

Let's Put Gymnastics Back Into Our Physical Education Programs!

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PRESIDENT EISENHOWER'S White House Conference on the Fitness of American Youth is ample evidence of the importance and national scope of the problem of fitness. The problem is of grave concern to educators and particularly physical educators.

Dr. Marjorie Phillips¹ of Indiana University administered the Kraus-Weber Tests of Minimum Muscular Fitness to 1,456 elementary school children in Indiana. The test and test items were found to be highly reliable. However, questions were raised about the validity of the test because no valid relationships could be shown to dynamometer strengths. The flexibility test of touching fingers to the floor has been roundly criticized by a host of authors. Writers have also been high on criticism of the "fail one item—fail whole test" idea. Nevertheless, the fact remains that four separate studies of American children have shown failures of 45.1% to 66.1% as compared to failures of 8.0% to 9.5% for three European studies. These findings merit considerable attention when discussing the effects of a given program of physical activity on the flexibility and strength of children.

In 1956 an experiment was set up to determine how children who participate in a gymnastic program compare with children in the American and European studies cited. The Kraus-Weber Test was administered to students at Pond's Palaestrum, a private gymnastic school located in Champaign, Illinois, and operated by Charles Pond, Gymnastics Coach at the University of Illinois, Urbana. The test items used were identical to those used by Kraus² and Fox³.

The instructional program at Pond's Palaestrum is run on a twelve-week basis. The students attended classes from one to three times per week. The class

period was one hour long, and an attempt *was made to keep* each student physically active for the whole hour.

Each class began with a rapid-fire mass warm-up of ten minutes duration. The warm-up was done on tumbling mats and was of the grass drill variety. This was called mat drill. The remainder of the class time was devoted to tumbling, trampoline, and free exercise (a combination of rhythmic, calisthenics, tumbling and balance moves). Fifteen minutes were allotted for each activity. Each class terminated with five minutes of chinning the bar and handstands.

There were four grades of classes: beginner, advanced beginner, intermediate, and advanced. Students were classed according to standards of ability rather than chronological age. In general, however, a beginner was usually in the program for the first time, an advanced beginner had usually attended one previous 12-week program, and intermediate had attended two or more programs, and an advanced student had been in the program from one to four years.

Of the 95 cases tested at the Palaestrum, 9 children failed one or more of the six items for a percentage of 9.5%.

1. Phillips, Marjorie A., Indiana Study of Kraus-Weber Tests, *Journal of the American Association of Health, Physical Education and Recreation*, 26:14-15, 71, September, 1955.

2. Kraus, Hans and Ruth P. Hirschland, "Minimum Muscular Fitness Tests in School Children," *The Research Quarterly*, 25:178-188, 1954.

3. Fox, Margaret G. and Janet A'wood, Results of Testing Iowa School Children for Health and Fitness, *Journal of Health, Physical Education, and Recreation*, Washington D. C., 26:20-21, September, 1955.

Chart I

A COMPARISON OF TOTAL NO. OF FAILURES OF POND'S PALAESTRUM STUDENTS AND STUDENTS TESTED IN SEVEN OTHER STUDIES

Studies on		% Failures
American Children	University of Iowa Study	66.1
	Kraus-Weber Study	57.9
	Slippery Rock State Teachers Study	49.77
	Indiana University Study	45.1
	Pond's Palaestrum	9.5
Kraus Studies on European Childred	Austria	9.5
	Switzerland	8.8
	Italy	8.0

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Chart II
COMPARISON OF KRAUS-WEBER,
INDIANA UNIVERSITY, AND
PALAESTRUM DATA

Ages		6	7	8	9	10	11	12
% Failures	Kraus-Weber	54.0	55.0	52.0	54.0	48.0	62.0	65.0
	Indiana	54.1	44.9	36.1	40.8	50.4	44.5	44.9
	Palaestrum	14.3	18.2	6.1	25.0	0.0	0.0	0.0
% Flexion Failures	Kraus-Weber	33.0	40.0	40.0	39.0	44.0	40.0	50.0
	Indiana	30.7	32.5	31.1	36.1	45.1	41.4	42.0
	Palaestrum	0.0	0.0	6.1	16.7	0.0	0.0	0.0
% Weakness Failures	Kraus-Weber	39.0	37.0	27.0	30.0	32.0	40.0	36.0
	Indiana	40.4	20.8	12.5	15.7	11.2	8.8	7.2
	Palaestrum	14.3	18.2	0.0	16.7	0.0	0.0	0.0

Interesting differences were seen when the statistics were broken down into age groups. There was a fairly steady increase in percent of failures from 6 years to 12 years of age in the Kraus-Weber data. The Indiana data showed no such trend. The six

year old group showed the greatest number of failures. The Palaestrum data showed a decrease in failures from 6 years to 12 years of age. This suggests that the Palaestrum program helps develop the qualities measured by the Kraus-Weber test

CHART III
PERCENT FAILURES IN EACH CLASS
GRADUATION

Class	No. Cases	Time in Program (12 week units)	No. Failures	% Failures
Beginners	46	1	8	17.4
Adv. Beginners	15	2	0	0.0
Intermediates	13	3	1	7.7
Advanced	21	4 (or more)	0	0.0
Totals	95		9	9.5

Another strong suggestion in favor of the Palaestrum program was found when a comparison was made between percent failures and time students spent under Palaestrum instruction. Except for one case in the intermediate group, there were no failures past the beginner's class. Eight out of 46, beginners failed for a percentage of 17.4%. It must be kept in mind that the beginners had just completed their first 12 weeks instruction.

The Kraus-Weber tests showed an increase in percent of flexion failures from ages 6 to 12 years. The Indiana data also shows this type of trend. The Palaestrum data shows a slight increase from ages 6 to 9 years but no failures in the 10 to 12 age levels. Both the Kraus-Weber and Indiana data shows that most flexion failures occur in the 10 to 12 year group. However, none occurred in the same age groups in

Palaestrum data. These results might imply that the Palaestrum improved best the item causing the most number of failures, viz., flexibility.

The percent of failures in the Kraus-Weber data remained rather steady in the muscular weakness items from ages 6 to 12. The Indiana data showed a definite downward trend with the greatest percentage of failures at 6 years and the least at 12 years, indicating a definite increment with age in muscular strength of the normal child. Kraus attributed this trend in the Indiana data to the possibility of better physical education programs of the Indiana children studied as opposed to the ones he studied. The Palaestrum data showed no definite trend. Percentage of failures varied from ages 6 to 9 years but no failures whatever occurred in the 10 to 12 age group.

The percentage of failures in the Kraus-Weber

tests given to random samplings of American children in four separate studies denotes a basic weakness in American children. The percentage of failures of Palaestrum children reflects a program which definitely improves the items measured by the Kraus-Weber test.

The startling fact that no failures whatever occurred in the 10 to 12 year Palaestrum group suggests the beneficial results of the Palaestrum program to children at an age when a large proportion of children from all walks of life, exposed to varied programs of physical education, and playing numerous sports, would be failing some item of the Kraus-Weber test of minimal muscular fitness.

As a whole, the picture is deplorable when we realize that one good course in gymnastics for a year

would wipe out practically all of these failures. If it can be assumed that the Kraus-Weber test is a reliable measure of minimal muscular fitness of elementary school age children and if physical educators consider flexibility and abdominal strength important components of general physical fitness, then, it seems logical that physical educators should be interested in an activity which will help develop these qualities. The type of program to which the students at Pond's Palaestrum are exposed is sorely needed in the elementary and junior high schools of our country. The activity is tumbling and gymnastics. The need is for 10,000 physical educators who believe in and will work toward the slogan: "Sports for fitness as well as fun!"

Join the "ABC"

What is it?

It's the ANTI-BOOERS' Club."

Booing is unsportsmanlike and should be taboo in all amateur sports, and particularly in all inter-school activities. The individual who "boos," no matter what the provocation, shows:

Disrespect for the players and the officials;

Lack of courtesy due other spectators;

A "win at all costs" attitude;

Lack of understanding of the purpose of school athletics;

And a lack of good sportsmanship and good citizenship.

The boomer generally discredits himself, although frequently he also brings discredit on his own team

and school. He sits comfortably in the stands entirely removed from any risk of injury or fatigue. He carries as "know it all" attitude. He thinks he knows all the game rules, the technique of coaching, the play strategy, and what every player or official should do under any and all circumstances. He is a "superman" in his own judgment, but a dud in everybody else's. He is a sports public enemy No. 1. And after the game he alibis every defeat and knows exactly what should have been done.

Yes, let's join the "ABC"—the 'ANTI-BOOERS' CLUB' and the "ALWAYS BE COURTEOUS' gang.

—Minnesota High School *League Bulletin*

Rating Coaches

How would a noted former college football coach rate coaches? Not like most fans, in all probability. We read where "Biggie" Munn, in a talk before a Minneapolis club, listed six questions he would ask his son's coach:

1. Does he have a Christian attitude to inspire

my son to be a better man? 2. Is he fair?

3. Does he maintain discipline? 4. Does he

make the game fun? 5. Is he mindful of the health of his players? 6. Would he ever play an injured player?

This certainly isn't an "easy" rating system, but it differs sharply from the common "games won and lost" appraisal. Some coaches might prefer the won-lost system. Many couldn't make the grade, or keep their jobs, under the Munn query plan.