will permit the person in charge to actually teach, and to obtain desirable outcomes. The herd system is not permitted in other branches of education and cannot be permitted in physical education if we desire to make it educationally sound. Desirable skills, habits and attitudes can be developed during physical education periods if groups are small enough to permit actual teaching, and to permit individual as well as group attention. Mass physical education is of no more value than any other mass education. Even the traditional barren programme of mass drill cannot be well done in large numbers. Certainly scientific educationally sound physical education will not permit the mass method because here the emphasis is not on exercise alone, but on obtaining outcomes useful now and throughout life.

4. Adapt the physical education programme to the interests, needs and capacities of pupils.

The traditional practice has been to plan merely to exercise the pupils. Physiological and anatomical needs may have been considered, but psychological factors did not guide. The child was fitted to a programme rather than fitting the programme to the child. Such procedure is recognized as being bad in general education. It is even worse in physical education.

But an educationally sound programme of play, games and athletics has a greater appeal to the interests, and is fuller of meaning to the participants than any other type of physical activity. Also such activities afford greater opportunity for directing energies in proper channels, for obtaining educational values, for developing qualities of citizenship, for building moral character. Likewise such natural activities can be carefully selected, classified, and conducted to cater to the needs as well as interests, and of course must always be well within the capacity of the participants to perform. The secret of success here is to consider carefully the nature and the needs of the pupils and to provide through natural and rational activities, physical experiences whose outcomes will be normal, happy, healthy, emotionally sound boys and girls. The traditional drill programme is not adapted to the interests of pupils nor does it adequately cater to their needs. Natural, rationally old activities do appeal to inherent interests and desires and at the same time afford opportunities for developing skills and qualities which are life like and which give satisfaction throughout life. Health and strength are possible outcomes also.

5. There should be provided an educative and protective programme in health and physical education. In fact the whole educational procedure should be educative and protective. There should be nothing in school life detrimental to physical skills, to posture, to physique or to general health. It is not for the physical education and health education programme alone to cater to the physical aspects of life. Unfortunately, we still find those who are under the impression that school life necessarily is detrimental to the physical aspects of life, and that physical education merely comes in as a therapeutic agency to rectify the damage done by other phases of school life. But

in our opinion any school which does not cater adequately to every aspect of life, which does not give opportunity for full and free expression of all phases of life, which has such an undesirable environment, such lack of facilities, such a badly organized programme that it undermines the health and happiness of pupils, we may be sure that its programme is neither educative nor protective and that it has no good reason for existing. Fortunately, however, true educators the world over have come to realize that school life must not be detrimental to health and happiness, and, that, therefore, the physical education programme need not be therapeutic in outlook and emphasis, but educative in every sense of the word. Physical education must place emphasis on activities which have social values and which make for wholesome happy living. This means that instead of traditional drill there must be provided physical activities which have meaning for the participants, which afford both mental and physical satisfaction, and which may result in habits, attitudes, and skills useful now and throughout life. Further, such activities must be directed for desirable outcomes and must be rational to ensure not only protection but full normal growth and development. Related to such an educative and protective physical education programme must be intelligent attention to diet, sanitation, hygiene, environment, facilities and leadership in every phase of school life if the products of the schools are to be worthy, happy, and useful citizens.

6. The physical education programme must include a large variety of activities.

Recent tests have shown that a narrow static standardized programme of physical activities fails to produce the skills that give satisfaction throughout life and which must be possessed if one is to be lifted well out of the physically illiterate class. The chief defect of the traditional standardized systems of physical education is that it is possible to pass successfully through the system and still be physically illiterate. The growing developing pupil should be exposed to a large variety of natural activities to ensure that all his fundamental skills may be developed. The traditional drill programme fails to develop all of the fundamental skills and at the same time specialization on only one game likewise fails. In the past we have seen boys pass through school or college, or both, having had no physical activity other than drill and gymnastics or perhaps nothing more than participation in one game like football. Such narrow experiences leave the person physically illiterate, certainly not physically educated. He passes out of school or college with so few physical skills developed that his physique and movements are far from beautiful to behold and far from a source of satisfaction to the possessor himself. To obtain real satisfaction from the physical life one must be physically skillful, and to become physically skillful one must participate in a large variety of physical activities involving all of the fundamental skills.

7. There should be a proper balance and right relationship between Instruction Periods, Participation Periods, and Inter-School Competitions.

What we commonly think of to-day as Compulsory Physical Education should be proportionately divided into two parts, one part for Instruction and another part for Participation. During Instruction Periods the pupils should be trained in the skills and technique of those activities and games which will form the play and competitive programme of Participation Periods. Instruction Periods are not Theory Classes as some people came to believe who read the Proceedings of the D.P.I. on this matter. Instruction Periods are actual physical activity classes in which the teacher helps pupils to develop skills which will enable them to enjoy their free play and competitions. Drill and gymnastics might form a small part of the Instruction Period if such activities really have any value for the present and for the future. But natural activities will come in for major emphasis because these will more likely be utilized in the Participation Periods.

Participation Periods in physical education are those organized and supervised classes in free play, group competitions, inter-house matches, inter-hostel, inter-class, or intra-mural competitions. Having learned the games, and having been taught the technique and fundamental skills of a wide variety of activities during Instruction Periods, the Participation Periods as well as Instruction Periods will have some meaning for our pupils. And further than that real opportunity is provided for character development as well as physical development through a scheme of play for all which makes it necessary for every boy in the school to do his best for his group and for his team. For obvious reasons Participation Periods should occupy a major place in the programme. But they will not serve their best purpose nor afford fullest satisfaction unless a proper amount of time is given to teaching skills by means of Instruction Periods.

In so far as Inter-School Competitions are concerned there still is too much of a tendency to place major emphasis and to spend a disproportionate amount of the budget on the small number of boys who represent the school in these activities. We believe in representative teams and in Inter-School Competitions but these should be merely the peak of the pyramid with a well-laid foundation of play and games for the whole pupil body and with emphasis on the foundation rather than on the peak. Meaningful physical experiences must be provided for all if we are to fulfill our aim for desirable outcomes.

We cannot realize this aim by starving the compulsory programme and over-feeding the optional. The compulsory programme must be made up of activities that are as much of a challenge to the participants as are the activities of the Inter-School Competitions, and they must likewise have their full share of funds, facilities, and competent leadership.

8. Considerable emphasis should be placed on physical activities that are useful to adolescents and adults as leisure-time activities.

While it must be recognised that physical exercise in abundance is necessary to keep pupils physically fit we must constantly keep in mind that the boy will not always be a boy and a pupil. Some day he will have com-

pleted his school life, but he will no doubt still have a desire to express himself physically. The question now arises: have we during his school life given him anything in the so-called physical education programme that will enable him to participate with joy, satisfaction, and benefit in physical recreation during his leisure time? Too much emphasis in the past has been placed on merely exercising the pupils. The physical education programme has given them little or nothing that was mentally stimulating and satisfying either for the present or for future leisure time recreation. As you are well aware the modern trend is to educate for leisure time. Similarly, physical education must educate for leisure time. The activities must be such as have carry-over values. Formal artificial physical activities have little or no carry-over values. At any rate we do not find boys or adults resorting to such activities for recreation in their leisure time. The normal person finds satisfaction in some form of play or games, in natural activities, and if he has been so unfortunate as to have attended a school which did not develop his playing skills, his playing habits, and his playing attitudes he is likely to be a most unhappy mal-adjusted individual in the present-day social order which is wisely turning more and more to physical play for recreation and satisfaction during part of its leisure time. But such leisure time activities must be wholesome and must be of such a nature that they may be participated in by individuals, or by couples, or by small groups and in small areas, as well as by larger groups in larger areas. The school programme of physical education must therefore provide instruction in a wide variety of games and recreative activities suitable for individuals, for pairs, for groups small and large and for all sorts of conditions and situations. The boy or girl who is fortunate enough to attend a school that looks forward to the time when the boy or girl is no longer a pupil; a school which realizes that much of the unhappiness in this world is due to failure to find satisfying recreation during leisure time; a school which provides physical activities which have carry-over values; that boy or girl is more likely to adjust happily to society and more likely to live wholesomely and constructively during leisure time than the unfortunate boy or girl who has had nothing but Swedish Drill during school physical education periods.

9. The School should keep and use for the good of the child, records of pupils' condition, behaviour, and attainments in health and physical education.

It is common practice to keep records of pupils' work and attainments in the regular academic pursuits. Perhaps this is done only because such subjects are examination subjects, rather than for the good of the pupil. But if it can be done in one section of school life, and if it has its values there, it can be done in health education and physical education, and it would no doubt give us facts that would be of immense value in shaping the programme according to the nature and needs of pupils.

Tests and measurements in physical education serve the double purpose of obtaining facts that may guide us in our work, and as an incentive to pupils to improve their skills, physique and health. It is one way of motivating the programme, and of placing it on a level with the academic work.

- C. Medical, corrective and hygienic exercises.
- D. Medical follow-up work, statistics, records, communicating with parents.
- E. Supervised games and sports.
- F. Instruction in practical hygiene and sanitation. First-Aid, Sex-knowledge etc.

From the very inception of this Department, it has been pointed out to College Physical Directors that their chief work lies in instructing the students in practical hygiene and sanitation, and in concentrated efforts to improve the remedially subnormal. In spite of this oft-repeated advice, these are the very two aspects of our work which are most neglected. Practically all the Colleges conduct a Medico-Physical Examination, some of them thoroughly and others cursorily. With some the classification, follow-up work, records, statistics, corrective work and lectures are done systematically and thoroughly, but with others, there is very little difference between the days of the old type of drill masters and to-day. The whole class is bunched together or in large sections, and the same type of drill and marching, calisthenics, games, etc. given. No imagination or commonsense is being used with the very natural consequence that the students hate the P. T. periods and derive no benefit from there. The health needs and conditions of individuals are not being touched at all, and even collectively the work amounts to very little.

No programme of Physical Education can be well balanced or complete, which does not stress the medical, corrective, and theoretical side along with the practical or recreational. The Medico-Physical Examination must be conducted properly, and then the follow-up work followed up until whatever is necessary has been obtained. If a man needs eye-glasses, he must get these from his parents or from the College poor fund. The same with medicines, minor operations, adequate food and clothing etc. To discover a need, and then sleep over it, is worse than not discovering it.

In the same way we must tackle defects of function and posture by constant work with individuals or small groups.

It is fundamentally important for all Physical Directors to examine and investigate, to follow-up, to correct and cure, to teach their men the elements of hygiene and sanitation, and then if they have time, to supervise games and sports or the character building activities. In other words our work lies primarily with the sub-normal and sedentary, and then if time and energies permit, with the normally healthy and active.

Finally, to succeed in our work whatever it be, we must have and express in our personality, keenness, energy, patience, sympathy, capacity and a sincere desire to serve.

[Paper read at the 3rd Provincial Physical Conference, Salem]

"Physical Education in Training Schools"

By

C. SATYANANDAM, B.A.,

Director of Physical Education, Teachers' College, Saidapet.

The topic which I have to deal with now is on "Physical Education in Training Schools at present." I fear I have to present a very sad and discouraging picture to the audience as regards Physical Training in Training Schools at present. With the exception of a few the rest of the training institutions are attached with Physical Instructors who are not fully qualified. And in the Training Schools this subject is being dealt with a perfunctory manner by teachers having an imperfect knowledge of it. The only branch of Physical Education generally cultivated in the schools is known as Drill, occupying but two-half hours a week and this is treated as a subject which must be taken because it appeared in the curriculum. In most cases words of command for Physical Drill have been given without any knowledge of the object of the movement, or of the effect which such movement is intended to have upon the body. Imperfect knowledge has caused and is still causing destructive effects upon development which is far worse than if the subject were left alone. Herein lies the road to disaster for the pupils, for the instruction rests upon foundations that will one day fail them and produce apathy for the work. It has also left the Instructor apathetic. If it is not strange to find such an interesting subject like physical producing apathy for the work in the minds of pupils when experienced Physical Educationists have said about it as:

"Age cannot wither it, nor custom stale,
Its infinite variety."

Take for instance a business man, before starting a new enterprise he will go over the ground weighing every possibility, for he knows that knowledge alone will equip him for the successful handling of his venture; so too with the Physical Instructor in Physical Education. He must drink deeply of the well of knowledge before he can cope efficiently with a subject so varied and extensive. He must make a comprehensive study of all its phases. He must go over the ground step by step. It is not sufficient to have a superficial acquaintance with the one branch of Physical Education Drill which is almost devoid of mental benefit.

For this knowledge the Physical Instructor must be in touch with the modern books, or journals or interesting articles in newspapers. This is neither possible nor practicable for the drill masters employed in the Training Schools at present as they are educationally backward. It is more often a pity to note that many of the pupil teachers know many more modern improvements in Physical Education than Drillmaster himself. Hardly any of these Drillmasters take care to prepare the lessons in a graded form. Notes of lesson for each is a thing which annoys them most.

Instruction in personal and domestic hygiene and insistence upon observance of cleanliness, ventilation, and upon the cultivation of respect for personal appearance are important details in the scheme of Physical Education for the pupil teachers. Capacity to teach all these things requires again a study of good books written by experienced people in the field. But the poor Drillmaster thinks that this is not within his field and so finishes his work after 4-30 p.m. like an illiterate gymnast. I therefore feel that most of these Drillmasters deserve a place in the circus tent rather than in a training institution.

Taking games into consideration, the Drillmaster must be fully equipped with the first note knowledge of the recent rules of the various games and the changes that come into existence from time to time. We know of course that this is beyond his comprehension. Hence we do not see the playing of organized games according to carefully-selected groups in the training schools. On the other hand one very often notices that most of the pupils clear off the school premises soon after the last bell goes. Very few will be seen playing at a particular game in a particular season. This is done just before the commencement of the Inter-School Tournaments. Even here more often the Sports Secretary is seen whose sole object is to make his pupils win a shield or a cup.

The Drillmaster does not for a moment think that the object of Physical Education is to prepare the pupil teacher for the game of life as ruled by existing conditions and to fit him for his uncontrolled existence when he will be obliged to think, decide and guide other pupils under him and work for himself in a community comprising all sorts and conditions of people. This is why the recreative side of the Physical Education is neglected and the young children become a source of annoyance to those about them and are troublesome to parents. As regard Track and Field events only a few who volunteer themselves to take part in the sports will be seen practising in the school by themselves just before the commencement of the sports. The Drillmaster neither knows to teach the athlete correct posture or the right take-off, nor is interested in the progress of the special aptitudes of those individuals. Hence the student also thinks his master's presence by his side is rather a nuisance rather than an encouragement. He is not aware that running, jumping and bending in games and athletics afford the student opportunity to exercise all his muscles in the most natural way.

Intra-mural tournaments or inter-house tournaments are new things to most of these old Drillmasters and so they are out of their time-table.

Group competitions, individual efficiency tests in athletics where all can take part and by the running of which the active and the healthy competitive spirit can be maintained all the year round, are unknown in most of the Training schools at present where the old type of Drillmasters are employed. To organise these activities of course one has to impart a little thought over the scheme every day. Since these competitions are not conducted in the train-

ing schools all the pupils as well as the Physical Instructors are seen outside the compound after 4-30 p.m. except on those days when they have drill classes. On no day some phase of Physical Education is discussed on the literary associations of the pupil teachers, for the presence of the Drillmasters in the Literary Association is almost nil during the whole year and his literary capacities are not recognised by students. Therefore, Physical Education in most of the Training Schools at present is in a very deplorable condition.

But all is not lost. Thanks to the College of Physical Education at Saidapet, which trains and sends out every year a healthy, competent and qualified band of Physical Directors and Instructors who shoulder the burden of melting away the illiteracy in Physical Education of the Training Schools by conducting it on the right lines. The inspecting officer, Dr. Andrews, with his deep knowledge and wide experience in Physical Education has greatly enlightened the outlook of the Drillmasters as well as the Sports Secretaries by conducting short refresher courses throughout the Presidency.

Before long with the introduction of the new and happier methods of Physical Education through the recently-trained Physical Instructors under Mr. Buck, we hope to replace the abnormal development of the muscles in certain parts of the body at the expense of others by the harmonious development of all parts of the human body internal and external—in brief, a fitness from which proceeds unwearied ability of mind and body. We further desire to form character national and personal not to encourage the accumulation of prizes. We are desirous of developing the true selfish amateur spirit with its personal reward a fit and healthy mind and body among the pupils of the Training Schools.

[Paper read at the 3rd Provincial Education Conference, Salem.]

What is Wrong with Character Education in Schools and Colleges?

By

DR. GEORGE F. ANDREWS, M.A., PH.D.,

Asst. Physical Director to the Government of Madras.

MR. PRESIDENT, LADIES AND GENTLEMEN,

It may seem presumptuous to start off on the premise that something is wrong with character education in our schools and colleges. I take shelter for this statement under the wings of no less an educationist than John Dewey, who says:

“Moral education in school is practically hopeless when we set up the development of character as a supreme end and at the same time treat the acquiring of knowledge and the development of understand-

ing, which of necessity occupy the chief part of school time, as having nothing to do with character."

Character development is thought of as an ideal of education which the students must somehow approximate. And at the same time the whole emphasis is on the syllabus, the curriculum and the examinations with rarely a thought as to how best the students may be helped to acquire sound habits of personal and social conduct and weave them into the web and woof of their character.

And with what result? Call to your memory the many events that happen daily. The recent leakage of question papers and the publicity related thereto do not redound by any means to the credit of schools. Are we not painfully aware of a superintendent here and a superintendent there who, at public examinations, will connive or wink at practices that should not be tolerated? What is the result of inter-school or inter-collegiate tournaments and sports competitions? Is it friendship or bitter rivalry? Is it satisfaction or extreme discontent? Or peeping into public life what of the communal tensions, the social disabilities, dishonesty in public dealings, etc.? Or again consider the many ways in which the intelligent electorate of the University react at the time of elections to the various University bodies. That from the press, platform and pulpit are poured forth tirades on the inadequacy of education for character is significant.

In the June issue of the *South Indian Teacher* the editorial began with this statement: "The question of Religious and Moral Instruction is engaging the attention of all anxious to reconstruct the present educational system." Yes, indeed. But will religious instruction solve the problem of character development of students? Dr. Arundale says that "religious education, if in the hands of the right type of teacher, will give the student all the morality he needs as well as the unnecessary intimations of life's real meaning and purpose." Dr. McLean believes that through precept and example the teaching of the Bible is invaluable as a means of moral instruction, and suggests how moral instruction can be made real through school discipline, class work and the athletic field.

We are so obsessed with "instruction" that even in the realm of morals and character we seem to think that instruction is of primary importance. We forget that it is the one method of least value. As Dewey says:

"It is a matter of common experience in other subjects that formal instruction leaves no great impress. It is one thing to learn words and sentences by heart and another thing to take them to heart so that they influence action. At the best this method has no great force in comparison with the indirect effect of conditions that are operating all the time in and out."

What then should be done if character education should be more real and lasting?

1. In the first place the "instructional" aspect should undergo a change. An amount of instruction there must be. But it must be modified. To quote Dewey again:

"Moral instruction through conference and discussion would be much more effective if it grew out of concrete situations present in the experience of the young instead of centering about general discussions of virtues and vices in the abstract. The more the school is organized as a community in which pupils share, the more opportunity there is for this kind of discussion and the more surely it will lead to the problems of larger social groupings outside the school. Moreover, such organization would give practice in the "give and take of social life, practice in methods of co-operation, and would require assumption of definite responsibilities on the part of the younger people—adopted of course to their age and maturity."

Greater opportunity for positive action with corresponding reduction of the amount of passive absorption will be potent factors in moral education.

2. In the second place it should be remembered that it is not in the high school and college that character education is to be begun. The responsibility of elementary schools in this matter is no less because it is in the highly impressionable younger age that character can be made or marred. But it does not appear as if this is realised. One has only to visit a few elementary schools to be convinced that talk of character education in elementary schools is all moonshine. The equipment of the elementary school teachers, the system of education in elementary schools, the wastage in the sense that very few who enter the first standard continue up to the fifth, the woeful insanitary and unhygienic and ugly conditions under which elementary education takes place—these need to be improved to enable foundations of character education being laid in the elementary school.

3. Environment is no less a factor to be considered. Research scholars are pointing out that the attitude of persons in the home, and others in close contact with children, is far more significant as an environmental factor affecting the future conduct of children than any physical or economic limitation of the environment. Not even chronic physical ill health itself has a more serious effect upon the conduct of youth than does the environment factor of attitude in the home, the church and school.

Character education is going on all the time, every waking hour of the day and 365 days in the year, and the influences that shape it are extensive. Schools should see that proper environment is provided to the children during the period they are at school. Not stern frowning teachers who inspire fear, not overloaded teachers in charge of overworked classes, not repressive method of discipline, but all to the contrary which will evoke satisfactory responses, reverence, respect and love should be what the children should come into contact with.

Physical environment cannot however be neglected. Cannot our schools be made more beautiful and should our school compounds be dirty and ugly? How can children appreciate that a 'thing of beauty is a joy for ever' in the midst of filth and squalor and that which is debasing to mind and morals? Organisations like the Junior Red Cross as they spread and grow in strength are positive sources of help in this respect, but it is the school teachers who should utilise these agencies.

Proper play environment is also essential because much of the leisure of children is devoted to play. It was Socrates who emphasised this centuries ago. He advised that "children from their earliest years must take part in all the more lawful forms of play, for if they are not surrounded with such an atmosphere they can never grow up to be well-conducted and virtuous citizens."

4 Fourthly the necessity of learning by doing needs to be emphasised. Self-expression is vital to growth and equally so in the realm of character education because habits of right conduct can be cultivated largely through actual situations where one expresses his usual self and where discoveries of import for the development of character are possible. The necessity of providing opportunities for such self-expression, for making decision as to the line of action to be followed is very urgent. In the class room the laboratory, the literary and debating society, the play-field, the garden etc. as a matter of fact wherever students assemble under the guidance of a teacher or teachers, is it possible to find or to create situations full of opportunities for character education. In using them aright lies the wisdom and the genius of the educator.

5. Of utmost importance is the teacher himself. Character education demands teachers well trained in educational theory and professional techniques. But more than this the teachers should themselves be living examples and exponents of the character qualities they endeavour to teach. They should have the right vision of the goal they desire to reach, be imbued with high ideals, and "dare to stand for the right with two or three". What John Ruskin says in this respect is worth quoting. He says:

"Education does not mean teaching people what they do not know. It means teaching them to behave as they do not behave. It is not teaching youth the tricks of numbers and the shapes of letters, and then leaving them to turn their arithmetic to rogues, and their literature to lust. It means, on the contrary, training them into the perfect exercise and kingly continence of their bodies and souls. It is a painful, difficult and continuous work to be done by kindness, by watching, by warning, by precept and by praise, but above all—by example."

Character education is as old as mankind. The traditional theory of character education has been resting on the principle of indoctrination—

indoctrination of children with fixed and immutable principles, and has been carried on by the inculcation of fear and submissiveness. But the development of character rests on other foundations than those of fear and adult-conceived principles. Apart from its relationship to morals, character may be said to be the "organisation of a large number of habits of action, habits of thinking, of attitudes, and of emotional states" (Hughes). Character is not just a bundle of habits as James would have it, but habits so organised as to result in the right action at the right time in the right manner. As Hughes says:

"One's character is the pattern within which his habitual acts fall, and character education is concerned with discovering and helping bring about the situation which provoke the right responses. Thus character and conduct are closely interrelated, the motive and the act are quite inseparable."

Educational reconstruction is uppermost in the minds of educators. Many are the proposals that have been made in this direction. But few are the thoughts bestowed to the development of the principles, materials and methods for enduring character education. How can the various activities of the school be harnessed together for this purpose? What place has sex education in the scheme? What use can be made of the extra-curricular activities like scouting, the Junior Red Cross, etc.? What is the contribution of the playground and its activities? A reconstructed educational scheme should take into consideration all aspects and all possibilities of character education in schools and colleges and point the way to the development of "well-cultured and virtuous citizens" who will become the bulwark of the society they are members of, and serve their motherland with unselfish zeal and enthusiasm.

[Paper read at the 3rd Provincial Education Conference, Salem.]

The Aim and Type of Physical Education for Modern India

By

L. N. GUBIL

Nothing can be more telling than the graphic picture of India and her conditions given by Dr. Gray: "India is a land of contrasts and contradictions—both naturally and otherwise. It has the highest mountains and the lowest lowlands; driest deserts and yet also places with the greatest rainfall; coolest hill stations and valleys, and the hottest plains and plateaus; big cities and small villages; rich capitalists and poor street beggars; huge majestic buildings and poor thatched huts; leading educated

gentry and illiterate masses; tall, strong and fair people, and tiny small folks; brave warlike people and timid unwarlike masses". It will not therefore, be a misnomer to call India a continent.

To a physical educator a continent of diverse features like India at once presents several considerations. The first of these is the imperative need for physical education which is as a matter of fact challenging the attention of educators and public workers.

The improvement of the health conditions of the mass and the increasing of the people's resistance to disease is a primary factor in the uplift of India. The Indians have little or no idea of personal and community hygiene. Millions are falling easy victims to disease every year. India's vitality is at a very low ebb. It is a shame that India's average life is but 23 years. Out of every 1,000 babies born, it is said that 250 die before they are one year old. This argues nothing but a sheer ignorance of the laws for upbringing of the child. Health education is a sure panacea for this terrible havoc, and should find a due place in the school and college curriculum, so that the boy trained at school in the hygienic ways of living forms early in life health habits which carry over into adult life. The necessity of health education as a vital part of the general educational scheme cannot be over emphasized; nor is it advisable to ignore public health propaganda. Not till proper ideas of health, hygiene and sanitation reach the masses, could India decrease her woeful death roll.

The second imperative need is the improvement of the general physique of the Nation. The school going population in India present in this aspect a very pitiable picture. Bad seats, dark rooms, long working hours, poor ventilation at home and in school go hard against the innocent boys and girls and far from enabling them to grow they undermine their vitality and sap their growth. No wonder that boys and girls pass out of schools and colleges with hollow chests, kyphosis, lordosis etc.; the remedy for this lies in the undoing of old ones and doing of new things. There can be no more effective counterbalancing of this than the facilities for open air exercises for the correction of posture and games and sports for mental recreation and development of vital stamina.

India's third great need is an adequate training in brotherhood, self-discipline and social unity. Being a land of diverse castes and creeds, it is a veritable hot bed of communal tensions. India therefore needs not only health but also the spirit of sportsmanship and proper understanding among themselves. Games and sports, if adequately provided for and well supervised in schools and colleges will go a great way to teach co-operation, fraternity and self-sacrifice, and at least the growing generation may not be a heir to the deeprooted prejudices of the past generations. Playground is the workshop where a boy's character is moulded on the ways of self discipline and self control. He can never get a chance—if not on the playfield—to acquire and practise the virtues of loyalty, team spirit, *esprit-de-corps*, fellow feeling, etc. Activities like scouting and camping should be properly encouraged so that the

boy who learns to manage things himself in a camp and to live with his fellows regardless of caste, creed or position imbibes the spirit of brotherhood and unity which will be the salvation of India. In the class room, the boy learns how to live best; but on the playground he actually lives his life, for in the games he must play his part manfully, subordinate his interest to that of others, and work for common glory. A boy's part in a game is a sure indication of his character. It brings out the best in him, and makes him feel ashamed of sneaky ways.

On closer examination one finds that Physical Education is more closely bound up with intellectual and moral training than it appears on the surface. So far as body alone is concerned its end is health, strength and skill; but over and above this, it seeks to draw out foster and develop those qualities of head and heart—intellect and character—that are so essential for effective and successful co-operation and competitive practical action. The Scandinavian proverb—"As we stand and walk, so shall we act"—is too full of significance.

The opinion in some quarters goes in favour of a military type of Physical Education. But this is only a political cry, not educational. It is the cry of politicians, not educators.

Militarism should be divorced from the general education of the children. Our present need is to make man fit for the time of the peace; and when he is fit for peace with all physical, mental, moral and social requirements, obviously it will not be difficult for him to prepare himself for service in time of war.

The conclusion is evident that the aim of Physical Education for modern India should be health, character, brotherhood, and the raising of the average vitality and life of the Indian. The type of physical education is obviously health education, and education through play and games.

Character Education through Play and Games

By

C. C. ABRAHAM, B.A.

Y.M.C.A. College of Physical Education

I propose to deal with this subject under three heads:—

- I. What is character education?
- II. Why play and games are conducive to character development?
- III. The conditions under which character education may take place.

I will take them briefly one by one.

I. What is character education:—This question must be given careful consideration before we actually discuss the method proposed. The meaning of the word character is considerably interwoven with intellect, morality and religion. An individual with outstanding qualities is referred to as

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having character. Later the word character was used to distinguish one of good repute. Character is apparently something, every one agrees is desirable and is essential for a progressing civilisation.

Character is nowadays thought of in terms of quality of social conduct, the quality of one's relationship to the various groups in which he moves, the organisation of large number of habits of action, habits of thinking, of attitudes, and of emotional states. Character education is concerned with setting up situations which provoke the right responses.

II. Next we have to consider to what extent do play and games afford opportunity for character education. The following conditions are present in properly organized play and games providing character building, opportunities.

1. *There is active participation in play and games* :—If there are possibilities of character building there must be opportunity for the individual to be an active participator. He must make choices and use judgments. Play and games which are activities organized around the interests of the child conform very definitely to this criterion. The child is interested in the game. He is an active participant. He must make choices. There is little time for thought of self. With the proper type of leadership and social approval these choices can be guided. The tremendous importance of this in character education cannot easily be overstated.

2. *Boys and girls have an inherent interest in play and games* :—Psychologists say that the human organism is endowed with certain neuro-muscular tendencies which may be called wants. These wants are manifested by interests. Interest is the beginning of an educational process. If the child wants to do something it is possible for leadership to build standards around these wants. The type of standard set up will depend entirely upon the type of leadership. Play and games lend themselves definitely to these required conditions. The boy wants to be a member of a team. He wants the skill that will give him recognition by his team-mates. Leadership can set certain standards of behaviour to which the boy will readily conform because of this driving want to excel in the games.

3. *Participation in play and games is emotionally satisfying* :—Play and games, properly organised, are satisfying in and of themselves irrespective of rewards. Therefore, they contain opportunities for directing behaviour. As soon as the boy is interested merely in an award, rather than the challenge of the activity, character building possibilities become negligible. Awards might at times be given, but they should lack in intrinsic values. From the standpoint of character building it would mean that emotional responses are developed. Class room situations seldom provide this opportunity, but when a team is pitted against another team, the boy has a variety of mixed emotions. Loyalty to his team and the institution he represents, a responsibility to his team mates, together with certain responsibilities to the other team.

Such situations also offer very valuable opportunity to promote right social behaviour. Play and games could bring together all kinds and classes

of people. Play makes no distinction in caste, creed or colour. The rich and the poor, the strong and the weak could all play together. Under good leadership play and games are unique in their socialising possibilities and the opportunity they give for the development of desirable social qualities.

4. *Play and games provide opportunity for leadership and followership* :—Character building implies a willingness to lead when the individual is capable of leading. It also implies the ability to follow other leaders when required. The appointments of captain and leaders in play and games offer ample opportunities along this line. The boy may lead a cricket team but he can become a willing follower of a more skilled leader in football. This helps to prevent the development of a superiority or inferiority complex.

5. *Play and games provide opportunity for self-direction* :—In character education one of the essentials is that of providing the individual the ability of self-direction, the ability to make decisions and to act on them. The individual must take the responsibility for his choices. Play and games offer plenty of opportunities in this field. Boys may be delegated the responsibility for organizing, refereeing, and captaining. There is an infinite number of opportunities for choice. Character also implies freedom. With this freedom we must accept the possibilities of bad choices. But a bad choice becomes a leadership opportunity to prevent a recurrence.

Play and games serve character training by setting up desirable attitudes, high ideals, and standards of conduct. Leaders will have opportunities to instill these ideals and attitudes into the minds of the participants and help them to attain these. Every fluctuation in the course of a game tips the balance toward victory or defeat for the player. A hundred times his side is in the ascendancy, a hundred times it is thrown back. To this everchanging situation the participant cannot possibly be indifferent. Each is called upon to exhibit courage, co-operation and courtesy and a host of other moral and social learnings.

Summing up :

1. Play and games are actively participated in by boys which give them the opportunity for making choices.
2. Play and games are activities where there is inherent interest and it is possible to build standards of conduct around these activities.
3. Play and games are emotionally satisfying and therefore, they help to train in emotional balance.
4. Play and games provide opportunities for leadership and followership.
5. Play and games provide opportunities for self-direction—the ability to make choices and to act on them.

III. Now I come to the third part—the conditions under which character education may take place. I said play and games offer the opportunity because they cannot guarantee character education results. The deciding

factor as to whether or not character development emerge depends quite definitely upon two things.

1. *Quality of leadership*:—The methods of teaching right conduct are far less clearly understood. Our view holds that character is "caught not taught" and should be secured indirectly by example. Another view holds that direct teaching must supplement this method. Under competent leadership play and games can contribute to character formation. Wholesome attitudes and ideals could be aroused. Opportunities for making choices could be provided. Leadership could build up in each individual the requisite concepts and habit patterns not only in game situations but in other life activities as well.

Character training through play and games requires a group of teachers who are well trained in educational theory and professional technique. But more important than this training, it demands, that these teachers themselves be possessed in large measure of the character qualities they endeavour to teach.

2. *Environment*:—It is the height of folly to theorize about ethical conduct in the schools and colleges when the boys have only a back-street for a playground. Character education involves more than knowledge of right and wrong. It is dependent upon the harmonizing of the environment with the wholesome desires of young people.

I maintain, therefore, that properly organized play and games under wholesome surroundings lend themselves as wonderful tools in the hands of competent leaders for character education.

Gentlemen

1. Should play and games, therefore, have a better place in your school and college curriculum.
2. Should they not be given better facilities by providing attractive play spaces?
3. Should you not help to provide the leadership where health, happiness and character are the desired outcomes?

BIBLIOGRAPHY.

1. Theory of Play by Mason and Mitchel.
2. An experiment in Physical Education activity related to teaching of Honesty and Motor skills. By Melvin. A. Clevert—(Research quarterly).
3. The role of Physical Education in character education. Articles by Jay. B. Nash—(Journal of Health and Physical Education.)
4. Physical Education as a character builder. Article by F. E. Oklavic; (Journal of Health and Physical Education).
5. Character building and health. Article by William L. Hughes. (Journal of Health and Physical Education).

[Paper read at the 3rd Provincial Physical Education Conference, Salem]

The Influence of Exercise on the Heart

By

T. P. JOSEPH, BSc.

The effect of exercise on the heart and how it influences the general blood circulation will be our reflections in the following pages. We all know that during exercise there is a greater need for oxygen in the tissues and this demand is met by a more rapid circulation. The circulation rate round the body depends primarily upon the output of the heart per minute and the other circulatory adjustments that take place during exercise, which enable the output of the heart to be utilised to the greatest advantage in supplying blood to the active organs.

THE OUTPUT OF THE HEART

Krogh made the first observation in 1912 by the nitrous oxide method and it has been shown that the output of the heart ranged from 3 to 5 litres per minute at rest and was raised by moderate work from 8 to 9 litres and when heavy muscular work is taken it may reach 20 litres or even more. Later experiments have substantiated these facts. "The heart cannot pump into the arteries more blood than it receives from the veins. In general, it may be said that the output of the heart is governed by the venous return of the blood." The amount of blood the heart pumps out into the arteries each minute will depend upon the number of heart-beats per minute and the volume of blood discharged per beat. The experiments of Bock and co-workers on Demar and others, show that the fundamental difference between the trained and the untrained individual to do a particular work, is that the heart of the trained man pumps more blood per minute with fewer strokes than that of the untrained heart. Moreover the heart of the athlete is much stronger and would empty more completely at each beat. The trained man has a larger stroke volume per beat and a slower pulse rate. Bainbridge remarks that "The powerful heart of the athlete with its greater reserve power can double or more than double its output per beat before reaching its physiological limit of size."

The larger output of the heart per minute involves a corresponding increase in the diastolic filling of the heart and it is primarily determined by the venous inflow, though the contractile condition of the heart musculature, the arterial resistance, and the frequency of the heart beat affect it partly.

THE VENOUS INFLOW

The blood reaches the heart at an increased rate at the time of exercise and this varies with the amount of muscular movement. The muscles act as a subsidiary pump, and combined with the action of the heart, blood is expelled into the vessels of the muscles and of the active muscles, send blood back to the heart. It is generally believed, that the respiratory movements, move-

ments of the diaphragm by raising the intra-abdominal pressure, squeeze the blood out of the Vena-Cava and thus increase the flow of blood to the heart. The efficiency of the muscular and respiratory movements in increasing the venous inflow during exercise has been demonstrated by Hooker in 1911. The considerable increase in the venous pressure indicates, that the venous inflow is not merely to increase the output of the heart, but to provide a head of pressure which ensures rapid filling of the heart in diastole. In response to a larger venous inflow, the heart can increase its output per minute, either by a larger output per beat or by acceleration. This takes us to the question of minute volume.

THE HEART MINUTE VOLUME

It means the volume of blood per minute. The product of the number of heart beats per minute and the volume of blood discharged at each stroke, is called the minute volume. Several attempts have been made to measure the minute volume by both direct and indirect methods. Grollman in 1931 found from his experiments that the minute output of the heart is much greater during active muscular movements than during slow ones. The finding of Handerson, of Harvard University, revealed the fact that the famous marathon runner, Demar, had a resting minute volume of 8.2 litres. Dr. Steinhans remarks "that even in mild exercises there is a considerable increase as compared with the resting individual, that the output increases with the increasing severity of exercise particularly in the..... form of rapid contractions alternating with relaxations. This increase is secondary to the forcing of more blood back to the heart by circulatory muscles. In the trained individual there is an increase in the stroke volume and less heart rate. This varies in an individual when he passes from rest into various degrees of muscular activities.

The heart may be considered as a respiratory organ in the sense that it determines the supply of oxygen to the tissues of the body. During heavy work the output of the heart must be greatly increased, an absorption of 4,000 c.c. of oxygen per minute can be attained by an athlete. The body has three ways to meet this requirement:

- (1) Acceleration of the heart beat so as to pump enough blood to carry the oxygen.
- (2) The amount of oxygen taken from a unit volume of blood as it passes through the capillaries may be increased.
- (3) The stroke volume of the heart beats may be increased.

According to Hill, Long and Lupton, when an athlete absorbs 4,000 c.c. of oxygen, he should have an output of the heart not less than 30 to 40 litres per minute. Starling's studies indicate that the heart is able within wide limits to increase its output in direct proportion to the inflow of blood. The property of the heart muscle makes it self-regulating and the output at each beat depends directly on the diastolic filling. The venous pressure also rises rapidly.

THE BENEFICIAL EFFECTS OF EXERCISE

Training develops the heart. This development corresponds with that of his muscular system. Some authorities say that the athlete's heart becomes larger and heavier (True hypertrophy—Hexheimer) while others think that it becomes larger due to greater time relaxation, and, therefore, greater filling between beats in the slower heart of athletes. The experiments of Secher pointed out that the weight of the heart of the experimental rats increased 5—6% of the body weight and also regression in cardiac hypertrophy. The experiments on dogs at George William's College have also revealed the following facts:

The heart begins to enlarge from 3 to 5 weeks after exercise begins, and when discontinued it tends to regress towards normal. Certain sports of endurance lead to physiological cardiac hypertrophy which makes the heart more efficient and that would be the more likely effect of the added strain of exercise on an impaired cardiac muscle. Owing to greater contractile power, the output of the heart is often larger and the pulse rate less frequent in the trained even at rest. There is greater co-efficient of oxygen utilization and oxygen carrying power of the blood in the trained individual, which requires less output of the heart per minute. If exercise is carried to excess (over-stress of the heart) it may lead to pathological dilation of the heart.

INFLUENCE OF EXERCISE ON BLOOD CIRCULATION

"During muscular exercise no other organ in the body is so much in need of an augmented blood supply as the heart itself." The heart gets its oxygen from the blood in the coronary arteries and capillaries. When the arterial pressure begins to rise, the coronary flow increases. We know from the studies of Starling that the coronary blood supply of the isolated mammalian heart could be increased by four factors:

- (1) Increase arterial pressure.
- (2) The reflexes associated with increased heart rate.
- (3) Deficient oxygen saturation of the blood.
- (4) Accumulation of carbonic and lactic acid.

Starling's studies further add that the changes in coronary blood flow depend ultimately on changes in aortic blood pressure.

Macleod is of opinion that the minute circulation of heart at rest is about 140 c.c. of blood and when muscular exercise performed, it may be increased five to six times.

A necessary condition of all muscular exercise is that the muscles shall be supplied with oxygen in proportion to their requirements. Under normal conditions, the arterial blood is saturated with oxygen and such increase in the oxygen usage in the muscles must imply a great demand for oxygenated blood. This will mean an increased blood flow through the lungs and in the ventilation of the lungs.

The circulation through the lungs is identical with the output of the right ventricle. During exercise the blood is driven through the lungs at a rate proportionate to the needs of the muscles for oxygen. Due to the contractions of the splanchnic vessels, the blood pressure is kept up or raised, and all the available blood is driven through the active tissues. The presence of lactic acid and other metabolites, cause dilation of the arterials, and capillaries in the muscles themselves. It seems probable that the majority of the capillaries are closed while at rest and during activity they dilate and are filled with blood. Hence the capillary bed in the muscles may be increased many times in area and each element of the muscle is brought into close contact with a dilated capillary through which flows oxygenated blood. Moreover the acid product in the muscle aid dissociation of the oxy-haemoglobin passing through the capillaries and thus make it available for the muscles.

Severe exercise with added emotional stress causes an excess of adrenaline circulating in the blood and which in turn increases the activity of circulation. As a result of excess of adrenaline there is an increase in the contraction of the splanchnic area, increase in the contractile power of the heart, and also an increase in the rate of heart beat. This will be true only in cases of intense emotional stress.

The velocity of the blood flow is directly proportional to the unit circulation and also inversely proportional to the cross-section of the vascular blood. The circulation time when at rest is about 45 seconds and during strenuous exercise it may be reduced to even 9 seconds.

Three Golden Keys to Success

"There are two ways of doing a job. You can do just what you are told to do, faithfully and well. You can do it conscientiously and ungrudgingly, leaving it at least with the knowledge that not the slightest detail has been overlooked.

"On the other hand you can do all that and a bit more. You can do more than you have been told to do. You can add to to-day's work the preparation for to-morrow's.

"You can cease to be a slave to a fixed routine, and use your intelligence as well as your brains. You can infuse personality into your work, and do your job as a thinking individual instead of just part of a machine.

"That is the better way. That is the way to travel fastest. That is the way to become a progressive worker. That is the way, and the only way, to do a full day's work and also fulfill a full day's duty.

"Too many people waste a great part of their energy in looking for soft jobs. That is why there are so few real successes. They are chasing shadows. There are no soft jobs. The softest jobs are, strangely enough, the hardest ones—providing they are done thoroughly and well.

"It is the only difficult job that, when it is done, provides self-satisfaction. It is only that sense of satisfaction in obstacles successfully overcome and difficulties surmounted that enables a man to leave his work with a feeling of well-being instead of a sense of frustration and fatigue.

"The physical and mechanical difficulties of a job are of no account. It is our mental attitude towards them that makes them hard or otherwise. Things are what we think them."

Old Boys' Association

OF THE

Y.M.C.A. College of Physical Education, Madras.

THE CONSTITUTION

(As amended and approved by the General Body at the Annual Meeting on 11th April, 1936.)

ARTICLE I. NAME AND OBJECTS

Section I. The name of the Association shall be "The Old Boys' Association of the Y. M. C. A. College of Physical Education," Madras.

Section II. The objects of the Association shall be

1. To promote intimate and close fellowship and to foster esprit de corps amongst all Old Boys of the Y. M. C. A. College of Physical Education.

2. To advance the cause of Scientific Physical Education amongst its members and the public by:

I. Lectures.

II. Demonstrations.

III. Publications.

IV. Research work, etc.

3. To devise measures for the mutual benefit of its members.

4. To carry out the ideals of the Y. M. C. A. College of Physical Education, severally and collectively, and to co-operate with such agencies as accept these ideals.

5. To help organised branches of the Association in the various provinces.

These objects shall be attained among other means by:

1. The celebration annually of the Old Boys' Day at such a time and place and in such manner as the Executive Committee may decide.

2. The entertainment of the College graduates annually.

3. Organising a Research Committee to decide on problems of importance and to carry out investigations on such problems with the co-operation

of members and others and to report at such a place and time and in such manner as the Executive Committee may decide

4. Occasional or annual contributions from members regarding their work and problems to be sent to the Secretary

5. Authorising Old Boys whenever feasible to organise meetings to discuss their problems.

ARTICLE II. MEMBERSHIP

Section I. Membership shall be active and honorary.

Section II. Active membership shall be open to all Old Boys of the Y. M. C. A. College of Physical Education.

Section III. Members of the College staff both past and present shall be entitled to honorary membership. Others interested in the work of the Association may become honorary members on the recommendation of 2 active members subject to the approval of the Executive Committee.

Section IV. Active membership fee shall be Re. 1 for diploma holders and 8 annas for others. Honorary membership fee shall be a minimum of Rs. 3 per annum. Payment of Rs. 50 shall entitle any member to Life Membership.

Section V. The Official year of the Association shall be from 1st May to 30th April and membership fee shall be paid in advance

Section VI. Membership shall cease on non-payment of the membership fees.

Section VII. Only active members shall be entitled to vote at meetings of the Association. Absentee members may vote through post or by proxy

ARTICLE III. VYAYAM

Section I. Vyayam (a journal of Health and Physical Education) is the property of the Old Boys' Association and shall be its official organ

Section II. The general body shall appoint the Board of Editors and the Business Manager for Vyayam at the annual meeting.

Section III. The Business Manager shall maintain all accounts. He shall deposit the funds of the journal Vyayam, in a bank as directed by the ex-Committee and operate on the same.

Section IV. The accounts of the journal Vyayam, shall be audited by an auditor, appointed by the Executive Committee and the audited accounts shall be placed before the General Body at the annual meeting

ARTICLE IV. MANAGEMENT

Section I. The management of the Association shall be vested in an Executive Committee consisting of:

(i) A President; (ii) a Vice-President; (iii) an Honorary Secretary and Treasurer; and (iv) and 6 others.

They shall be elected annually at the General Meeting of the Association. The President, the Vice-President and the Honorary Secretary and Treasurer shall also be the office-bearers of the Association.

Section II. The President shall preside at all meetings of the Association and shall have general supervision of the Association. He shall be an ex-Officio member of all Committees and Commissions the Association may appoint. In the absence of the President, the Vice-President shall exercise all his functions.

Section III. The Honorary Secretary and Treasurer shall keep a roll of all the members of the Association and give notice of all meetings sufficiently in advance and shall serve as Executive Officer in respect to the work of the Association generally. He shall keep the minutes and the proceedings of all meetings of the Association, conduct all correspondence and keep copies of the same. He shall render a report of the activities of the Association at the Annual meeting. He shall also be an ex-Official member of all Committees and commissions the Association may appoint.

Section IV. The President and the Honorary Secretary and Treasurer shall sign and attest all instruments executed by the Association to which the Association may be a party.

Section V. The Honorary Secretary and Treasurer shall keep detailed financial accounts of the Association in a suitable book provided for that purpose. He shall deposit the funds of the Association in a bank as directed by the Executive Committee and operate on the same.

Section VI. The account of the Association shall be audited by an auditor appointed by the Executive Committee and the audited accounts shall be placed before the General Body at the annual meeting.

Section VII. The Executive Committee shall have full authority to act for the Association in all matters of administration.

Section VIII. Four shall form the Quorum of the Executive Committee.

Section IX. Meetings of the Executive Committee shall be held as often as necessary. Special meetings of the Executive Committee shall be called by the Secretary or at the written request of 4 members of the Committee.

Section X. The Executive Committee shall have power to make such bye-laws, regulations and conventions as may be necessary but which are not inconsistent with this constitution.

ARTICLE V. MEETINGS

Section I. A General meeting of the Association shall be held once a year at the time of the Old Boys' Day at such a place and time as may be decided on by the Executive Committee.

Section II. Special meetings of the General Body of the Association shall be called at the written request of 30 active members or 2/3rd of the active members in roll whichever is less.

Section III.—15 shall form the Quorum for General Body Meeting, or 1/3 of the active members on roll whichever is less.

ARTICLE VI. AMENDMENT

Amendments to this constitution may be made at any meeting of the General Body of the Association provided at least one month's notice of such amendments has been given by the Secretary in writing to all members and provided that they are passed by a vote of 3/4th of the active members present at the meeting.

ARTICLE VII. DISSOLUTION

In the event of the dissolution of the Association all properties of the Association, both moveable and immoveable shall be entrusted to the Y.M.C.A. College of Physical Education, Madras, or in its absence to any other institution with similar ideals for the furtherance of the cause of Physical Education.

BYE-LAWS

1. *Special Membership.* Any Old Boy by paying Rs. 2 to the Association annually shall become a member of the Association and also a subscriber to Vyayam.

Note. The subscription for Vyayam is Rs. 2 per annum.

2. *Honorary and Life Members.* All Honorary and Life members shall be entitled to Vyayam.

3. Vyayam shall be jointly published by the Y. M. C. A. College and its Old Boys' Association.

4. The Principal of the Y. M. C. A. College shall be an *ex-officio* member of the Board of Editors.

CONVENTIONS

1. It shall be a convention that at the Annual meeting the Vice-President shall be elected President of the Association for the ensuing year.

2. A Joint Secretary may be elected, if necessary.

Diary of the Old Boys Week—1936

It was my sixth pilgrimage to the Y. M. C. A. College of Physical Education—my *Alma Mater*—the first one being in 1928. The shrine is ever increasing in usefulness, importance, and splendour, especially since its setting in its present site. The priest and priestesses are as godly and wise and as punctilious and kind as ever before.

A varied programme lasting for four days was before us. The whole gamut of it was gone through with great benefit and fun for all concerned. The discussions, the demonstrations, the speeches, the advices, the matches, the messes, the picnics, the socials, the initiations were all unique in themselves and interesting and educative through and through.

The staff and the present students vied with one another to make things useful and enjoyable to the Old Boys. The breeze, the grass, the books, and the buildings added their charms to the whole.

The functions started, with the exhibition of 'Kummi' and 'Kolattam' which delighted every one and took them by surprise. We owe a debt to Mrs. Sitaram, B.A., L.T., the instructress for placing on its proper pedestal the homely and valuable, yet much neglected art of indigenous folk dances of our country.

Next came the inspiring opening speech of Mr. Lobo. It not only was interesting but served as an index of the sympathy and concern of the Madras Government in the matter of Physical Education. He said that games were the means of smashing meaningless sectarianism as was practised among some colleges which endorsed Non-Vegetarian, Non-Brahmin, Non-Cocoanut oil and similar sections.

The demonstrations of certain games which were calculated to increase the skills required in playing Volley-Ball, Basket-Ball, Football, Playground Ball were simple yet worth while. They are really the inventions of the staff and are valuable and original contribution to the cause of Physical Education.

Then we came to the discussions of problems and difficulties concerning Physical Education. Some of the subjects discussed were Character Education through Physical Education, the place of Calisthenics, the enlisting of the sympathy of the principal and other authorities and the universities towards physical education, the holding of an athletic camp of one month's duration, the method of using gymnastic apparatus and the question of district and taluq sports contests. Besides these, there were the private discussions between Old Boys and the staff, and Old Boys among themselves. The staff and Dr. Andrews led the discussions.

The little bits of coaching in boxing, wrestling and cricket were quite helpful.

As usual matches were played in the evening between Old Boys and Present ones in football, playground ball, tennis and horseshoe pitching. In keeping with the tradition the Present boys had the upperhand, generally. There was also an exhibition of a proper American baseball game. A cup instituted by Dr. Andrews for contests between Old boys and New ones was won by the latter, and was presented to them by Mrs. Sitaram.

There was a picnic to the other side of the river. It was peculiarly interesting.

The traditional tea party given by the Old Boys to the Present ones was held near the Principal's bungalow in congenial and enjoyable surroundings. Then came the dinner given by the Present students at which the Old Boys were the honoured guests.

Following on it came the grand yet solemn ceremony of initiation of the Present boys into the honoured fold and Association of the Old Boys; following on it the enthusiastic greetings of "Welcome Old Boys."

Then, some social games led by Mrs. Buck were enjoyed by every one. And afterwards we regretfully dispersed after good nights and goobies till the next Old Boys' Week.

M. P. ABRAHAM, (1939).

News and Notes.

By

P. M. JOSEPH

The New Students:—Another College year has begun with a new group of students. Once again we have an all-India atmosphere. Madras, Bengal, United Provinces, Central Provinces, Punjab and Bombay are represented. After Madras, Punjab has again the largest Provincial representation. Bombay University has deputed several men. We have a good group, and together we are going to strive hard, and achieve much. Several Old Boys have sent students to take this training. Usually, men who are introduced by Old Boys are the type of men we want for the profession. Old Boys can help in the training of leaders by encouraging promising young men to take up this course, as well as discouraging the doubtful types. In course of time, when we have our men placed in satisfactory numbers in the various Provinces, the selection of candidates from their Provinces, to take the training at Madras, should be a matter left to them. It is important that the men we train are suited to the profession. Our Old Boys ought to know the type of men who will make good and be an asset in our rank.

Improvements on the Campus:—Every year we are fortunate in being able to report some new addition to our buildings. This year we have completed two hostel units, each to accommodate eight students. These are exactly like the permanent unit which was built last year.

The building of one of these cottages was made possible through the great heartedness of late Mr. D. H. Boulton, an intimate friend of the College. Mr. Boulton had made an anonymous gift before he sailed for England, with the express stipulation that the name of the giver was not revealed. But Mr. Boulton was taken ill on his way, and died at Gibraltar as the result of an operation. When this happened it was felt that the donor's name must be announced. In response to a special request from Mr. Buck, Mrs. Boulton agreed to drop the condition that the donor's name should not be revealed. It was also decided that this new cottage should be dedicated to the memory of the late Mr. Boulton. In the death of Mr. Boulton the College has lost one of its best friends. What he has given to the College will help us to remember the great spirit that was his. Generations of students from all over India who will stay there can bless his memory and secure inspiration from that spirit. In life nothing pleased Mr. Boulton more than to see a group of men living as Indians forgetting their communal differences and provincial biases. We pay homage to his memory by building a house where young men live as Indians first, and not as Muslims, Hindus, Punjabis or Madrassis.

The Swimming Pool still seems far away. We have not made any further progress in its construction.

Other changes on the campus are the pulling down of the old mess hall and class-room. The Boxing Ring has been shifted to the front of the old mess

hall near C. C.'s cottage. Mrs. Buck has planted trees on both sides of the road leading to the present mess hall. There are so many other changes which are too numerous to mention, in detail, here. You will see them all when you visit good old Saidapet.

Madras Provincial Physical Education Association:—At the Physical Education Conference held at Salem in May, Dr. G. F. Andrews was elected the Secretary of the above Association. Many Old Boys in the Presidency may not be aware of such an organization. It has the aim of bringing together all the men in our profession for more progressive work. We, in Madras, should become familiar with it, and Old Boys in other Provinces also are welcome to make enquiries if they plan to start something similar in their own Provinces. Please address all correspondence to Dr. G. F. Andrews, Y.M.C.A. College, Saidapet, Madras.

Old Boys:—It is a matter of pride for the College that at the coming Olympic Games in Berlin, we are also represented. Mr. N. K. Mia, a member of the College staff, and a very active member of O.B.A., is attending the Games. He is the Manager of the Indian Athletic and Wrestling teams. Another Old Boy, Swami Jaganath of Forman Christian College, Lahore, is the Manager of the Indian Hockey Team. H. C. Thakur is accompanying a party of Indians who have been specially invited by the International Olympic Committee to give a demonstration of some indigenous physical activities. Our congratulations and best wishes to all three. We feel highly proud of the distinctions won by these Old Boys. I am sure they will share some of their experience with us. Let us wish them all a very successful tour.

Marriages:—This seems to be the marriage season. We had invitations to the weddings of Rozario, 1934; Chockalingam, 1934; and Kandaiya, 1936. Our congratulations to these Old Boys and their happy brides.

Appointments:—Dalip Singh, (1936), writes that he has been appointed Physical Director at his old College, Hindu College, Delhi. Work away and show your stuff, Dalip.

Most of the men who have passed out have already got appointments. If there are any who are looking for a place please communicate with Mr. Buck. Very often references are made to him and sometimes we have nobody to recommend.

Mr. M. S. Swamidoss (1928), Physical Training Instructor, Municipal High School, Ootacamund, is also the Secretary of the Committee in charge of the Annual demonstration of physical activities at Ooty. This year the demonstration came off on the 25th April in the immediate presence of His Excellency the Governor of Madras. Eighteen schools all over the Nilgiris took part in the demonstration and acquitted themselves creditably. Swamidoss seems still to believe in drill because 12 out of the 18 items were drills. Wake up Swamidoss! The war is over, and the world is forging ahead even in physical education!! Have you heard of natural activities in physical education?