PHYSICAL EXERCISE AND GAMES AS OCCUPATIONAL THERAPY

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It is probable that the great majority of those who give any thought to physical exercise hold the traditional point of view and consider the subject almost entirely in its direct relation to physical well-being. This position is abundantly justified. The leading schools of physical education maintain standards which place them upon a par with other professional schools, and their graduates are doing some remarkable work, both with normal people in the development of sound physique and with the abnormal and subnormal in the way of corrective exercises.

It is our intention in this discussion, however, not to reemphasize the fact that physical exercises and games may join hands with occupational therapy in a service which is based upon the fact that increased bodily activities stimulate respiration, circulation and metabolism, and that postural and even structural defects may be mitigated or corrected by certain muscular movements which are studiously adapted to that end. This in itself is a large and important field and one that is little enough appreciated; but we would here direct our attention to that type of therapy, familiar to the medical profession, which deals with mind as well as with body, which seeks to restore to the mental patient such response habits as will mark the beginning of his return from a world of illusion to a world of reality, and which will establish in the patient of normal mentality the will to survive.

It is especially in this psychological aspect of our work that joyous physical exercise or play and occupational therapy meet.

1 Read at seventh annual meeting of the American Occupational Therapy Association held at Milwaukee, Wis., October 30 to November 1, 1923.
Experience has taught us that the psychological effect of physical activities is of much greater importance than is the mere technique of the subject, and that even good physical results are largely conditioned by the mental effects which such activities produce. It is not simply the muscular but the neuro-muscular results which we must consider, not only the building or strengthening of tissues but the increase of nerve tone which must be our concern, in determining the content and method of the program of physical exercise.

A very brief discussion of the relation between the mental and the physical will suggest the possibility of the use of physical activities in restoring the normal response habits of mental patients. Psychologists and educators agree that we learn by doing. The sane adult may differentiate between thought and action; the child and the mental patient do not. What thinking they do is with muscles as well as with brain. Not being given to self-analysis they are not conscious of that dualism of mind and body which many scholars are fast abandoning. As psychology is more and more recognized as a biological science, the part that physical activities play in mental development or restoration becomes increasingly apparent.

If it is true, as has been repeatedly pointed out, that the child learns self-expression, develops personality, and achieves social consciousness not by rationalizing, but by physical activity, may we not confidently depend upon the same means for help in certain tasks that assume large proportions in the field of mental disease—the restoration of response habits that have become confused or lost, the reintegration of personality that has become impaired or dissociated, and the resocialization of the individual who has become asocial or antisocial?

Opportunity for the observation and study of the reaction of mental patients to a program of physical exercise and games was afforded by some activities undertaken by the writer at the Manhattan State Hospital, Ward's Island, New York City. Thirteen days were spent at the institution, with intervals of from two to five days between visits.
Each morning was spent with a group of about 60 male patients, from fifteen to thirty years of age, mostly dementia praecox cases, and the afternoon with a group of about 80 female patients, from the same classification. The assignments to the groups were made through the office of the clinical director. There were a few changes in personnel from time to time as different individuals were sent to the class for the purpose of studying their reactions, and always in each group there was a certain proportion, probably one-third, of those who were not highly disturbed, who exercised a stabilizing influence and made the work easier for the director and the assisting attendants.

As soon as the patients had assembled and while they were laying aside their wraps and coats, a few moments were spent in friendly greetings and conversation. This helped to dispel any feeling of formality and restraint, and to establish that wholesome social relation which is so necessary for creating an atmosphere of play rather than of serious undertaking.

The first exercises, for about five to ten minutes, consisted of very simple calisthenics. For these the patients were called to the floor which had been previously marked off into squares, and each one, alone or with the aid of an attendant, found his place upon a cross mark. It is very important to have these spots indicated on the floor. They make it much easier for the patients, save time, and "finding a spot" becomes a game. The less disturbed persons were placed at the front so that they might be seen and followed in the exercises by those standing behind them.

The evoking of physical responses through calisthenics depends at the beginning upon imitation. It was necessary for the leader to go through all the exercises with the patients and to ask those in the front lines to follow most carefully. The exercises were accompanied by music that there might be established an association of ideas to assist in stimulating response. Some of the more disturbed or lethargic patients were helped at first by an attendant. In a number of instances it was noted that neither verbal instructions nor the sight of the leader or of other members
of the class had any effect until the arms were lifted or flexed by an attendant. Several who were so stimulated followed fairly well afterward by simple imitation. The progress of the entire group was rather marked from day to day, both in the ease and accuracy of their performance and in promptness of response.

After the calisthenics, which were never carried on long enough to be tiresome or formal, the music changed to a march of vigorous tempo in which all joined by advancing straight to the front and turning left into line. At first we found the marching could be done only by having all join hands and follow around in a circle. The more depressed and unresponsive patients could be made to participate in no other way. After several weeks almost all of the group could “follow the leader” without joining hands, and ultimately a “grand right and left” was fairly successful.

The marching, ending in a circle formation, merged readily into the simpler Danish and Swedish folk dances, which introduced, in addition to the rhythm of the steps, much clapping and stamping. In the program thus far, the appeal was entirely to the most simple and primitive of the physical responses, based upon imitation and rhythm, assisted by certain arbitrarily produced associations of ideas. I think that we forget sometimes how elemental is our instinct of rhythm, as shown by the early age at which the individual begins to respond to it. Nearly all of the simple games and plays with which infants have been entertained from time immemorial are based upon rhythm and imitation. In our re-education programs we make large use of the association of ideas, but sometimes forget these more primitive types of response.

A number of patients who would not participate in any of the activities were watched carefully for the first signs of interest. Almost without exception, when the response came it was in the form of rhythm—a nodding of the head, a tapping of the foot or keeping time with hand or arm, an almost unconscious reaction. The first conscious attempt was in the form of imitation, a following, often with great deliberation and seemingly great effort, of the motion of the leader's arms.
The association of certain tunes with definite motions seemed easily fixed. After four or five class meetings, the few introductory measures of a folk dance tune would start a number of patients to stamping or clapping the rhythm of that particular dance. On one occasion I had a new pianist with me. I asked her to play any lively music to accompany the calisthenics. Having no other music at hand she opened at random the book of folk dances, and happened upon a dance we had used a number of times. Several of the patients when they heard the music, followed the steps of the folk dance, oblivious both of my leadership and the actions of their companions in the class, the association in their mind of certain sounds with definite actions being more compelling than either.

After from ten to twenty minutes of folk dancing some simple games were introduced. We discovered that the only games which were possible at first were those which were purely individualistic. Only a few patients were able to take part in any game which required even so simple an appreciation of social values as the recognition of a partner, and only as the class made progress could we use games requiring such ability. Games such as passing a basketball and follow-the-leader led up to variations of the game of tag and a large group of games dependent upon quick response, such as kicking a ball, jumping, running or dodging upon a prearranged signal—a visual, sensory or auditory stimulus. After games depending upon the recognition of a partner had been used a few days, those calling for cooperation with a group, either a part of the class or the entire class, were developed. The value of such a program depends upon its progressive nature, just as is the case with occupational and habit-training activities. The development of individual competence in accurate and prompt response gave opportunity first for self-expression and then for training in socialized activity.

The length of this period of games was determined by the interest and enthusiasm as well as the capacity of the patients. They were next gathered around the piano for fifteen or twenty minutes of group singing. In the use of the old familiar songs we secured emotional responses called forth by old memories.
As leader I always chose such songs as I thought would create the right emotional effect, though trying to have the group make most of the selections. In their choice of songs they showed recollection of many of those which we all know. In the singing of familiar tunes there was also apparent the welding of the individuals into a group. At first they were diffident and rather unresponsive, but I soon discovered not only considerable ability but great love of music on the part of these patients, and in the latter days of the class the moment the music was announced, no matter how interested they had been in the games, many of them would rush over to the piano and crowd around it as closely as possible.

As the result of one experience we eliminated Tosti from our regular repertoire, and learned that the probable emotional stimulus of all songs must be carefully studied. Just as with the normal individual there is the necessity for response and outlet for the emotions, so we found that with these patients there should not be a piling up of any sort of emotional stimulus without opportunity for self-expression.

Allow me to emphasize here the necessity for providing regularly the type of musical program which gives to the individual the opportunity to participate. Just as in our experience with normal people we have in the last few years learned anew that nearly everyone can sing and enjoys singing, so in our dealing with mental cases we find that we must more and more give music the opportunity to exercise its personalizing and socializing value, that comes through the performance of music and not the mere listening to it. Entertainments and concerts are not to be condemned or discarded, but their contribution is far different from that of the type of music which allows for participation on the part of the patients.

After fifteen or twenty minutes of singing, a brief period, five or ten minutes, was allowed for free play or for dancing, the former proving more acceptable to the men and the latter to the women. After the group had sung for a while they seemed to need some opportunity for physical self-expression.
We found with the women patients that when they arrived at the amusement hall and the pianist was playing, very few of them wanted to dance or seemed to pay any attention to the music, but after more than an hour of vigorous exercise, games and singing, almost all of them danced, either the conventional dances in couples or solo dances which they improvised as a means of self-expression.

We discovered that for the men it was necessary to have some simple articles of equipment.\(^2\) The hall had basketball goals at either end, and two basketballs would keep twenty or twenty-five men fairly active for a short period of free play. The response of the men was similar to that of the women,—little desire to play at the beginning of the hour and reluctance to leave at the close.

We do not at this stage of our experiment claim definite curative values for this work. However, there can be no question that in some of the ways which I have indicated we did secure a significant response and noted marked progress with these patients.

If the normal individual needs opportunity for self-expression and the sublimation of some of his pent-up emotional life, certainly similar opportunities will be fruitful in dealing with mental cases. The psychologists are all agreed that with a great majority of people the most normal and common type of sublimation is through some physical expression. It is infinitely better that this should come through play and games, which can readily be brought up to a plane having socializing value, rather than through tantrums, which, even if relatively harmless, are at best purely individualistic.

If those are right who see in most of the dementia praecox cases evidence of the "shut-in personality," are we not justified in trying, especially in the early stages of the disease, the curative value of such activities as singing, dancing (especially of the

\(^2\) The cage ball, which is a large, light canvas-covered ball 24 or 30 inches in diameter, is particularly valuable, as is also the volley ball. The indoor base balls are not so good, as there is nearly always present some disturbed patient who is apt to throw them wildly about the building.
vigorous, boisterous, gymnastic or folk-dance type) and romping noisy games, which will give emotional release and will sublimate real or imaginary inhibitions? Even untrained attendants recognize the value of this.

Physical and occupational activities should not be limited to those cases which are most promising. Let us hope the day will come when we can greatly increase our reasonable expectation of recoveries, but in the meantime we all know that there are great numbers of patients who will probably need more or less permanent custodial care. These form a real community. To such, certain fundamental human needs are common: food, shelter, work, play, friendship. The average institution provides these in a descending scale. Food and shelter? For all, certainly. Work? It can be provided only for a few. The others too often sit idly day after day with folded hands and empty lives, and much of the effort of attendants goes to “keeping them quiet.” Let us not be satisfied until we give to these too, up to the limit of their capacity, a measure of joy in work and play and the comradeship that comes to folks as they work and play together.

There is a great need for physical and occupational therapy for other than these mental cases. It is particularly necessary that joyous activities be provided for the physically handicapped. The worst barrier to their recovery is not the one that nature or accident has erected, the physical handicap—it is the one which is so easily built up in their own conscious and subconscious minds, the “inferiority complex,” which is most difficult to overcome. Once we give such a person the joy of definite accomplishment, we have prepared the soil in which the will to survive may grow. I sometimes feel that Miss Neva Boyd’s compilation of “Hospital and Bedside Games”? has proved as fine medicine as any which has ever been discovered. It has ministered to many in recent years.

*Boyd, Miss Neva L., Hospital and Bedside Games, Chicago School of Civics and Philanthropy, Chicago, Ill., 1919.*
There is also a growing appreciation of this type of service in the tuberculosis sanitarium. One of the critical stages in the patient's fight against the white plague is reached when the impatience and restlessness of early convalescence attack him. The outcome of his fight will depend upon his willingness to continue to conserve his strength as he has shown marked improvement. At this critical period, when he begins to feel ambitious, many an otherwise able advisor fails because he must adopt so definitely a negative attitude.

Visits to two great institutions stand out in my mind. Both are state-maintained and have been hampered in no particular as to plant or staff. Both are situated in wonderful natural locations among the pine groves in the mountains. I visited both institutions in the month of July and both, by a mere accident, in the afternoon. As I left the one I saw several hundred young men and women (both received incipient cases only) walking away from the buildings toward the state highway. The superintendent's secretary said, "As soon as the afternoon rest period is over all of the patients who are making good progress are sent, on pleasant days, for a walk. They stay out for an hour and it is a rest and change for them." I got into my car and drove away, and around the first turn in the road saw the "walkers." For about two hundred yards they had perched on the white fence along the highway and sat with wistful faces idly watching the cars whiz past bound toward "home" until, the hour being up, they could go back to their rest porches. As I sat talking with the superintendent of the other sanitarium, who was telling me about his occupational work, the looms, the metal work and the basketry, he suddenly looked at his watch and said, "Sorry, you'll have to excuse me now. The afternoon rest period is over in a few minutes and all the ambulant patients are going up into the pines for a picnic lunch—just a simple sort of affair, sandwiches, milk, and an hour of fun and stories," and he was gone. As I drove away I looked back to watch several hundred young men and women going away from the highway up into the pines for their picnic, just like any other group of
folks off for a good time. I do not know which of these two sanitaria ranks the higher from a medical standpoint, but am in no doubt as to which superintendent knows the human values more fully and so, I believe, gives his patients a better fighting spirit.

Another side of this type of activity is worthy of emphasis. A valuable by-product of a program of physical exercises and games is the better attitude of those occupational aides and assistants who have a recreational contact with the patients in addition to that of their regular duties in the work-room. Let us realize frankly that there is no virtue of any kind either for normal people or for patients, in work for its own sake, but a task becomes play when there is joy in the doing of it. Some of the best technically trained people fail because they are weak in establishing real human contacts. To counteract this inaptitude the occupational aides might often serve also as assistants in the play hours. Any results which we may have secured in the activities which I have described are largely due to the fact that we brought into our group the occupational aides and a number of the cadet nurses from the training school. They were not only of great assistance in carrying on the activities, but many of them during the time since these classes were inaugurated have continued certain of the activities in the work-room and in the wards, and the same friendly play spirit which characterized our recreational hours together lives on in their daily work.

We must carry this play spirit over into the work-rooms. There must be joy in creative effort, pride in good craftsmanship, satisfaction in the accomplishment of worth-while tasks, and the adventure of human comradeship pervading all of our work, if it is to accomplish the best possible results. The cases that have come to my attention of those who have won the fight and returned to physical or mental health have stated that somewhere along the road they met a sane, strong, sympathetic friend. Is it too much to hope that with at least a certain percentage of our patients we may use physical and occupational activities as the first means of bringing that light into their darkness which will reveal to them the friend who stands ready to help?