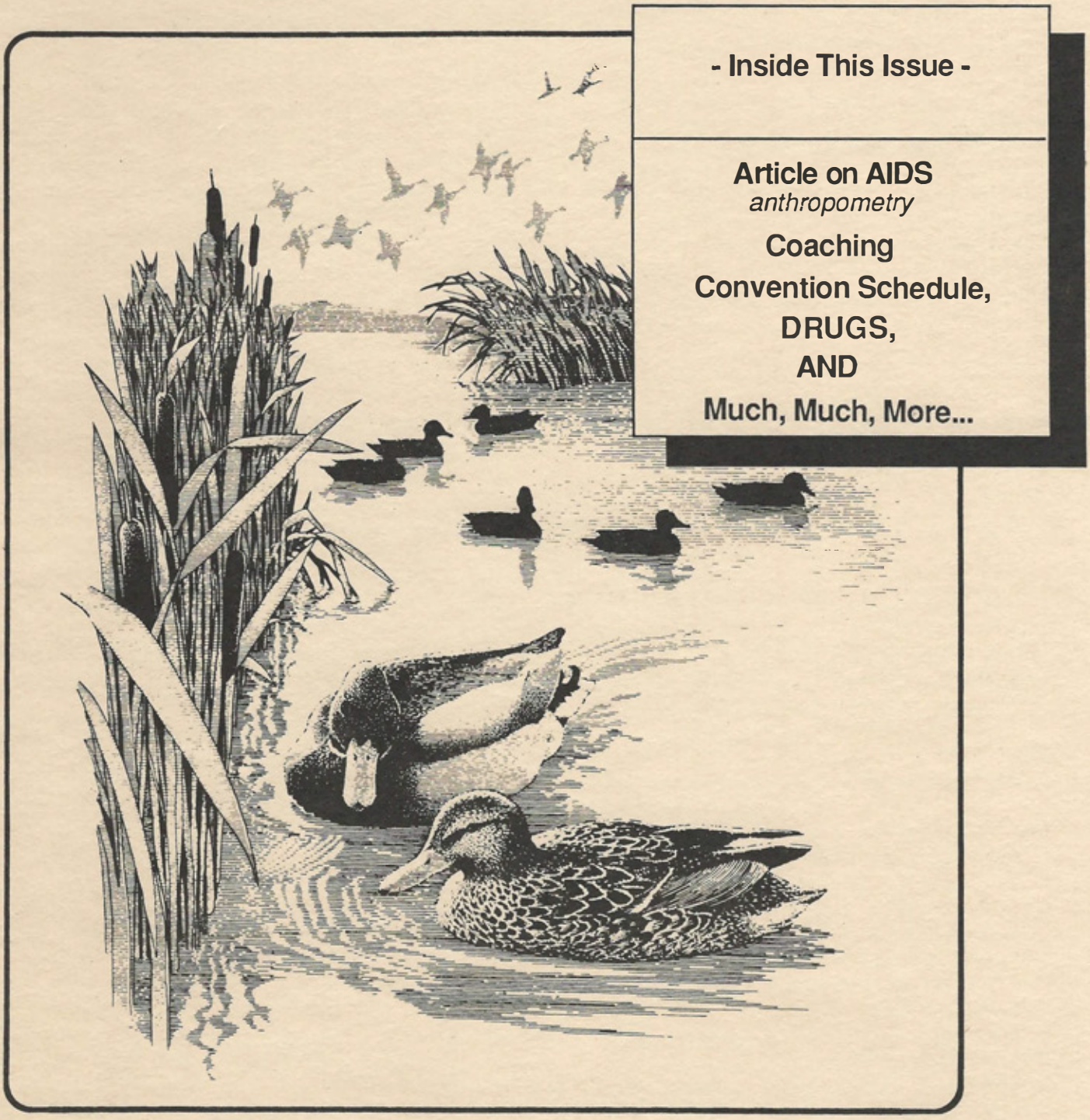
The Indiana Journal For Health • Physical Education Recreation • Dance

Volume 17, Number 3 **CONVENTION ISSUE** FALL, 1988



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1987 - 88

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IAHPERD Journal

CONVENTION ISSUE

Volume 17, Number 3

Fall 1988

Indiana Association For
Health, Physical Education, Recreation and Dance

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The **Journal** is published three times a year (Fall, Winter, Spring) by the Indiana Association for Health, Physical Education, Recreation and Dance. Third class postage paid at Indianapolis, Indiana.

The Indiana Association for Health, Physical Education, Recreation and Dance is a professional organization serving education in these four and related fields at the elementary, secondary, college, and community levels. Membership in IAHPERD is open to any person interested in the educational fields listed above. Professional members pay annual dues of $15. Students pay $5. Make checks payable to IAHPERD Treasurer, c/o IUPUI, School of Physical Education, Indianapolis, IN 46223.

CHANGE OF ADDRESS

In order to receive the **IAHPERD Journal,** your change of address must be mailed to P. Nicholas Kellum, 901 W. New York St., Indianapolis, IN 46223. A change of address sent to the Post Office is not adequate since **Journals** are **not** forwarded.

When individuals fail to send changes of address, a duplicate copy of the **Journal** cannot be mailed unless the request includes funds in the amount of $5.00 to cover postage.

Typesetting and Printing By City Press, Inc.

Guidelines For Authors

The following information should be used when submitting a manuscript to the *IAHPERD Journal*. Many types of original manuscripts are suitable — theoretical, practical, technical, historical, philosophical, creative, controversial.

Write for the *Journal's* readership and be sure to spell out the implications of the article for the discipline. Use a simple, clear and direct writing style, avoiding the use of first person pronouns and repeated references to one's institution.

Philosophical and historical backgrounds are not usually necessary unless these are the primary purposes of the manuscript. References are not compulsory, but writing ethics dictate that quoted material as well as historical sources be cited in bibliographical style.

When reporting research results, try to maintain non-technical language and to avoid complex tables which are not directly related to the text. Avoid extensive discussion of methodologies and statistical techniques unless they are clearly unique. Concentrate on theoretical framework, reasons for conducting the research, discussion and applications to the field.

Manuscripts will be acknowledged upon receipt, but may take up to three months for review. The decision regarding acceptance/rejection/revision is made by four members of the editorial board who perform ''blind reviews'' and submit confidential evaluations to the editor. Accepted manuscripts may be edited to conform to space constraints. Manuscripts that are not accepted will not be returned. Author will receive written acknowledgement of any editorial decision.

The most common reasons for rejection are: inappropriate subject manner; repetition of previously published material; topic too narrow or already common knowledge; poor documentation; poor writing.

Publishing ethics dictate that a manuscript should not be considered simultaneously by more than one publication, and no article which has appeared in another publication should be submitted to the *IAHPERD Journal*. The IAHPERD accepts submitted materials for the *Journal* as ''professional contributions'' and no remuneration can be offered. Authors receive one complimentary copy of the issue containing their article.

TECHNICAL SUGGESTIONS

Style. Material should be presented consistently throughout the manuscript. Preferred style is that of the American Psychological Association (APA) Publication Manual or the University of Chicago Manual.

Length. Maximum preferred length is 10 double-spaced pages. Longer manuscripts will be considered but will receive lower priority for inclusion in the *Journal*.

Cover Page. Type title of manuscript about three inches from top of page, followed by author name(s) as it/they should appear in the published piece. Drop down a few spaces and type complete name, address, and phone number of author with whom editor should correspond. Also, state number of words in manuscript (rounded to nearest hundred). Author name(s) should appear *only* on this page, since the editing process is conducted as a ''blind review''.

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Tables, Charts, Graphs. Use where appropriate; don't duplicate material in the narrative; be *accurate*.

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SUBMISSION REQUIREMENTS

Copies. Five (5) copies must be submitted — one original and four photostatic copies (no carbon copies or dittoes are acceptable).

Time lines. Manuscripts should be submitted at least 3 months in advance of publication date if consideration for a specific issue is desired. Tentative publication dates are October, February, and May.

Address. Materials for *Journal* review should be mailed to:

Dr. Tom Sawyer, Chairman
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HELPFUL PUBLICATIONS FOR WRITERS

Follett, Wilson, **Modern American Usage,** New York: Crown Publishers, 1980.

Jordon, Lewis, **The New York Times Manual of Style and Usage,** New York: Quadrangle/New York Times Book Co., 1975.

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Publication Manual of the American Psychological Association, 3rd ed., Washington D.C.: American Psychological Association, 1983.

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Zinsser, William, **On Writing Well,** New York: Harper & Row, 1976.

A MESSAGE FROM THE EDITOR ...

BUT, WHY IAHPERD?

A **member** can be defined as one who belongs to an association, a society, club, party, etc. ---. And membership is being a member of a collective body. Whereas, an association is the state of being associated; fellowship; companionship; persons associated for some common purpose.

IAHPERD is the Indiana **Association** for Health, Physical Education, Recreation, and Dance. Its **membership** consists of **members** associated for a common purpose - to foster and encourage healthy attitudes towards mind, body, and spirit, and to assist the youth of Indiana in raising their health and fitness consciousness, since they will be the leaders of our future.

But, Why IAHPERD?

For over fifty years now, there has been an "IAHPERD" around in Indiana. Actually the "IAHPERD", when it's working at its best, is an **Association** of people. Some people think the "IAHPERD" is a paper organization, but it really isn't. Paper organizations are just tools for people to do things together.

Because the "IAHPERD" is an **Association** of people, down through its history it has developed all kinds of innovative ways to do things together. For example, the "IAHPERD" organizes annually **a membership** convention, and nine district **membership** workshops. It publishes three journals and, two newsletters, and it develops position statements such as the one on Quality Daily Physical Education, and it is developing an organized intensive campaign to raise the health and fitness consciousness of all Hoosiers.

The "IAHPERD" still continues to be innovative; if it stops serving the needs of **members** it will disintegrate and die. It continues to set up ways in which folks can relate together meaningfully because it is a **voluntary** association. There is no reason for anyone to stay in it unless they **want** to. No one is forced to be a part of the **Association**.

Another feature of the "IAHPERD" is that people who join tend to emerge as better for having been in its various programs. They tend to have a greater sense of worth than people who do not join. The real measure of whether or not the "IAHPERD" is doing anything important is whether or not its members are better persons after joining. This writer and member feels they are.

The unique quality of the "IAHPERD" is that, it brings people together for a common purpose. If it were a business, it would gain its support by producing a product or **a** service. In a business, one group of people gather together with tools and technology and produce products or services which another group will buy.

In the "IAHPERD" both producers and what is produced are the same - the people, who came together for a common purpose.-

They are simply better for having associated with each other in meaningful ways.

Why is the Indiana Association so important? As the song says, "People need people", and professionals need professionals to grow and learn.

Sociologists tell us that two of the largest problems in an urban society are alienation and boredom, especially for those living in the more dense areas of our society. So, our "IAHPERD" must **reach out** and invite our community of health, physical education, recreation, and dance professionals to become a part of our Association. A membership campaign is not only a program event, it is professionals searching for other professionals to strengthen their common bonds and share their knowledge and experiences.

Each new member we bring into our membership is a form of Reaching Out, of widening our Association circle, and of spreading our influence in the State of Indiana. When **we** do this well, others grow, **our** "IAHPERD" grows, and **we** grow too!

Help widen our Association's sphere of influence, encourage a colleague to join, its only $15.00, less than the price for a dinner for two, a day on the links, or an evening of entertainment at a local theater. Yet, professionally it can not only be rewarding but also educational and

invigorating. Your membership provides you the opportunity to grow, to learn, to associate with others for a common purpose, to influence leaders, to build and strengthen our profession, and much more.

I challenge each and everyone in the membership to ADOPT-A-NEW MEMBER by the Fall Convention in Muncie - October 26-28. Help your Association to help other professionals and the youth of Indiana - our future leaders.

Responses to this message are welcomed and will receive equal treatment by the Journal in a column entitled - Letters to the Editor.

Thank you in advance for your interest and concern in **our** profession.

Here's a technique to measure commitment of your aspiring presidents

By THOMAS A. SHANNON, exec. director Nati School Boards Assn., Alexandria, VA.

The quality and commitment of the elected leadership of an assn is a matter of urgent and abiding concern to its executive leader. Yet, the executive is constrained by the very nature of his or her position from medding in the assn's nominating and electing processes. That's why the executve breaths sighs of relief when the elected people themselves take an active and direct interest in those processes to ensure that only the most qualified and committed folk climb into the chairs enroute to he presidency or board chairmanship.

The quality of a person is easy to judge. His or her education, experience and background of accomplishment in the subject field of the assn. may be quantified, verified and assessed with convenience and dispatch. Not so easy, however, is gauging a person's commitment to serve as an elected leader. And without real commitment of the advancement of the assn. the willingness to invest the time and energy in the forward thrust of the assn and to focus attention on providing spirited leadership for the assn-the most highly qualified person will fail badly, all to the detriment of the assn.

Jonathan T. Howe, the well-known Chicago attorney specializing in assn law, recently had to face up to the question of whether he possessed the commitment to serve as president of the Natl. School Boards Assn. (NSBA). A long-time school board member in the Chicago suburb of Northbrook, IL, Jon developed a list of ten questions. He asked himself these questions to measure, as precisely and accurately as he could, his own commitment in the face of the enormous block of time that he would have to allocate to NSBA to serve well as its president during 1987-88. He shared his list at ASAE's first annual conference on Volunteer Management in Washington earlier this month.

Howe's list is solid. His questions go to the jugular of commitment. Executive leaders of any assn would do well to arrange for Howe's 10 questions to be asked of their assn's candidates for president. Here they are (in 2nd person voice):

1. Why do you want to be President?
2. Are you willing to make the sacrifice that serving as president will entail in your personal and professional life?
3. Will your health, age, and spirit take the physical and emotional demands of the presidency?
4. Can you identify and work effectively with the executive staff as a partnership team?
5. Are you emotionally prepared to withstand critical comment-sometimes personal and severe-from your peers in the assn which the actions of your presidency will invariably generate?
6. Can you take defeat and disappointment in your leadership efforts without passing the buck?
7. Can you communicate effectively the message of the assn.?
8. Can you subordinate your personal biases to represent the assn. well?
9. Do you have support for your presidency-the time, travel, and concentration it will require-in your "own backyard" (wife, family, and employer)?
10. Can you deal with the letdown after your presidency that naturally comes with being a past-president?

Satisfactory Answers?

If your assn.'s nominating committee can elicit satisfactory answers on these 10 questions from aspiring presidents-and even from candidates for the board of directors, by just changing a few words here and there on Howe's list - the crucial issue of commitment of elected leaders will take care of itself.

MEMBERSHIP:
THE LIFE BLOOD OF IAHPERD---

MUNCIE IN 1988

President Message...

Dear IAHPERD Members:

As the term of my presidency comes to a close I would like to express my appreciation to the members of the board for their help and understanding. I wouldn't be completely honest if I told you that this past year has been an easy one. It has, however, been a rewarding experience to take an active part in my professional organization at the state level. I encourage each one of you to participate in IAHPERD not only with your membership but with active promotion of quality daily physical education in your school and community.

I hope that each one of you will take advantage of the opportunities provided for you this coming October 26, 27, and 28 in Muncie at the 1988 IAHPERD Conference. Your state program council under the capable leadership of Past President Becky Hull have planned programs to reflect current interests, needs, and desires of our professions. The theme "Fitness: A Sure Bet" promises exciting, stimulating programs plus a "Casino Night" just for fun.

Do something for yourself——come join us at the 1988 IAHPERD Conference! I look forward to seeing you at the Radisson Hotel in Muncie.

Respectfully,
Roberta J. Litherland
President, IAHPERD

President, IAHPERD
Roberta J. Litherland

President-Elect
Betty Evenbeck

President Elects Message...

Greetings from your President-Elect! I'm writing this "message" in late June, when, I'm told, "the livin' is easy". Actually, I'm in the beginning stages of drawing up a "game plan" to guide my upcoming year as IAHPERD president.

I take this opportunity to thank the IAHPERD Board for funding my trip to Washington, DC, June 3-7, 1988. During that time, the American Alliance for Health, Physical Education, Recreation & Dance conducted the 33rd Annual Presidents-Elect Conference.

What a great five days! The AAHPERD staff, headed by the efforts of Mark Pankau (Executive Director, State & District Relations) inundated us with helpful, timely information. We covered several topics: the new AAHPERD fitness initiative (Physical Best), Jump Rope for Heart as a n educational and financial tool, ASP (applied strategic planning), District activities, political acuity and activism. We spent a n entire day at AAHPERD headquarters in Reston meeting the staff, and a day conducting the Congressional Legislative Fitness Day (I measured legislative body fat).

The agenda included "R & R" time. I studied dinosaurs at Natural History, viewed great masters at the National Gallery of Art, hiked to the National Cathedral for services (my husband had assured me it would take 45 minutes max — took me 2 hours!). A walk past the Vietnam Memorial was as painful for me as my first such walk a year ago.

On the plane flying back to Indianapolis, I felt overwhelmed by the sheer amount of information and handouts and good ideas and possible projects which I might pursue "back home again in Indiana." My mind kept returning to some simple, but very wise advise I learned a few years in scuba class: plan your dive, dive your plan (another way of packaging applied strategic planning!)

This summer I'll be spending time planning for the next year. My trip to Washington provided an incredible array of possibilities. My time at IAHPERD Board meetings has given me insight into the interests and concerns of state professionals. I'm looking forward to devising a visionary yet manageable plan for the coming year, and working with all of you to accomplish it.

New Alliance Leadership

Joel Meier is New President-Elect

Joel Meier

Dr. Joel Meier of Missoula, Montana, was last week elected to serve as president-elect of the American Alliance for Health, Physical Education, Recreation and Dance, the country's largest professional association for health and physical educators. The vote came at the Alliance's 103rd Anniversary Convention in Kansas City, Missouri.

Dr. Meier, a 12-year member of the Alliance who has served the organization in a number of capacities form the local to national levels, is Chairman of the Department of Health, Physical Education and Recreation at the University of Montana, and also a Professor of Recreation Management at that school.

Highlights of Meier's service and recognition in the field include President, Montana Association for Health, Physical Education, Recreation and Dance (1984-85); five term member of the Executive Board for the Northwest District 91980-85); President of the American Association for Leisure and Recreation (1978-79); Visiting Fullbright Scholar to New Zealand (1980); Northwest District Representative to the Alliance Board of Governors (since 1983); noted editor an author; and an international representative for the field.

Dr. Meier received his B.S. an M.S. degrees from the University of Nebraska and Doctor of Recreation degree from Indiana University.

Charles H. Hartman

Charles H. Hartman Elected New EVP

Charles H. Hartman, President of Touchstone Management Services of Delta, Pennsylvania, was elected to serve as the Executive Vice President of the American Alliance for Health, Physical Education, Recreation and Dance.

Hartman, who has an extensive background in both education and safety, begins his tenure May 1.

Prior to his founding of Touchstone Management Services in 1984, Hartman served as President/CEO of the Motorcycle Safety Foundation (1973-1984) and Deputy Administrator of the National Highway Traffic Safety Administration of the National Highway Traffic Safety Administration, U.S. Department of Transporation (1970-1973).

Hartman also taught at both the secondary and college levels, including positions at Penn State University, two campuses of the University of Wisconsin, Illinois State University, and Holidaysburg (PA) Public Schools.

His education includes Michigan State University (Ed.D - Education and M.A. - Traffic Safety) adn Millersville (PA) UIniversity (B.S. - Social Studies/Government).

Membership

The American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) is a nonprofit association representing professionals in physical education, sports and athletics, health and safety education, recreation and leisure, and dance.

Founded in 1885, the American Alliance continues its mission to improve our country's programs in these fields (in schools and communities nationwide) and to improve the general quality of life for both children and adults.

Located near Washington, D.C. the Alliance provides a strong voice for members both within and outside the United States. Membership in the Alliance can keep you aware of legislative developments and their local, national, and international impacts.

Yes, I want to join the **American Alliance.**

Name (Mr.) (Ms.) _____
Address _____
City _____
State _____ **Zip** _____
Telephone: Home ( ) _____ ( ) _____

My highest level of education is:

- ☐ Undergraduate Studies (US)
- ☐ Bachelors Degree (BD)
- ☐ Masters Degree (MD)
- ☐ Doctorate Degree (DD)
- ☐ Post-Doctorate Study (PS)
- ☐ Other (OT) _____

I select the following membership option, based on my status in the profession and my choice of periodicals:

Professional Update Plus:	*One-year membership*	*Two-year membership*	*Three-year membership*
Any one periodical*	☐ $ 60.00	☐ $110.00	☐ $150.00
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Any three periodicals*	☐ $100.00	☐ $190.00	☐ $270.00

Student (Student rates apply only to full-time students.)

Update plus:	*Graduate*	*Undergraduate*
Any one periodical*	☐ $25.00	☐ $22.00
Any two periodicals*	☐ $45.00	☐ $42.00
Any three periodicals*	☐ $65.00	☐ $62.00

* Add $5.00 for each periodical mailed outside the U.S. or Canada

I wish to receive the following periodicals:

- ☑ Update (An automatic benefit of membership)
- ☐ Journal of Physical Education, Recreation and Dance
- ☐ Health Education
- ☐ Research Quarterly for Exercise and Sport

I also wish to receive Strategies
(Add $10.00 to your membership dues.)
(Add $15.00 to foreign memberships.)

I select membership in the following association(s) of the American Alliance. (Circle two boxes, indicating your first and second choices. You may select one association twice. Each association that you select receives a portion of your dues.)

- [1] [2] American Association for Leisure and Recreation (AALR)
- [1] [2] National Dance Association (NDA)
- [1] [2] Association for the Advancement of Health Education (AAHE)
- [1] [2] Association for Research, Administration, Professional Councils and Societies (ARAPCS)
- [1] [2] National Assocation for Girls and Women in Sport (NAGWS)
- [1] [2] National Association for Sport and Physical Education (NASPE)

I primarily work in this employment area:

- ☐ Elementary (1)
- ☐ Secondary (2)
- ☐ Community/Junior College (3)
- ☐ College/University (4)
- ☐ Agency (5)
- ☐ Business/Industry (6)
- ☐ Hospital/Clinic (7)
- ☐ Recreation/Parks (8)
- ☐ Other (9) _____

I am remitting my dues

- ☐ by enclosed check, payable to AAHPERD
- ☐ by VISA (13 or 16 numbers)
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(please read and write numbers carefully)

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Four dollars of your dues are allocated to Update, and twenty dollars per each selected periodical.

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P88

AN INVITED ARTICLE

ANTHROPOMETRY

Thomas S. Baur Ph.D.
U.S. Army Fitness School

INTRODUCTION

People never seem to be satisfied with the size of all, or part, or their body. consequently, a considerable amount of time and money is spent in efforts to alter physical appearance. However, it has become increasingly clear that size, per se, is not as important as the relative contribution of different tissues to that size. Health risks increase dramatically when the fat content of the body reaches extremes. The measurement of body composition has, thus, become relevant to an estimation of physical fitness, and has led to the evaluation of the science of anthropometry. Anthropometry deals with measurement of body size and proportion. Typically, it involves the use of skinfold and circumference measurements to estimate fat content. The purpose of this paper is to explain the basis of anthropemetric estimations of body composition and to describe the potential errors associated with these techniques.

Traditionally, the assessment of body composition has been based on the two compartment model. In other words, it is based on the assumption that the body is composed of only two types of tissue: lean and fat. If the total body density was known, along with the lean and fat components, then the proportional contribution of each component could be determined. The densities of fat and lean tissues have been determined through the chemical analysis of cadavers. The unknown quality is the total body density. Density is mass per unit volume. Body mass can be measured conveniently on a scale, but the volume of the body is more difficult to determine. While most volumes can be determined mathematically, the complex geometry of the body precludes that possibility. The body volume must be measured. Presently, the "gold standard" for the determination of body volume is hydrostatic weighting. A person's weight in water will be less than in air because of Archimede's principle states that an object in water in buoyed by a force equal to the volume of water it dispaces. Therefore, a person's weight in water subtracted from their weight in air is the weight of the water displaced by the subject. Since the density of water at different temperatures is known, dividing it into the weight of the water displaced will give the volume of water displaced or body volume when corrections are made for air trapped in the lungs and the gastrointestinal tract.

Hypothetical Example

Weight in air 50 kg
Weight in water - 2 kg

Weight of water displaced = 48 kg = 48000 g

Density of water @35 C .9940 g/ml

Volume of water displaced 48290 ml

Correction for trapped gases - 1200 ml

Body Volume 47090 ml

DENSITY = Mass/volume

= 50000 g/47090 ml

=1.062 g/ml

The conversion of total body density to percent body fat is possible mathematically because the densities of fat and lean tissue are known. There are several equations that can

be used to make the conversion. One of the most popular is the Siri equation which is based on densities at 1.1 g • cc -1 and .90 g • cc-1 for fat free and fat tissue, respectively.

Siri Equation

% Body Fat = 495/body density - 450

495/1.062 - 450 = 16% Body Fat

Sources of Error Associated with Anthropometry

As most anthropometric protocols utilize hydrostatic weighting as their criterion reference it is important to understand the errors inherent in this procedure. To begin with one must examine the model upon which it is based. The two compartment model is limited because it relies on the following assumptions. (1)

1. The densities of fat and lean tissue are known.
2. The densities are constant among individuals.
3. The densities of the individual tissues comprising the lean component are constant within and among individuals, and their proportional contribution to the density is constant.
4. The individual differs from "reference man" only in the amount of depot fat.

Although densities of fat and lean tissues are known it is important to realize that the determination of these densities was based primarily on the study of young, white, non-athletic male cadavers. It is now evident that the density of individuals who do not fall within this categorization may be different. Therefore, the use of equations based on these studies, such as the Siri equation, in other than young, white, non-athletic males introduces the potential for significant error. Unfortunately, the Siri equation has been used in a variety of populations. The results of such studies should be viewed with caution.

Most of the problems associated with the two compartment model involve the lean component. The lean component is comprised of several different types of tissue including bone, muscle, and organ tissues. The total lean density is determined by the densities of the individual tissues and their proportional contribution to the total which is assumed to be constant. However, the densities of the individual components may vary as does their proportional contributions. Maturity, for example, has a significant impact on bone density. In adolescents the bone desity is generally lower than that in the adult. The elderly frequently exhibit lower bone density as a result of aging. Racial differences are also apparent. Blacks have been shown to have higher lean densities than whites because of their bone density (2). The constant proportional contribution of the lean components is also in doubt. The proportional contribution of the muscle mass will be higher in a resistance trained athlete than in a sedentary individual. It is obvious that some of these assumptions are violated in certain individuals. Recent technological advances have enabled further compartmentalization. The accurate measurement of bone densities, muscle mass, and total body water are now possible and with refinement will improve the accuracy of body composition assessment. But, for the present, it is necessary to appreciate the limitations of the two compartment model and the fact that any estimate based on this model is subject to error.

In addition to errors related to the model, measurement eror must be considered. In hydrostatic weighting several sources of measurement error exist. It is beyond the scope of this paper to identify and discuss each of these errors. The measurement error from all sources is quantitated statistically by the error variance. Typically, measurement error accounts for the largest portion of the total variance. An important statistic to consider when evaluating the accuracy of a prediction equation is the standard error to estimate (SEE). The SEE includes measurement error as well as error due to lack of correlation betwoeen the dependent variable and the independent variable(s). Under the best conditions the standard error of estimate associated with hydrostatic weighing from 1-3% body fat. Anthropometric techniques that use hydrostatic weighing as the criterion reference begin with this error and must add to it the error inherent to the specific technique. It has been estimated that nearly 50% of the prediction inaccuracy of body density prediction equations can be traced to the criterion reference, hydrostatically determined body density. The standard error of estimate associated with skinfold and girth measurements generally range from 3.0-4.0 percent body fat.

It should be apparent that anthropometry is an inexact science. Yet, in the physical education setting, where budgets and equipemnt are limited, it is the preferred method. Therefore, it is vitally important that the physical educator understand the limitations of anthropometric techniques. An appreciation of the error associated with anthropometric measurements is not intended to discourage their use. There is a legitimate need for body composition assessment in the physical education arena. The key lies in minimizing the error.

Interpretation of Anthropometric Results

A recognition ofthe limitations of anthropometry is necessary for the accurate interpretation of results. Many who use anthropometry are too eager to categorize individuals. More example, if the SEE for a specific protocol is 3% and the prediction equation indicates 18% body fat, the individual could be anywhere from 15-21% fat. To report that the individual is 18% fat and needs to lose 10 pounds to reach an ideal

15% is inappropriate considering that the individual may already be 15% fat. Endurance athletes frequently have predicted body fat values below what is considered essential for survival, yet they are able to function at levels far beyond that of "average" people with "normal" body fat. How can this be explained? The athletes are not truly below essential fat levels but because of measurement error, the use of inappropriate protocols, and the violation of assumptions necessary for anthropometric measurements it appears that they are. A coach who does not understand how such results are possible may advise the athlete to gain weight to reach a body fat defined as optimal for performance. The additional weight could lead to a decline in performance. If estimates are made without a complete understanding of the protocol and its foulndation, then the chances of misinterpreting the results are high. Prediction error can be minimized if prediction equations are appropriately applied. Frequently a protocol is utilized because it is the one with which the evaluator is familiar. This practice can lead to significant error if the individual being assessed is not described by the population on which the prediction equation was developed. Most equations developed prior to the mid 1970's used samples that were homogeneous in terms of age and body fatness and assumed a linear relationship between skinfold fat and body densidy. The use of these population specific equations on subjects other than those in that specific population increases the error substantially. Recent research with heterogeneous samples has shown that the relationship of skinfold fat to body density is not linear and that age is independently related to body density. This understanding has lead to the development of quadratic, generalized equations which can be applied over a wide range of ages and to both sexes. The generalized approach does not improve the correlation over linear, population specific equations, but it does reduce large prediction errors that occur at the extremes. Consequently, one generalized equation can replace several population-specific equations without a loss of accuracy.

The trend has been toward generalized equations but the need still exist for good population specific equations. Certain populations such as adolescents, elite athletes, and the elderly must be assessed with population specific equations. The problem is that there are no good equations for these groups. Presently, it is difficult, if not impossible, to accurately predict body fat in these populations because they violate several of the assumptions of the compartment model. AAHPERD recognized the inappropriateness of using prediction equations in youth advocates the use of two skinfold measurements to generally describe their level of fatness. Care must be taken when selecting a protocol to insure that it can be applied to the group being tested.

CONCLUSION

In summary, no measurement is exact. Measurement of body fat is particularly prone to error because it cannot be done directly. Indirect measurements that rely on assumptions that are frequently violated can lead to substantial error. Some error is tolerable, but efforts must be made to minimize it. In light of the health and performance consequences of having too little or too much body fat, the benefits of body fat screening far outweight the risk of incorrect estimates. However, it is important that the limitations of the screening technique be understood in order to insure appropriate application and accurate interpretation of the results. The physical educator must understand the basis of any prediction of body composition if the measurement is to have any meaning.

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2. Schutte, J.E., E.J. Townsend, J. Hugg, R.F. Shoup, R.M. Malina, and C. Gunner Blomquist. Density of lean body mass is greater in Blacks than in Whites. J. Appl. Physio: Respirat. Environ. Ex. Phys. 56(6): 1647-49, 1984.

For Further Information
Contact
Dr. Thomas Baur
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Lexington, Va 24450

Conferences/Workshops

October 20-22, 1988. Ohio National Physical Education Conference K-8. Sponsored by Ohio Advisory Council, endorsed by AHPERD. The conference will be held at Youngstown State University, Youngstown, Ohio. For more information contact Barbara Wright, Dept. of Health and Physical Education, Youngstown State University, Youngstown, OH 44555. Tel. (216) 742-3654.

November 7-11, 1988. The American College of Sports Medicine Health/Fitness Instructor Workshop and Certification. Sponsored by Adelphi University, Garden City, Long Island. For more information contact Robert M. Otto, Director, Human Performance Lab, Adelphi University, Garden City, NY 11530 (516) 663-1053, or Ann Partlow, Director of Continuing Education, ACSM, PO Box 1440, Indianapolis, IN 46206 (317) 637-9200.

COACHING CORNER ....

RESPONSIBILITY OF COACHES TO YOUR PLAYERS

Edith E. Godleski
Associate Professor
Department of Physical Education
Indiana State University

We, coaches, deal with peoples lives and emotions and are instrumental in the development of the future of each player who comes in contact with us. I tend to associate coaching with the science of puppetry. The form of puppetry I refer to is the marionette. The definition of marionette is a figure string operated through manipulation of inanimate objects.

In coaching, we manipulate human beings who have and display emotions. For example, in the game of basketball, coaches manipulate or pull certain strings when substituting players for one another. We yank the players from the game and verbally attack them in front of the entire sideshow held in the gymnasium. How often do we tend to treat players as inanimate objects, like puppets, rather than human beings with feelings?

Which string do we pull when there are 10 seconds left in a game so we can have the crowd exalt another human being? How does this affect the other marionette who is clothed similarly, but is a slightly different model determined by its mold and make-up?

Do we ever take into consideration the other player's individual personality or emotional stability while we patronize the heroine?

The string used in puppet manipulation is a fine, thin wire. The ultimate intent is to minimize the intrusion of the operator. Instead, we find coaches who use a thick big "tug of war" rope and maximize the operator. It is the coach who becomes the center of attention rather than the marionette describing the show.

If we were required to give a performance in the science of puppetry; we first have to construct our marionette. In doing so we compensate various material things to assure freedom of motion so the story could be told as realistic as possible on a make believe stage. With this science, the operator allows its marionette a freedom of motion. But often times, as we construct our team, we will find operators (coaches) who want to pull all of the strings at once and the next thing we find is a group of indivdiuals sorely over-coached and their precious individuality suffocated by an over zealous operator.

Athletes come as marionette, of different backgrounds and aspirations. They will react to stress and pressure differently. The same string on one marionette won't necessarily dictate the same movement on another marionette, so in turn, will it on basketball players.

The point I am leading to is the string you pull is the one that will affect your ball players and their lives the most. From my personal viewpoint, as a former college coach, many high school coaches want their players to get a scholarship somewhere, some place. Sure this looks good on the resume, but before we ship the players to college, we must evaluate their talents as realistically and as humanly possible.

Further, I think you must evaluate their personalities to the rigors of college life, and playing basketball. Does the player have the "mettle" (mental toughness) to cope with the travel, hours, and constant training? When the players sever their umbilical cords, can they adjust to the fact of not having someone leaning over their shoulders and making them study? Will they accept not being the star and not having the offense revolve around them? Will they realize that they must earn their position from the bench to first substitute to the starting role? I realize this can be tough and often times intangible, but look at it objectively and be honest with the college coach. Try to let the college coach and the individual be aware of his/her be aware of their limitations.

A further concern you should have for your players is the caliber of

basketball played at a particular institution. The biggest hang-up college coaches have is their honesty on whether or not their player can play in a particular Division. Ninety-five percent of all the high school coaches have rarely seen a women's college game, Div. II or NAIA. Some will say they have seen Texas on TV and assume their player can play college level ball. Television can be deceptive, especially in size and quickness.

I, personally feel that watching just ISU, Purdue, or Butler is not fair to the game of basketball. You must attend all Divisions I, II, III, and NAIA , and then evaluate the talent of your players and the competition encountered at each level. All 3 Divisions play good basketball, but the caliber of basketball varies because of size and quickness of the players. I realize the basketball coaches' schedule is busy, but you owe it to your players you are helping to obtain a scholarship by attending varied college basketball games.

Moreover, another area often times mis-read, is the type of play that is found at each institution. As you attend a college game you should become aware of:

* the style of offense or defense,
* the decorum of the coach on the sideline,
* the handling of players, and
* the general personality of the team as a whole on the floor

All of these factors you must observe before you can truly understand a particular collegiate program. Now the question is, where will these players best fit in the collegiate organization? If your player is shy, sensitive and the coach is a vociferous hot head, who will be more miserable?

A final concern sometimes neglected is, did we ever ask the player(s) point blank if they want to play college basketball? Parents may want the player to, you may expect it, but we neglected to check with "Suzie". There is an old saying, "if two people ride the same horse -- someone has to ride behind". Check to see if you have the correct player riding up front. Maybe a player's success on the court came because of a good team, or a great coach who took all the physical and mental abilities, blended them into a group and made them a winner. You need to ask yourself, can that player alone, leave that group and play college basketball? Maybe the player is the rider who was riding behind and the playing days on a highly skilled team are over. This trauma is tough on any player and we must help the player to adjust to the new realities of life.

In closing, when you approach a college coach, be honest. Tell the coach what to expect. I remember when I was a coach that I was lied to, kept in the dark, and when, after the fact, talked with the high school coach about what "Suzie" did, the comment was "sounds like her"! I realize most coaches have developed a style and coaching philosophy and the science of puppetry is rather far-fetched. But we are a people-oriented science, not a science dealing with inanimate objects that are operational only because the operator or coach can manipulate them. The one thought I'd like to leave you with is that you must realize the game is for the players. This experience becomes an integral and rewarding part of their life an d we owe them that enrichment. Winning is the by-product of each team performing to the best of their abilities. Hopefully, you as a coach or operator will run your show with a fine wire and not with a course rope, so you can minimize your intrusion of the performance of your team. Your must continue to manipulate the strings or the marionette will collapse; **But** allow the players the freedom to enjoy the game of basketball and let them perform the greatest show on earth !!! We must all remember, "It is **not** whether we win or lose, but how **they** played the game."

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Edie is a former college basketball coach. She retired from coaching at Indiana State University in 1983.

AAHE Awar $400,000 AIDS Education Grant

The Association for the Advancement of Health Education (AAHE) has been awarded a four-year, $400,000 cooperative agreement with the U.S. Centers for Disease Control to develop high quality curriculum and teacher training materials for AIDS education.

Phase I of the project specifically proposes to provide the much needed multiculturally sensitive AIDS education curricular materials for intermediate and secondary grade students. The materials developed for use by students will be available in English-only formats, as well as the standard bilingual (English/Spanish) format.

Phase II of the project will focus on the development and dissemination of a multicultural teacher training kit with interdisciplinary application potential.

The kit will be be provided in both English and the standard bilingual format. The modular components, available in both print and audiovisual formats, will address preservice, inservice, hispanic youth, urban and rural populations, and elementary and secondary levels.

Both Phase I and Phase II will address the dissemination process of the materials.

For further information on the project, contact AAHE at 703-476-3438.

AAHE will be working with the following organizations during the course of the project: American College of Preventive Medicine, American Home Economics Association, American School Health Association, Association of Teacher Educators, ETR Associates, Inc., National Association for Bilingual Education, National Association of Biology Teachers, National Coalition of Hispanic Health and Human Services Organizations (COSSHMO), and Prince George's County Public Schools.

AN INVITED ARTICLE

Florida's "Personal Fitness" Course: Why Not "Indiana's"?

Dewayne J. Johnson and Manny Harageones

Florida State University

K-12 physical education has been under attack and subject to unkind comments for many years. Many of those who viewed physical education favorably, did so because they view physical education as synonymous with athletes, not because of the quality of the program. When budget cuts are required, school boards look at physical education as an expendable subject. In many states or local districts, physical education requirements have been reduced or eliminated.

That was the scenario in Florida prior to 1983. In fact, the Florida Legislature was on the verge of passing educational reforms that did not include physical education as a requirement for high school graduation. At that point, Florida's Association for Health, Physical Education, Recreation, and Dance successfully lobbied for physical education to be included in the statewide high school graduation requirements. In response to that lobbying effort, the Florida Legislature included in the 1983 education reform bill the mandate that every high school student be required to pass a one semester physical education course. Even more significant was the fact that the content of the course was specified in law.

This was the first time that Florida had a statewide physical education reqirement. The law specified that the 1/2 credit in physical education should focus on the assessment, improvement, and maintenance of personal fitness. The intent of the Florida Legislature was to provide all high school students with a basic physical education course that would contribute to the compelling state and national interest of having a physically fit citizenry.

The Personal Fitness course was Florida's response to the growing pressure from parents and the general public to do something about the quality of secondary physical education programs. This course is Florida's high school physical education graduation requirement. The passage of legislation requiring the Personal Fitness course was a direct result of successful lobbying efforts by the Florida Association for Health, Physical Education, Recreation and Dance.

The results of implementing this course has been phenomenal. The Personal Fitness course has generated more positive comments about the physical education programs in Florida than any other single thing. Parents, school administrators, school board members, and even state legislatures are singing the praise of physical education and Personal Fitness. It has also provided students with a common focus for physical education. Students, for the first time, understand why it is important that they learn how to become physically fit, and why it is important to elect to take other physical education courses, such as tennis or racquetball or aerobics.

We do not want to mislead anyone. All is not perfect, not even in the Personal Fitness course. The implementation of the Personal Fitness course has varied from the in-

tent in some schools. But an opportunity has been provided. Good teachers and good administrators, and interested parents now have something with which they can build quality physical education programs.

This cognitive based Personal Fitness course has been Florida's answer to all of the jokes and humiliating comments about our profession. It has allowed physical education teachers to point with pride to the content of their program. The implementation of the Personal Fitness course has resulted in renewed administrative, parental, and student support for Florida's high school physical education programs. The education reforms provided an opportunity to do what the literature and research indicate ought to happen. Physical education profesionals in Florida take pride in the fact that they seized the opportunity and took bold steps to make the education reforms work for them.

Your school, district, or state can also seize the opportunity. This type of course can also be the key for you and your school program, or school district program, or , like Florida, statewide.

Recommended Implementation Strategies

The implementation strategies listed below will tell you a little about the Florida Personal Fitness course. These recommendations are given to help serve as a guide for those who are planning such a course or for those who would like to do so in the future. The Personal Fitness course in Florida was implemented during the 1984-85 school year. The length of the course is one semester. Recommended implementation strategies include the following:

Scheduling--Students should take the Personal Fitness course in either the 9th or 10th grade so they can apply knowledge of the course content throughout their high school years. Additionally, the content of the Personal Fitness course should permeate all other physical education courses at the high school level.

Laboratory/Classroom Instruction--Instruction each week should be the equivalent of three days of laboratory activities and two days of classroom teaching. Some days may be 100% classroom instruction or lab activities, while others may be 50/50% or 80/20%.

Classroom Space--Classroom space should be provided for the Personal Fitness course because of the nature of the class.

Class Size--The class size of the Personal Fitness course should be consistent with those of other academic courses.

Instructional Materials--Schools who implement such a course should provide textbooks for the course. Students should have their own individual copies of instructional materials of the Personal Fitness course to enhance acquisition of course content.

Fitness Assessment--Pre- and post-assessment of the health-related components of physical fitness should be administered utilizing the AAHPERD Health-Related Physical Fitness Test. Students should be assisted in selecting planned exercise programs based upon their assessment results and encouraged to continue participation throughout the course.

Homework--Assigning both cognitive and psychomotor homework should be viewed as essential elements in the Personal Fitness course and should be assigned in the same proportion as homework assignments in other subject areas. Students should keep notebooks to faciliate tracking of activities from instructional materials, homework in-and out-of-class assignments, and exercise logs.

Student Evaluation--The purpose of evaluation should extend beyond the collection of data for assignment of grades. Evaluation should be viewed as a diagnostic tool to help both the student and the teacher. An effective evaluation system should correlate with the student performance standards. Student evaluation should include the cognitive, affective, and psychomotor domains.

Curriculum Framework/Student Performance Standards*

The purpose of this course is to provide a student with opportunities to develop an individual optimal level of physical fitness, acquire knowledge of physical fitness concepts, and acquire knowledge of the significance of lifestyle in one's health and fitness.

The content should include, but not be limited to, knowledge of the importance of physical fitness, assessment of the health-related components of physical fitness, knowledge of health problems associated with inadequate fitness levels, knowledge and application of biomechanical and physiological principles to improve and maintain the health-related components of physical fitness, knowledge of safety practices associated with physical fitness, knowledge of psychological values of physical fitness including stress management, knowledge of sound nutritional practices related to physical fitness, and knowledge of consumer issues related to physical fitness.

After successfully completing this course, the student will be able to:

1. Understand the components of physical fitness.

The student will:

1.01 define physical fi ness..

1.02 identify and de scribe

health-related components of physical fitness.

1.03 identify and describe each of the skill-related components of physical fitness.

1.04 compare and differentiate health-related fitness.

2. Assess individual fitness levels.

The student will:

2.01 identify methods of determining level of flexibility.

2.02 identify methods of determining level of cardiovascular fitness.

2.03 identify methods of determining level of muscular strength and muscular endurance.

2.04 identify methods of determining estimated percent of fat.

2.05 define ideal body weight.

2.06 describe at least one method of determining level of flexibility.

2.07 describe at least one method of determining level of cardiovascular fitness.

2.08 describe at least one method of determining level of muscular strength and muscular endurance.

2.09 describe at least one method of determining estimated percent of body fat.

2.10 describe at least one method of determining ideal body fat.

3. Understand the relationship between physical fitness activities and stress.

The student will:

3.01 define stress.

3.02 identify the different types of stress.

3.03 identify the positive and negative aspects of stress.

3.04 identify specific health problems that may be caused or affected by negative stress.

3.05 identify stressful events in his/her daily life.

3.06 identify positive coping strategies.

3.07 identify negative coping strategies.

3.08 identify techniques of progressive relaxation

3.09 describe the benefits of vigorous and non-vigorous physical activities to stress diversion.

4. Understand sound nutritional practices related to physical fitness.

The student will:

4.01 identify the basic four food groups

4.02 explain the 4-2-4-4 system of maintaining a nutritionally sound diet.

4.03 identify the number of calories which make up a pound of fat.

4.04 identify myths assoicated with nutritional practices related to physical activity.

4.05 explain the use of exercise as a method of weight control.

4.06 explain the use of diet as a method of weight control.

4.07 explain the combined use of exercise and diet as a method of exercise and diet as a method of weight control.

5. Understand health problems associated with inadequate fitness levels.

The student will:

5.01 identify health-related problems associated with inadequate flexibility

5.02 identify health-related problems associated with inadequate cardiovascular fitness.

5.03 identify health-related problems associated with inadequate muscular strength and muscular endurance.

5.04 identify health-related problems associated with an abnormal percentage of body fat.

6. Understand consumer issues related to physical fitness.

The student will

6.01 differentiate between fact and fad, quackery and myths as related to fitness.

6.02 determine the validity of marketing claims promoting fitness products and services.

6.03 identify consumer issues related to selection, purchase, care and maintenance of personal fitness equipment.

7. Evaluate physical activities in terms of fitness value.

The student will

7.01 identify the contributions of physical activities to the development of the health-related components of physical fitness.

7.02 identify the contributions of physical activities to stress diversion.

8. Select from a variety of dynamic

activities those which will help them to improve physical fitness levels.

The student will:

8.01 identify a variety of static and dynamic stretching exercises which promote flexibility.

8.02 identify a variety of aerobic activities which promote cardiovascular fitness.

8.03 identify a variety of activities which promote muscular strength and muscular endurance.

8.04 identify a variety of activities which promote ideal body weight.

8.05 identify a variety of activities which promote stress diversion.

9. Design a fitness program that meets individual needs and interest.

The student will:

9.01 design a personal fitness program that will lead to maintain an optimal level of health-related components of fitness, based upon an understanding of training principles, individual skill level and availability of resources.

10. Understand and apply correct biomechanical and physiological principles related to exercise and training.

The student will:I

10.01 identify factors one should consider before engaging in a physical fitness program.

10.02 describe the importance of a warm-up/cool down period when participating in physical activity.

10.03 describe the training principles of overload, progression and specificity (frequency, intensity, duration).

10.04 describe how flexibility is improved through application of the training principles.

10.05 identify the biomechanical principles related to flexibility activities.

10.06 describe how cardiovascular fitness is improved through application of the training principles.

10.07 describe how muscular strength and muscular endurance are improved through application of the training principles.

10.08 describe how muscular strength and muscular endurance are improved through application of the training principles.

10.09 identify the biomechanical principles related to muscular strength and muscular endurance activities.

10.10 determine his/her target heart rate zone.

11. Understand and apply safety practices associated with physical fitness.

The student will

11.01 describe safety procedures which should be followed when engaging in flexibility, cardiovascular, and muscular strength and muscular endurance activities.

11.02 explain methods of maintaining proper fluid balance during physical activity.

11.03 identify signs of heat illness caused by fluid loss.

11.04 identify precautions to be taken when exercising in extreme weather and/or environmental conditions.

12. Exhibit an improved state of physical fitness.

The student will demonstrate an improvement of the heath-related components of physical fitness as measured by the AAHPERD Health-Related Physical Fitness Test.

13. Assess individual lifestyles as related to quality living.

The student will:

13.01 identify the primary risk factors associated with disease, disability, and premature death.

13.03 identify risk factors he/she needs to change and or modify to pursue a healthy lifestyle.

13.04 describe the ralationship between one's health and fitness and one's lifestyle.

14. Exhibit a positive attitude toward physical selves and lifelong physical activity.

The student will:

14.01 identify attitudes that people have toward exercise and physical activities.

14.02 identify reasons why fitness should be a compelling state and national concern.

14.03 describe the benefits of participating in a regular personal fitness program.

14.04 describe the benefits of optimal fitness.

14.05 demonstrate a positive attitude toward his/her physical self and lifelong physical activity.

After successfully completing this course, the student will be able to

1. Understand the components of physical fitness.
2. Assess individual fitness levels.
3. Understand the relationship between physical fitness activities and stress.
4. Understand sound nutritional practices related to physical fitness.
5. Understand health problems associated with inadequate fitness levels.
6. Understand consumer issue related to physical fitness.
7. Evaluate physical activities in terms of their fitness value.
8. Select from a variety of dynamic activities, those which will help them to improve fitness levels.
9. Design a fitness program that meets individual needs and interest.
10. Understand and apply correct biomechanical and physiological principals related to exercise and training.
11. Understand and apply practices associated with physical fitness.
12. Exhibit an improved state of physical fitness.
13. Assess individual lifestyles as related to quality living.
14. Exhibit a positive attitude toward physical selves and lifelong physical activity.

References

*Florida Department of Education, (1984). *Personal Fitness Curriculum Framework/Student Performance Standards*. Tallahassee, Florida.

Authors

Dewayne J. Johnson is Professor of Movement Science and Physical Education at Florida State University. He has served on a number of task forces and committees related to the Personal Fitness course. Manny Harageones is the Physical Education Consultant with the Florida Department of Education and has been instrumental in the development and implementation of the Personal Fitness course.

Aging Council Produces Video

The ARAPCS Council on Aging and Adult Development has produced a new videotape, unveiled at the 1988 Kansas City convention. The 60 minute video consists of three segments depicting gerontological research, HPERD programming for older adults, and the evolution of the Council.

The tape is available for purchase at a modest price. For ordering information, contact Dr. Ray Ciszek's office at AAHPERD headquarters, (703) 476-3430.

Wanted: Successful Dance Programs

The national Dance Association is conducting a project to identify successful U.S. K-6 and 7-12 dance programs. Increasing governmental and National Endowment for the Arts interest in arts education has resulted in regular inquiries about successful programs in dance for both elementary and secondary students. NDA hopes to build a reference file of such programs.

If you can help, please write a single page description of the program including the kind of dance, teacher, time per week, duration, grade level and curriculum features which contribute to effectiveness. Include your name, address, and phone number. NDA intends to follow-up each submission. Send descriptions to Dr. Margie Hanson, NDA Executive Director, 1900 Association Drive, Reston, VA 22091.

AAHE To Help Establish National Health Objectives for the Year 2000

AAHE and the American Alliance are participating with the U.S. Public Health Service (PHS) and numerous other national professional and voluntary organizations in a three-year process to develop national health objectives for the year 2000.

The health objectives, which are to be drafted, refined and adopted by early 1990, will become the preventive health policy framework for the nation during the next decade. The intention is to build and improve upon the base built in this decade by the 1990 Health Objectives for the Nation.

The process for developing the objectives is as follows:

1. formation of a consortium of national professional and voluntary associations an state health departments to assist PHS and the Institute of Medicine in gathering professional and consumer input to develop measurable targets for health improvements by the year 2000;
2. conducting regional hearings to gather testimony about preventive health priorities for the next decade;
3. drafting objectives and refining them through extensive expert and public review and comment;
4. publication of year 2000 health objectives as a second Surgeon General's Report on Health Promotion and Disease Prevention; and
5. conducting a national conference to review the national health objectives progress in the 1980s and set the tone and direction for the 1990s.

As the AAHE/American Alliance's first step in this process, a public hearing on the national health objectives for the year 2000 held during the American Alliance 1988 Kansas City Convention.

Student's Speak Out...

STRESS AND ATHLETES

Leah Sluder
Graduate Student
Indiana State University

Introduction

Stress has been a topic of research by professionals in general psychology for many years. Hans Selye has been credited with defining stress and initiating extensive research concerning the physiological and psychological effects of stress upon an individual.

In recent years stress has received tremendous amounts of attention in popular and scientific literature. According to Pargman (1986) stress has been indicated as a factor in various disorders such as mental illness, cancer, cardiovascular disease, and the common cold.

The purpose of this paper is to define stress, indicate the factors that influence stress as it pertains to a motor/athletic performance, and discuss management and coping techniques that may help to eliminate the overall effects of stress on a motor performance.

Definition

Selye (1980) defines stress as the nonspecific response of the body to any demand made upon it. This definition for stress was formulated in 1936, yet remarkably few groups of individuals agree that there is a clear definition of stress. According to Seyle (1980) the business person may feel stress as frustration or emotional tension, the air traffic controller as a problem in concentration, the athlete as muscular tension. It is this final group (stress on the athlete) on which the majority of this paper will focus.

FACTORS INFLUENCING STRESS

According to Buceta (1985) it has commonly been known that a certain amount of stress (which enhances the state of alertness of the individual) leads to a level of performance. Buceta (1985) further states that according to research by Yerkes and Dodson (inverted U hypothesis) an optimal performance by a performer follows at least a moderate increase in arousal.

Arousal

Arousal is one of the aspects of the stress response. Stress may actually have an affect on performance if the level of arousal goes well above or below moderate; although there seems to be no definitive answer to "moderate" level of arousal.

Pargman (1986) states that an individual must be minimally activated or aroused if that individual is to be alert to stimuli in the environment. He further describes arousal as the extent that all bodily organs and systems are "cranked up" and functioning.

As indicated earlier, there is support for the idea that an increased stress response (arousal) to an optimal level increases motor/athletic performance. Franks (1984) indicates that the optimal level probably differs with each individual and task.

When an individual perceives stimuli from the environment as being negative, this stimuli is considered a stressor. These stressors can influence the body's fluid and biochemical balance (homeostasis).

Stressors

Pargman (1986) explains that depending upon an individual's back-

ground and experience, stimuli may or may not be interpreted as a stressor. Pargman (1986) places stressors into six broad categories: social, physical, chemical/biochemical, bacterial, climatic, and physical environment. Those categories most important to theis review will briefly be discussed.

Social Stressors: Basically, this reaction occurs as an individual interacts with other individuals. For example, a person attends a gathering where she/he suffers from stress. This stress stems from the fact that the individual may not be familiar with other individuals at the gathering.

Physical: Common in the sports-world is the treat of pain and injury. An athlete who has a serious injury to the knee or other parts of the body may suffer from stress. This individual may be reluctant to return to competition after rehabilitation.

Psychological: Anxiety is a psychological stressor with poorly defined causes. A performer may suffer from pre-game "jitters". This nervousness results from anxiety related to performance outcome and evaluation (internal and external).

Obviously, some performers may be more critical than others. An individual may be thinking about previous performances. Additionally, the performer may be comparing her performance with that of another performer. This anxiety may lead to psychological stress which could adversely interfere with performance.

Climatic: Since many athletic events are out of doors, climate may affect performance. Some sports are played regardless of weather conditions. Thus, the quality of a performance may be influenced by extreme heat or cold.

Competition

The stress associated with athletic competition can be easily detected. It doesn't take an expert in the area of stress research to detect the nervous tension apparent in competition.

According to Tutko (1976) competition is an intrinsic form of pressure. Tutko (1976) explains that our society is one heavily oriented toward competition. Unfortunately, even play becomes a test of superiority.

Tutko (1976) states that the challenge of various tadks required in sports and accomplishing these tasks against competition are automatic setups for pychological distress. Because a performer reaches a goal or defeats an opponent, she may briefly be satisfied. Furthermore, there is usually someone who performs better or faster, and many judgements an individual makes about herself may be essentially negative.

The experienced athlete may be conditioned or used to the pressures of competition. With increasing regularity, competitive stress becomes troublesome to the performer. According to Kroll (1982) competitive stress becomes toublesome enough to affect performance, contributes to emotional unhappiness, and may even be responsible for the individual quitting competition entirely. Kroll (1982) notes the following with regard to competitive stress:

1. Nearly all Japanese athletes from the 1960 Rome Olympics reported that stress detrimentally affected their performance.

2. The cumulative stress effects are apparent in the findings that about 50% of nationally ranked swimmers in 1968 had quit swimming by 1972. The overwhelming reason given by the swimmers who quit was the pressure created by an inability to perform up to expectations.

Kroll (1982) compiled a survey (not a statistical analysis) to determine stress items most frequently cited by athletes. These items to be explained briefly are: somatic complaints, fear of failure, feelings of inadequacy, loss of control, guilt, and agression.

Somatic complaints refers to physical reactions resulting from the emotional response to stress. Examples of somatic complaints according to Kroll's (1982) survey include upset stomach, nervousness, trembling, and sore muscles.

Fear of failure may include letting teammates down, performing to one's ability, losing, and living up to the coach's expectations. Occasionally, Kroll (1982) notes, items such as making a foolish mistake, falling for a sucker play, and choking can lead to a fear of failure.

Feelings of inadequacy, loss of control, and guilt are all additional items that may affect a motor performance. Related to the previous stated information concerning the effects of competition, Buceta (1985) states that unpredictability of outcome, and frustration can influence an athletic performance.

Unpredictability of outcomes refers unknown circumstances surrounding competition. The performer may not be able to predict the abilities of other competitors, the difficulty of the event, or one's own talents in comparison to the opponent. The greater the predictability the more likely is the appearance of the response of excessive stress.

If a performer has a high level of control over the performance of an event, she can predict the outcome. Conversely, a performer may have little control and unexpected events may produce a stress response.

An athlete may predict a negative outcome which may result in frustration. According to Buceta (1985) adversive events may take place, such as bed practices and injuries, or during competition the performer makes errors that result in positive actions by the opposition. This might also lead to frustration and in turn stress.

Performance as a Stressor

According to Welford (1968) tension and arousal levels are sometimes higher before a task has begun than they are once it has started, or that they decline as performance proceeds or the task is learnt. In

other words, as a performer becomes familiar with the task, learning occurs and uncertainties disappear.

Welford (1968) states that individuals presented with prolonged stress become conditioned; that is, they react to stress in certain situations whether or not it's justified.

Although research by Franks (1984) dealt with stress and physical activity (not performance), the findings are related and cited in this review as follows.

1. Light activity before and after heavy exercise decreases the stress response and acute physical activity reduces the stress reaction to stressors.

2. When related to perceived stressor, activity gives the individual an increased feeling of control over the situation.

3. Activity can reduce stress by providing a distraction from stressors. Many sports are characterized, at least initially, by the general nature of the task to be anxiety or stress producing.

An interesting study by Mace and Carroll (1985) involved the stressful undertaking of abseiling down a climbing rope form the roof of a 70 foot building. Obviously, this performance of a motor skill involves high levels of stress at leat prior to the acitivity. Mace and Carroll (1985) used stress inoculation training (which will be discussed in a later section) to reduce the stress that would have affected the performance of abseiling.

Gal-lor and Tenenbaum (1986) states that parachute jumping is an extremely stressful situation which involves acquisition of many new perceptual motor skills. According to Gal-lor and Tenenbaum (1986) those parachutists who had high body image and high self control could best cope with the stress associated with parachuting.

Both the concept of a performance and actual performance are potentially arousing. For some individuals just the idea of performance is upsetting and stressful. In our society, a competitive goal is highly valued. An individuals' ego may not be prepared to handle the evaluations that are made about a performance. It is difficult to avoid performances on the athletic field, arena, etc. Pargman (1986) indicates that unless a performer (athlete) can adopt a rational view of the experience and its consequences objectively, the level of arousal for a performance may increase to the extent of being a stressor.

Three categories of performance-related stress as stated by Pargman (1986) are: before, during, and after performance.

According to Pargman (1986) pre-performance stress reactions tend to be more cognitive (involving worry) than mid or post-performance anxiety. He states that worry involves the expectation of negative self-evaluation related to performance. This worry generally implies negative impacts on performance.

Pargman (1986) further states that performance itself permits a diffusion of biochemical weaponry, and anxiety may result. Prior to performance the attention of the individual is focused on the task; therefore, little effort can be given to coping with the anxiety.

Mid-performance stress is difficult to assess. Obviously, it would be rather inconvenient to stop an event and ask an athlete to respond to questions about stress. It is difficult to determine if an increase in heart rate is due to an increase in activity or to anxiety. Other research indicates that pre-match levels of anxiety are related to mid-match anxiety.

Pargman (1986) states that post-performance stress is likely to center upon performance outcome. Defeated sports competitors according to Pargman (1986) must deal with the following: rejection, loss, frustration, embarrassment, diminished sense of self-worth, and deprivation. All of these burdens can undoubtedly be stress inducimg. The feedback about a performance from coaches, friends, teachers, media, and others may be an evaluation that produces post-performance stress.

Furthermore, most athletes have been conditioned to believe that only success and victory are good, failure is viewed as bad.

Gross and Fine Motor Performance

Gross motor tasks involving large muscle groups generally respond optimally during times of high arousal. Thus, depending upon the performer, a certain level of anxiety may increase performance of gross motor skills. Again, the optimal level of arousal differs with the individual.

Fine motor tasks involving detail or high levels of accuracy may be inhibited by increases in arousal. Pargman (1986) states that too much chemical-electrical excitation at myoneural junction (the juncture of nerve and muscle tissue where the muscle's message to contact or relax is received), seems to upset the control necessary for delicate or fine motor task execution.

Pargman (1986) further states that prolonged attention to the demands of very fine motor tasks or skills may create a stress reaction associated with fatigue and boredom.

COPING AND STRESS MANAGEMENT

Anxiety generally begins gradually and continues to the level where it cha inhibit performance. According to Rivizza and Rotella (1982) to control anxiety performers (athletes) must recognize it early to stop the learned response to stress. Additionally, speedy intervention is important because stress is contagious from one athlete to the next. An observant coach may detect tension early by observing behavior that consists of excessive laughter or fatigue. Nail biting is an additional behavior that may indicate the performer is tense.

Ravizza and Rotella (1982) state that at the cognitive level one must talk with the athletes to determine the types of imagery and self-doubt that occurs: self-doubt; negativity, scattered thoughts (positive, self-enhancing, and self-defeating).

Additional information by Ravizza and Rotella (1982) provides insight to coping strategies for gymnast. Many psychologists and sport psychologist believe that awareness is thefirst step to changing any behavior. Ravizza and Rotella (1982) state that gymnasts must have their attention focused on what they were experiencing at the moment. It was important that the gymnast just observe what was being experienced, not judge it. This results in the gymnast (or any other performer of a motor task) focused in the present time orientation; aware and in control of their anxiety.

Additionally, Ravizza and Rotella (1982) indicate that this present orientation is also where the gymnast consciousness needs to remain during performance because breaks often occur due to anticipation of future moves or being relieved at completing previous moves.

Relaxation

Ravizza and Rotella (1982) state that relaxation should be progressive and begin early in the season. For example, once an athlete gets control in a quiet environment, distractions were added gradually.

Ravizza and Rotella (1982) provide three purposes of relaxation:

1. Relaxation provides a reference point for managing anxiety.
2. Relaxation prepares one for enhanced imagery and visualization procedures.
3. Relaxation aids in giving the person the overall benefits of relaxation (physiological and psychological nurturing).

Mental Imagery

Ziegler (1982) states that the use of mental rehearsal has been explored for years but questions regarding its effectiveness as a technique in stress management still exist. In research involving 45 subjects, Ziegler (1982) found that subjects using mental imagery and physical practice acquired successful techniques in free throw shooting faster than other groups.

Furthermore, Ziegler (1982) states that additional research is needed to provide direction concerning types of imagery, extent of information given, sex of subject, previous experience, repertoire of skills, and a variety of other factors affecting mental imagery as a stress management technique.

According to Pargman (1986) imagery techniques should be practiced to the point where the performer can quickly imagine her bodily form. Further, the performer can add emotional responses to stressors and resolve the problems through mental imagery. Therefore, real life reactions to stress can be reduced since they have already been encountered. Pargman (1986) concludes with the following in regard to mental imagery: the importance that its you yourself imagined to actually be experiencing an event, rather than you observing, as a third party.

Stress Inoculation Training (SIT)

SIT, according to Mace and Carroll (1985), is a treatment package which teaches skillls for coping with stress and provides opportunity for practice in rehearsing and applying these skills. The program involves exposing the individual to small, manageable units of stress and incorporate the use of modeling and reinforcing self-statements.

A study by Mace and Carroll (1985) involving stress inoculation training prior to abseiling revealed lower stress and anxiety levels from those performers in the stress inoculation training group.

Moreover, as with other types of stress management techniques, the performer must first learn to recognize stress and anxiety reactions. Finally, Pargman (1986) states that this cognitive approach (SIT) places a premium on imaginal confrontation with anxiety-causing circumstances.

Cognitive-Affective Stress Management Training (SMT)

This technique parallels the SIT in many ways. SMT as in SIT emphasizes the individuality of a stress management program. Ziegler (1982) states that some athletes will be some effective in stress reduction through the physical, while others will find greater success in cognitive methods. Additionally, there are five phases in the SMT program. Briefly, those phases are as follows: (Ziegler, 1982)

1. Pre-assessment phase deals with an overall picture of the athlete's abilities, strengths and weaknesses in coping with stress situations.
2. The second phase educates the athlete concerning the type of treatment and explains the intervention options for the program.
3. This phase provides the skill development portion of the program.
4. The fourth phase provides the athlete opportunity to practice newly acquired coping skills.
5. The final stage is an evaluation to determine effectiveness and to modify the program to accomodate individual needs.

Biofeedback

Zaichkowsky (1982) defines biofeedback as a technique where an individual interacts directly with a sensing device (machine) which in turn informs (feedback) the individual of moment-to-moment changes in biological function. This process allows a person access to biological

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WEDNESDAY

OCTOBER 26, 1988

3:30 - 7:00	REGISTRATION	Radisson Hotel Lobby
4:00 - 5:00	BOARD OF DIRECTORS MEETING	Radisson Hotel Lobby
7:30 - 9:00	REPRESENTATIVE ASSEMBLY	Radisson Hotel Lobby
9:30 - 11:30	ALL CONFERENCE SOCIAL	Radisson Hotel Lobby

THURSDAY
October 27, 1988

7:30 - 10:00	ALL COMMERS CONTINENTAL BREAKFAST	Radisson Hotel Lobby
7:30 - 4:00	REGISTRATION	Radisson Hotel Lobby
8:30 - 9:30	AEROBICS FOR ELEMENTARY PHYSICAL EDUCATION	Hackley A
8:30 - 9:30	THE RELATIONSHIP BETWEEN FITNESS AND RESTING METABOLIC RATE	Hackley B
8:30 - 9:30	RESEARCH SECTION	Trenton #1
8:30 - 9:30	EFFECTS OF TEAM LOSING	Trenton #2
8:30 - 9:30	ENHANCING PARENT-CHILD RELATIONSHIPS THROUGH WATER PLAY	YWCA Pool
?	NURTRITION FOR THE DANCER AND ATHLETE	Radisson Hotel Ballroom
9:45 - 10:45	ATHLETIC DRUG TESTING CHALLENGE	Hackley A
9:45 - 10:45	FLORIDA'S LOOKING/FEELING GOOD PROGRAM	Hackley E
9:45 - 10:45	RESEARCH SECTION	Trenton #1
9:45 - 10:45	STUDENT DEVELOPMEMT OF RECREATIONAL SPORTS	Trenton #2
9:45 - 10:45	WATER WAKING FOR FUN AND FITNESS	YMCA Pool
9:45 - 11:00	CREATIVE DANCE IN SCHOOLS	Radisson Hotel Ballroom
11:00 - 12:00	"SUPER YOU" NUTRITION & FITNESS FOR EL. SCHOOLS	Hackley A
11:00 - 12:00	PHYSICAL BEST- NEW AAHPERD FITNESS PROGRAM	Hackley B
11:00 - 12:00	MAINSTREAMING ACTIVITIESI IN EDUCATION	Trenton #1
11:00 - 12:00	COACHING ETHIC AND RESPONSIBILITIES	Trenton #2
12:45 - 1:45	OLD GAMES THAT STILL WORK	Hackley A
12:45 - 1:45	SECOND H	
12:45 - 1:45	THERAPEU	
12:45 - 1:45	STUDENT S	
12:45 - 1:45	BE PROUD	
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2:00 - 3:00	RISK MANA	
2:00 - 3:15	MODERN D	
3:15 - 4:15	DRUGS	
3:15 - 4:15	INDIANA'S	
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8:15 - 9:15	COLLEGE	
9:30 - 11:30	CASINO N	

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7:30 - 12:00	REGISTRA

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E PROGRAM

	AND SMOKE	Hackley B
	TIC RECREATION	Trenton #1
	SECTION MEETING	Trenton #2
	SYSTEM OF	Radisson Hotel Exec. Lounge
	TION IN SPECIAL EDUCATION IN THE INDIANA	Raddison Hotel Boardroom
	A SENSE OF PRIDE- CHIEVE	Hackley A
	ND ATHLETIC MENT	Hackley B
	LAUS TECHNIQUE	Trenton #1
	ACADEMICS	Radisson Hotel Exec. Lounge
	MOVEMENT	
	AGEMENT AND LIABILITY	Radisson Hotel
	ANCE TECHNIQUE	Radisson Hotel Ballroom
		Hackley A
	DAILY PHYSICAL N STATUS - BLE PANEL	Hackley B
	N MOTION	Radisson Hotel Exec. Lounge
	TATES ASSOC. FOR ATHLETES 1988 MPIONSHIPS	Trenton #2
	IONAL INTERACTIONS	Convention Ctr. All Rooms
	DINNER/GENERAL	Radisson Hotel Ballroom
	RECEPTIONS	Private Rms.
	IGHT	Radisson Hotel Ballroom

RIDAY

ER 28, 1988

	FESTIVAL	YMCA
	ERS CONTINENTIAL ST	Radisson Hotel Lobby
	ATION	Radisson Hotel Lobby

9:00 - 10:00	VOLLEYBALL	YMCA GYM
9:00 - 10:00	PROBING THE DEPTHS OF WATER EXERCISE AND SURFACING WITH FLUID INFOR.	YMCA Pool
9:00 - 10:15	MODERN JAZZ	Radisson Hotel Ballroom
9:00 - 11:00	POTPOURRI OF ELEMENTARY ACTIVITIES	Hackley A
9:00 - 10:00	AIDS	Hackley B
9:00 - 10:00	ASSESSMENT IN SPECIAL PHYSICAL EDUCATION	Trenton #1
10:15 - 11:15	BASKETBALL	YWCA Gym
10:15 - 11:15	LAYERING AN AQUATIC FITNESS PROGRAM	YWCA Pool
10:15 - 11:00	POTPOURRI OF ELEMENTARY ACTIVITIES CONTINUED	Hackley A
10:15 - 11:15	TEEN HEALTH RISK APPRAISAL	Hackley B
10:15 - 11:15	WHAT DO PE MAJORS "HAVE TO TAKE?"	Trenton #1
10:30 - 11:30	STRENGTH WITH ELASTIC RESISTANCE	Radisson Hotel Exec. Lounge
11:30 - 12:30	SPORTS FOR THE DISABLED: GOALBALL & BEEPBALL	YWCA GYM
11:30 - 12:30	SOCCER SKILLS AND DRILLS	Hackley A
11:30 - 12:30	The "NOT SO TRIVIAL" PURSUIT OF FITNESS	Hackley B
11:30 - 12:30	MENTAL TRAINING TO ACHIEVE PEAK PERFORMANCE	Trenton #1
11:30 - 12:30	HOW TO WRITE A JOURNAL ARTICLE	Trenton #2
11:00 - 1:00	ALL CONFERNECE BUFFET/JRH DEMONSTRATIONS	Radisson Hotel Ballroom
1:00 - 2:00	POWER TONING - AN AEROBIC WORKOUT USING HAND WEIGHTS	Hackley A
1:00 - 2:00	TEACHER BURNOUT	Hackley B
1:00 - 2:00	SPORTS CAMPS -- ARE THEY BENEFICIAL? A LOOK BEHIND THE SCENES	Trenton #1
1:00 - 2:00	INJURIES TO THE HANDICAPPED	Trenton #2
2:15 - 3:15	HEALTH/WELLNESS FAIR	Radisson Hotel Ballroom
3:30 - 4:30	BOARD OF DIRECTORS MEETING	Radisson Hotel Boardroom
3:30 - 4:30	DISTRICT WORKSHOP	Radisson Hotel Exec. Lounge

information not usually available to one's consciousness.

Pargman (1986) states that biofeedback training is essentially a method of teaching subjects to regulate their organic and systemic responses. Additionally, feedback corresponds to function such as heartbeat, muscle tension, brain wave activity, blood pressure, a nd peripheral skin temperature. With feedback training stressors themselves are not removed, but the performers response to them is controlled. Obviously, control of physiological arousal is an important step in stress management.

Conclusion

In summary, factors influencing stress reactions with regard to motor tasks have been reviewed, as well as techniques that may be used in coping with stress.

Through this review of the literature, it has become obvious to the writer that competitive stress management is a growing area in sports psychology. Moreover, the prescription for stress management for aspecific motor task will be dependant upon the individual performer and the task to be completed. It seems that each coach, clinician, and teacher is responsible for careful observation of the performer to determine the need for stress management; and if needed, the best technique to control the reactions to stress.

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Conference/ Workshop

December 1-4, 1988. Early Childhood Conference: "Forging the Linkage Between Moving and Learning for Pre-school Children" Hyatt Regency Hotel, Washington, DC. Sponsored by The Council on Physical Education for Children of the National Association for Sport and Physical Education and The Commission on Children's Dance of the National Dance Association. For more information contact Margie R. Hanson, Elementary Education Consultant, AAHPERD, 1900 Association Drive, Reston, VA 22091.

Dance Education of the year Award

This year the National Dance Association will initiate a Dance Educator of the year Award. This award will be presented for the first time at the Boston Convention in April, 1989. Any person is eligible who has had major responsibility for teaching dance in grades K-12 for a specific school or school system for at least three years.

The criteria, timeline, and procedures will be similar to those of the Elementary and Secondary School Physical Education Teacher of the Year Award. Nominations must be submitted on an offical application blank by November 1, 1988. An application blank can be obtained from state or district presidents or by writing NDA Dance Educator of the Year, 1900 Association Drive, Reston, VA, 22091.

DISTRICT ROUNDUP ....

DISTRICT COORDINATOR:

Dolores Wilson
Haverhill Elementary
4725 Weatherside Run
Fort Wayne, IN 46804
(0) (219) 436-6000, ext. 69 (H) (219) 356-3151

The following information outlines a major re-organization of the District Concept:

A. The District Offices are as follows:
   1. District Chairperson
   2. Membership Coordinator
   3. Public Information coordinator
   4. Special Events coordinator

B. District officers are appointed by the President upon recommendation by the District Coordinator and must be approved by the Board.
   1. The Term of office shall be two years. A person may succeed him/herself.
   2. The odd numbered districts shall be appointed in the odd numbered years; the even numbered districts shall be appointed in the even numbered years.
   3. Terms of office shall be from May to May.

C. All District Officers shall work together to create, foster, and promote district programming and communication. In addition, each office has been assigned specific tasks which are outlined for each job description.

D. Responsibilities which are common to all four district offices are as follows:
   1. Attend the training session for district

officers to be scheduled in June by the District Coordinator.

2. Serve as a member of the Representative assembly. The RA shall meet at the state convention, the spring leadership conference, and other times at the discretion of the President.
3. Assist other district officers as requested,
4. Provide the District Coordinator with names, addresses (business and home), and telephone numbers of perspective nominees for district offices.
5. Provide the President-Elect with the names, addresses (business and home), and telephone numbers of perspective nominees for Board of Directors offices.
6. Submit a detailed list of expenditures to the Executive Director for reimbursement, and
7. Attend all meetings convened by the District Chairperson and actively participate.

JOBS DESCRIPTIONS

DISTRICT CHAIRPERSON

The Duties of the District Chairperson are as follows:

1. To coordinate and to oversee district programs, events, and workshops within his/her own district with the assistance of the other district officers,
2. Initiate and promote at least one professional program in the district. Coordinate the work with the other district **Workshop Financial Guidelines** to provide the Executive Director with monies received and bills for district projects,
3. Keep the District Coordinator informed of all district programs. At the conclusion of the event, submit to the DC a detailed report of the activities and of the evaluation of the event,
4. Act as chair and convenor of all district meetings. Establish regular meeting dates an inform the other officers of them,
5. Contact other district officers on a regular basis to see that each is fulfilling his/her responsibilities and to coordinate the assistance of others as needed,
6. Submit 60 copies of an Annual Report to the Coordinator of the Representative assembly no later than October 1st, and
7. Act as liason to the Board of Directors attending Board meetings when appropriate.

MEMBERSHIP COORDINATOR-

The duties of the district Membership Coordinator are as follows:

1. Serve as membership coordinator for the district by maintaining and updating a list of current IAHPERD members within the respective district.
2. Act as liason to the Executive Director to accommodate any address changes, status changes, name changes within the district.
3. Act as contact person in the district and subsequent liason to the Executive Director in troubleshooting persons who are not receiving IAHPERD materials, but should be.
4. Work with other district officers at creating a proactive plan for promoting membership in IAHPERD at all levels of our field and in each discipline.
5. Recommend nominees for each of the Association Awards to the chairperson of the Awards Committee.
6. Inform the Necrologist and President of the death of members. Include complete name, business and home address of the deceased.

SPECIAL EVENTS COORDINATOR-

1. Help to plan, foster, and coordinate any "special events" within the district. Examples of these events might be: A) Jump for Heart b) National Girls and women in Sport Day, and c) National Sport and Physical Education Week/Month.
2. Act as liason to the State Jump for Heart Coordinator.
   Secure AHA/JRH materials from Coordinator for distribution in the district.
   these events might be: A) Jump for Heart b) National Girls and women in Sport Day, and c) National Sport and Physical Education Week/Month.
2. Act as liason to the State Jump for Heart Coordinator.
   Secure AHA/JRH materials from Coordinator for distribution in the district.
3. Become aware of the current year's goal agreement with AHA for JRH events and help to work towards fulfilling that target amount.
4. Contact the Regional AHA office and coordinate efforts with them to promote JRH events in the district.
5. Act as liason to our NASPE delegate. Take back to the district any special programming coming out of the AAHPERD office.
6. Inform the District Coordinator of the status of special events in the district.

PUBLIC INFORMATION COORDINATOR - JOB

1. Establish a communication network throughout the district:
   a. Work with the Membership Coordinator to establish a system of communication with all of the IAHPERD members in the district.
   b. Work with the media to establish a system of communication for publicity for promotion of events.
   c. Work with the Executive Director to establish and maintain a file of all schools in the district to allow for communication with all professionals how many may or may not be IAHPERD members.
2. Maintain a file of all media coverage relating to IAHPERD activities within the district. Send a material to the District Coordinator.
3. Coordinate the releases concerning district events. Work with other district member officers to faciliate maximum and promotion of events.
4. Serve on the Public Information Administration Board.
5. Submit an Annual Report to the IAHPERD Derector of Public Information by October 1st.
6. Contact the IAHPERD joural Editor for publicity before and coverage afterwards of all district events. Provide pictures when possible.

WANTED
IAHPERD
EXECUTIVE DIRECTOR

(Position description currently under review by the Board of Directors)

The Executive Director is a member of the Association's Board of Directors and a member in good standing.

PREFERRED QUALIFICATIONS

1. Must have an interest in promoting the goals and objectives of IAHPERD.
2. A minimum of a baccalaureate degree in Health, Physical Education, Recreation or Dance.
3. Administrative experience.

DUTIES AND RESPONSIBILTIES

1. Act as parlimentarian at all Board of Director's meetings, and shall follow the most recent version of Roberts' Rules of Order.
2. Assist the Secretary in keeping a file/finder of all motions from Board meetings. Motions shall be categorized according to areas of interest.
3. Serve as a resource person to all Board members, standing committees and special committees.
4. Promote membership and maintain a current membership list.
5. Collect and tabulate information pertinent to conference evaluations.
6. Make recommendations concerning revision of this job description.
7. Serve as exhibits manager and assist the conference coordinator in the management of the Annual Conference.
8. Serve as chairperson of the site selection committee.
9. Assume all duties of the treasurer within one year from the date of appointment as Executive Director.
10. Responsible for appropriate mailings as directed by the President.
11. Other responsibilities and duties as directed by the Board.

OPERATING PROCEDURES

1. The Executive Director shall be given an operating budget approved by the Executive Committee of the Board.
2. The Executive Director's operating budget shall include travel to the state, midwest and national conventions. Travel shall include: registration, transportation, lodging and per diem and shall not exceed $1,500 per year. The Executive Director shall be accountable to the Executive Committee for all expenses.
3. Salary negotiable, based on background and experience, but not to exceed $3,000 annually.

TERM OF OFFICE

The term of office shall be for three (3) years provided the Executive Committee is satisfied with his/her performance, which will be evaluated annually. At the end of a term of office, the Executive Director may re-apply for the position. The Executive Committee may terminate appointment at any time performance is deemed unsatisfactory.

Share your ideas in the next issue!

A SPECIAL REPORT

WHAT RESEARCH TELLS US ABOUT ---

THE ELEMENTARY SCHOOL PHYSICAL EDUCATOR IN INDIANA

Michael P. Savage, Ph.D.
Purdue University

Research in physical education curricula and programs has been a source of information leading to the continued growth and development of those programs. Additionally, research about those who teach in these programs provides further insight about those who are responsible for designing, coordinating and implementing those programs.

The major purpose of this study was to survey physical education problems and teachers in the public elementary schools of Indiana.

The methods used in this study were written questionnaires and personal interviews.

Questionnaires containing 56 items were mailed to 218 randomly selected elementary physical education teachers from the 4 geographic school sizes in the State of Indiana. This represented thirty-three percent of available elementary physical educators. Additional data was collected from personal audio-taped interviews from 20 randomly selected elementary physical educators and their principals.

The questionnaire used was an adapted and expanded form of the Wilder Scorecard (1974) which had previously been used by Wilder (1974) and Williams (1977), and an interview schedule developed by Savage (1985). The Wilder Scorecard had been used to survey elementary physical education programs and teachers in Alabama.

The data which was collected from the questionnaires and interviews revealed the following information about elementary school physical educators in Indiana.

METROPOLITAN TEACHERS

The 41 teachers who responded to the questionnaires (M=17, F=24), showed remarkably similar education levels and years of teaching experience. Eighty-eight percent (88%) of the male teachers, and seventy-nine percent (79%) of the female teachers had earned a Master's Degree.

Both male and female teachers were very experienced, with the majority of teachers having eight (8) or more years of teaching experience.

RURAL TEACHERS

The 36 teachers who responded to the questionnaire (M=17, F=19), reflected similar educational backgrounds. Ninety-four percent (94%), of the male teachers and eighty-two percent (82%), of the female teachers had earned a Master's Degree. Both male and female teachers were experienced, with the majority of teachers having six (6) or more years of teaching experience.

SUBURBAN TEACHERS

The 31 teachers who responded to the questionnaire (M=14, F=17), reflected a similar educational background. Sixty-four percent (64%), of male teachers and one hundred percent (100%), of the female teachers indicated they had earned a Master's Degree. The years of teaching experience for males was less than seven (7) years and over eight (8) yers for female teachers.

TOWN TEACHERS

The 14 teachers who responded to the questionnaire (M=8, F=6), also reflected similar educational backgrounds. One hundred percent (100%) of male teachers had earned a Master's Degree and eighty-three (83%), of female teachers had earned a Master's Degree. The number of years of teaching experience for both males and females was eight years.

SUMMARY

In each of the geographic areas, the educational backgrounds of all teachers were very similar. An average over eighty percent of elementary physical education teachers had obtained their Master's Degree. Similarly, in all groups except suburban female teachers, the number of teachers who have more than eight years teaching experience was over seventy-five percent.

From this data it might be said that the elementary school physical education teachers in the State of Indiana have a strong education background and are experienced teachers.

A second area of interest concerning elementary physical education teachers was that of Professional Choice in Teaching. The following data was obtained concerning their professional choice in teaching.

WAS ELEMENTARY PHYSICAL EDUCATION TEACHING YOUR FIRST CHOICE?

In each of the geographic areas, the educational backgrounds of all teachers were very similar. An average over eighty percent of elementary physical education teachers had obtained their Master's Degree. Similarly, in all groups except suburban female teachers, the number of teachers who have more than eight years teaching experience was over seventy-five percent.

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The data in Table I indicates that seventy-seven percent of metropolitan teachers chose elementary school as their first teaching career; sixty-three percent of rural teachers, seventy-six percent of surburban teachers and indicated similar career choices. There was no apparent difference in career choice between male and female teachers in Metropolitan or Rural Schools. However, there were differences in career choice between male and female teachers in both Surburban and Town Schools. Over 60% of both male and female teachers indicated that elementary school teaching was not their first choice.

Interviewing data revealed some of the reasons teachers chose or didn't choose elementary school as their first teaching choice.

"Elementary school always seemed less stressful and I enjoy young kids." -Female teacher, Metropolitan School.

"Children at elementary ages are affectionate, kind and great fun to work with." -Female Teacher, Metropolitan School.

"I have always been involved with young children, I love it." -Female Teacher, Rural School.

"Elementary children have a lot of enthusiasm they enjoy doing a wide variety of activities with enthusiasm." Female Teacher, Town School

Table I
PROFESSIONAL CHOICE IN TEACHING

Response	Metropolitan Schools N=41		Rural Schools N=36		Surburban Schools N=31		Town Schools N=14	
Was Elementary Physical Education Teaching your first choice?								
	M.	F.	M.	F.	M.	F.	M.	F.
A. Yes	9-53%	12-50%	9-52%	8-43%	5-35%	11-65%	3-37%	5-83%
B. No	8-47%	12-50%	8-48%	11-57%	9-65%	6-35%	5-63%	1-17%
C. No Response								
Total	17-100%	24-100%	17-100%	19-100%	14-100%	17-100%	8-100%	6-100%

"I have always preferred elementary school, now I am happy I did." -Male Teacher, Metropolitan School.

Teachers who indicated that elementary school was not their first professional career choice expressed the following feelings about their present teaching assignment:

"When I graduated college, there were no high school positions available so I took an elementary position." -Male Teacher, Metropolitan School.

" I thought I wanted to teach secondary school, then after four years expereince in high school; enough! Now I like elementary school better." -Male Teacher, Suburban School.

"I was trained for high school teaching, but couldn't find a position, so I took an elementary one." -Male Teacher, Suburban School.

"I wanted to coach at the high school level, but there was not a job open so I took this one. Now I wouldn't go up." -Male Teacher, Metropolitan School.

"My first choice was secondary, but when I decided on elementary school." -Female Teacher, Suburban School.

SUMMARY

The choice of elementary teaching as a profession is due to many reasons. Some teachers indicated their frustration at teaching in high school, others felt the stress of teaching and coaching, still others indicated and elementary schools were more "family oriented", and they felt a sense of belonging.

In essence, teachers in this study indicated they like working with elementary children. They enjoy the enthusiasm, adventure and creativity of elementary children and are rewarded by thediscovery and growth of individual skill and learning. As one female teacher replied:

"I taught Middle School by choice in my first 3 years. Then the Middle School incorporated an elementary school and I had to teach elementary. I enjoyed it so much that I requested a transfer to an elementary school."

A third area of inquiry concerned teaching satisfaction in elementary physical education.

DO YOU FIND SATISFACTION IN TEACHING ELEMENTARY PHYSICAL EDUCATION?

Satisfaction in teaching elementary school physical education was perceived by this investigator as teachers being content with their position in the school system. The factors which influenced these perceptions were: personal enjoyment and challenge in teaching physical education, and perceived students enjoyment of physical education. Table II indicates the information concerning teachers' satisfaction in teaching elementary physical education.

In Metropolitan schools, both male and female teachers overwhelmingly indicated they felt satisfaction in teaching in elementary physical education. Responses to the questionnaire by teachers in the other three school groups were similarly positive with regard to satisfaction in teaching. The interview data substantiates the findings of the questionnaire data:

"I'm glad I got into elementary school, I really enjoy the elementary teaching." -Male Teacher, Metropolitan School.

"I enjoy working with elementary children. Teaching fitness and a healthy life style and the elementary level seems important to me." -Female Teacher, Town School.

TABLE II
SATISFACTION IN TEACHING

Response	Metropolitan Schools N=41		Rural Schools N=36		Suburban Schools N=31		Town Schools N=14	
Do you find satisfaction in teaching elementary physical education?								
A. Yes	M.	F	.M.	F.	M.	F.	M.	F.
	16-94%	23-95%	16-94%	16-84%	12-85%	15-88%	8-100%	5-83%
B. No	1-6%	1-5%	1-6%	3-16%	2-15%	2-12%	0-0	1-17%
C. No Response								
Total	17-100%	24-100%	17-100%	19-100%	14-100%	17-100%	8-100%	6-100%

"I have the deep satisfaction of helping students feel good about themselves because of what they have accomplished in p.e." -Male Teacher, Town School.

"Seeing children who develop and improve their skills; working with children, giving them love and respect, and receiving their love and respect in return. That's most satisfying." -Female Teacher, Metropolitan School.

"I have a real feeling of accomplishment at this level." -Female Teacher, Town School.

"My satisfaction in teaching comes from seeing my students grow in diverse ways." -Male Teacher, Suburban School.

SUMMARY

Although the majority of teachers who responded to the questionnaire indicated that they were satisfied with their teaching career. The frustrations expressed about time, faculty support, status and isolation must temper the level of satisfaction expressed by teachers. Perhaps the teachers expressed satisfaction in the act of teaching children, or they felt they were powerless to change the status quo and were therefore expressing a sense of resignation to the situation of which they were part.

SUMMARY DISCRIPTION OF TEACHERS OF ELEMENTARY SCHOOL PHYSICAL EDUCATION IN INDIANA

The results of the data collected in the study indicate that the persons conducting physical education in elementary schools in Indiana were highly professional and experienced teachers. Ninety-five percent of teachers had achieved a Bachelor's Degree and further, an average over seventy-five percent had completed study toward a Master's Degree. In each school group, the average number of years of experience for teachers was eight (8), years.

The physical education specialists in the schools were able to instruct in all activities at a sufficient level to allow them to feel comfortable in teaching them to students. Further, the physical education teachers who responded indicated that they had attempted to continue their professional growth through participation in workshops, conferences and coaching clinics. Additionally, physical education teachers in Indiana demonstrated effective planning and scheduling their programs within the total school curriculum.

The majority ofphysical education teachers who participated in the study indicated that they were content in their chosen profession and felt that they had a challenging and satisfying career which was overall personally and professionally rewarding.

In short, the physical education program in elementary schools in Indiana is an important link in the total curruculum. Similarly, the physical educator is important. However, as this study indicates, the struggle for recognition and professional equality is still not over, and until a change occurs, physical education programs and teachers might continue as, "the break in the day with the gym teacher".

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For Further Information
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West Lafayette, In.

STATE OF THE STATE . . . .

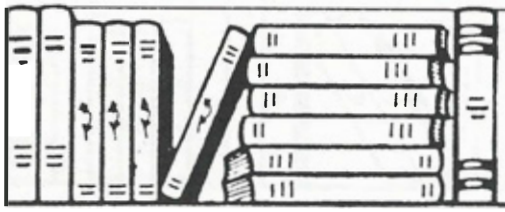
Barbara Ettl
Physical Education Specialist
Indiana Department of Education
(317) 269-9611

In January of 1988, the Indiana Department of Education (DOE) funded, for the first time, the position of Physical Education and Health Consultant. As a former physical Education and Health teacher in grades K-12, I am delighted to be involved in this field at the state level. I am thrilled that Physical Education and Health are finally receiving the attention they so richly deserve. This is an exciting time for us.

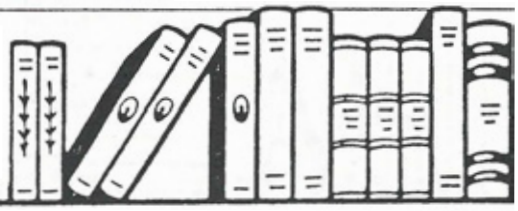
A major project occurring this summer, coordinated by Dr. Norma Jean Johnson and the Department of Education, relates to the Physical Education and Health Proficiencies disseminated in 1987 as part of the Indiana Curriculum Proficiency Guide.. Unlike ISTEP (Indiana State Test of Educational proficiencies), our area has no one instrument recommended by the state to measure the proficiencies. As a result, grants were extended to schools to participate in the establishment of learner outcomes that correlate with the proficiencies in health and physical education. This activity will also include the development of an instrument to assess student achievement of the learner outcomes of each subject area. The grant recipients who will partake in this process this June will pilot the instruments in their districts during the 1988-1989 school year.

As I travel the state visiting individual programs, the majority of technical assistance requests from Physical Education Specialists are for recommendations of model P.E. programs to visit. This need for greater program information has become one of my top priorities. Plans are being developed to work with IAHPERD and the local schools to offer workshops featuring exceptional Indiana physical education and health programs.

Many of you have special programs or unique program components waiting to be discovered. Sharing our ideas will help others improve their programs. I am interested in what you are doing and I will gladly come visit your school at your request. In the meantime, please call if I may be of assistance to you.



NEW BOOKS



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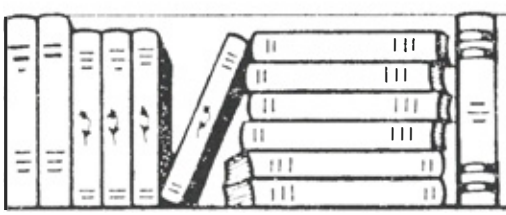
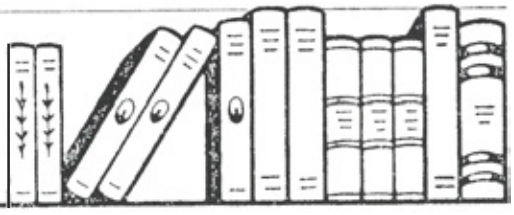


Book Reviews



The athlete Within: A Personal Guide to Total Fitness. Harvey B. Simon, and Steven R. Levisohn. Boston: Little, Brown and Company. 1987. 314 pp. $19.95.

-Reviewed by James Gemar, assistant professor of physical education, Moorhead State University, Moorhead, MN 56560.

The Athlete Within is a comprehensive text designed to help healthy adults develop an individualized exercise program that is effective, safe, and enjoyable. This fitness book is written by medical doctors who emphasize preventative medicine rather than the treatment of disease. They stress fitness as the primary method of achieving optimal health.

The book's four parts include: the medical basis for a fitness program, practical instructions for constructing a balanced exercise program, activities for a lifetime of fitness and the prevention, recognition and treatment of common athletic injuries.

The physiological and psychological benefits of exercise are discussed in the first part. Many difficult exercise physiology topics are presented clearly to provide the reader with the scientific knowledge necessary to develop a comprehensive fitness program. Some of these topics include maximum oxygen uptake, glycogen utilization, lipo-proteins and muscle fiber types.

The strength of the bood is found in part two where practical information for constructing a balanced exercise program is presented. Exercise prescription is based on the FAS(S) program: flexibility, aerobics and strength, with speed being optional. The chapter called "Putting It All Together" provides excellent training schedules for beginning, intermediate and advanced level exercisers. It also describes case histories of individuals with different fitness levels. These are helpful for readers who have similar needs, so that they too may plan a personalized fitness program.

The flexibility and strength exercises comprise one of the most comprehensive lists found in any fitness book. Each of the 88 exercises is illustrated and accompanied with complete instructions and comments. An y fitness enthusiast will find this information a valuable resource.

Part three discusses life sports-aerobics activities that can be continued throughout one's lifetime. Each activity is analyzed according to its advantages and disadvantages, equipment needed, goals, technique, precautions to avoid injury and advanced training. The section entitled "Setting Your Goals and Getting Started" provides the reader with a practical approach for developing a gradual, progressive exercise program.

Part four covers the prevention, recognition and treatment of exercise-related health problems. A highlight is the list of guidelines to enable readers to manage their own sport injuries by early recognition and intervention. "Understanding Your Back" is a section which includes important information about the causes, rehabilitation and prevention of backaches.

Weaknesses of the text include the absence of references and a lack of information on weight control. Only eight, brief weight control tips are given. A comprehensive review of the causes and treatments of obesity would be helpful in planning a fitness program.

However, the authors successfully emphasized the importance of fitness as a form of preventive medicine. The book's practical information and clear presentation can assist the health y adult in developing a balanced exercise program. The content is also applicable to an undergraduate class in fitness or for anyone who has an interest in the physical education, health, and wellness fields.

Although the central theme does focus on the author's preface of challenging current practices in athletic coaching, there are some disappointing elements in the text. The author's general approach to establishing humanistic programs and behaviors fails to target specific groups. Obviously, the procedures for establishing a successful humanistic strategy with a church league basketball team would differ from that of a NCAA Division I powerhouse. Differences such as those were not explored thoroughly.

Despite providing numerous references to support humanism and negate traditional coaching practices, the author includes too many personal opinions. While identifying virtually every problem and weakness with the traditional approach to coaching, he fails to consider difficulties and shortcomings that could occur with the humanistic coach.

NASPE POSITION PAPER

COUNCIL ON PHYSICAL EDUCATION FOR CHILDREN PHYSICAL EDUCATION & PHYSICAL FITNESS

Physical fitness is one of the many important outcomes of a quality physical education program. Children derive immediate health benefits from sustained participation in vigorous physical activity. Optimum development of the musculoskeltal and cardiorespiratory systems is enhanced through children's regular participation in planned programs designed by professional physical educators to maximize movement skill development through sequenced instruction.

The far-reaching effects of achieving physical fitness through physical education are manifested in children's emerging attitudes and knowledge. By integrating physical fitness into the broad range of activities which children enjoy, a bond is established between gaining or maintaining fitness and having fun while playing alone or with friends. This positive approach to pursuing fitness within children's movement forms, in addition to focusing on the fitness outcomes is central to the pursuit of a lifetime of physical activity.

Along with the integration of positive attitudes and acquisition of movement skills, the physical educator provides opportunity for cognitive learning about physical fitness. Through activities which explore the various kinds of fitness, levels of fitness, and means for attaining, maintaining, and measuring fitness, children become familiar with those key concepts which will help make wise decisions in the future about their own participation in physical activities.

By conducting daily vigorous physical education programs which emphasize skill instruction, children become physically fit and skillful movers. By sharing accurate information about fitness, professional educators equip children with the tools for healthful living as they develop the skills, attitudes, and knowledge essential for making intelligent choices throughout their lives.

NASPE POSTION PAPER REQUIRED QUALITY DAILY PHYSICAL EDUCATION

Quality physical education is a program of structured, sequential learning experiences in aquatics, dance, games, gymnastics and sport which provide for all school age students the opportunity for the development and maintenance of the physical fitness, skillful moving and the knowledge and understanding of human movement and well-being.

Frequent exercise is a physiological necessity. Further, current research indicates that **quality daily physical education** can make a significant contribution to the physical development of the growing and maturing student. Research also indicates that such a program has a positive impact on the development of the student's interpersonal relationships, self-esteem, responsible behavior and maturing independence. All students, including those involved in co-curricular activities, need to be involved daily each school year in the instructional phase of the program and need to have access to and use of facilities which will benefit individual growth as well as stimulate continued interest in learning, acquiring and maintaining satisfactory skill and fitness levels.

Competent and certificated physical education specialists can design quality programs for all students, including those with special needs. Through planned, seqential learning experiences students can achieve improved fitness and movement skills and can come to understand important knowledge about how physical activity can influence their everyday lives. Individual growth rates require constant adjustment to previously learned motor patterns and demand instructional attention.

Quality learning experiences designed for students are supported by current research in understanding human movement; in particular, motor learning, motor development, exercise physiology and the application of mechanical principles.

Quality daily physical education programs must meet two criteria - credibility and effectiveness. To be credible, the outcomes sought for any lesson must be clearly related to what research describes as possible for that activity. Program effectiveness must be measured in relation to its established students' goals and outcomes. Student skill, fitness, value and knowledge assessment should be reflected through the use of acceptable standardized measurements.

NASPE believes that required daily education for every student must become a reality in our schools. Philosophical and financial support of the school district will provide sufficient instructional time, space and equipment to do quality work. The actual time for students needs to include the following:

- Vigorous physical activity
- the diagnosing and learning of neuro-muscular skills
- discussion to learn and understand movement
- strategies involved in all physical education activities
- time to enjoy the use of skills and knowledge

MAKE PLANS FOR OCT. IN MUNCIE 1988

MEET NEW IAHPERD OFFICERS

VICE PRESIDENT - ELECT PHYSICAL EDUCATION

NAME: Harry Moser

SCHOOL ADDRESS/PRESENT POSITION:

Elementary Physical Education Teacher, John Strange Elementary School, 3660 East 62nd Street, Indianapolis, Indiana 46220

EDUCATION:

B.A. Baldwin-Wallace College 1962, M.A. Ball State University 1964, Additional graduate studies Ball State University

EXPERIENCE:

Teacher East Cleveland Public Schools 1962-66, Junior High School Football and Track Coach 1962-66, Teacher Metr. Sch. Dist. Washington Township 1967-present, Junior High School Football and Track Coach 1970-79, Assistant High School Football and Track Coach 1980-present

PROFESSIONAL MEMBERSHIPS:

National Education Association Indiana State Teachers Association, Indiana Association of Track and Country Coaches American Alliance of Health, Physical Education, Recreation and Dance, Indiana Association for Health, Physical Education, Recreation and Dance

OFFICES, COMMITTEES:

IAHPERD District Officer 1984 IAHPERD District Coordinator 1985-present, IAHPERD **JOURNAL** Editorial Board 1985-present, IAHPERD Board of Directors 1985-present

PROGRAMS, CONSULTATIONS:

1981 IAHPERD Conference at West Lafayette, Indiana, 1982 IAHPERD Conference at Bloomington, Indiana, 1983 Workshop for Kokomo Public School System Kokomo, Indiana 1983 Workshop for New Castle Area Headstart Program New Castle, Indiana, 1984 IAHPERD Conference at Evansville, Indiana, 1985 Mid-West AAHPERD Convention at Milwaukee, Wisconsin, 1986 IAHPERD Conference at Terre Haute, Indiana 1987 Mid-West AAHPERD Convention at Chicago, Illinois

VICE PRESIDENT-ELECT RECREATION

NAME: Jeffery S. Vessly

SCHOOL ADDRESS/PRESENT POSITION:

Associate Professor of Physical Education & Director, Dept. of Intramural & Recreation al Sports, IUPUI, Indpls, IN

EDUCATION:

Ed. D.1, Higher Education Administration, Indiana University 1986

EXPERIENCE:

Faculty member, School of Physical Education, IUPUI, 1974-Present Chairman, Dept. of Intrumural & recreational Sports, IUPUI 1975-Present, Men's Golf Coach, IUPUI, 1974-78, Women's basketball coach, IUPUI, 1976-87 and 1981-82

PROFESSIONAL MEMBERSHIPS:

AAHPERD, IAHPERD, National Intrumural & Recreational Sports Association, Phi Epsilon Kappa, Professional Physical Education Fraternity, Delta Psi Kappa, Professional Education Fraternity, Indiana Officials Association

OFFICES, COMMITTEES:

Vice-president for Recreation, IAHPERD, Associate National Executive Secretary, Phi Epsilon Kappa, 10th Pan American Games Venue Coordinator-Taekwando

PROGRAMS/CONSULTATIONS:

"Adopting International Rules for Intramural Use," National Intramural and Recreational Sports Association Conference, Atlanta Georgia, 1979. "Student Operated Facility - By Students for Students", National Intramural & Recreational Sports Association, Columbus, OH 1985, " Examining Professional Development Opportunities in Recreational Sports at Four Universities of Varying Size." Las Vagas, 1986

Fit to Achieve Becomes A Reality

Due to circumstances beginning last June and not resolved until December, the Fit to Achieve project was put on hold. The anticipated kick-off in September was postponed until the Kansas City Convention.

In December, Congress passed the Physical Education Resolution which advocates quality physical education programs in the schools, grades K-12. Although this has no force of law, it urges states to promote such programs. This event is of great value to the Fit to Achieve project and to the Alliance in promoting physical education.

Over the past few months, Doremus Porter Novelli has been working on several pieces of the Fit to Achieve project for release at Kansas City. A brochure designed especially for parents, but also useful for state and local policy makers, explains the benefits of physical education and how a comprehensive quality daily program is essential to making children Fit to Achieve. It identifies the current status of children's fitness as noted in recent studies. The brochure suggests a partnership between physical educators and parents to improve the situation in the schools. Parents are asked to assess the physical education experience their children receive with several strategies identified to remedy a situation that is not allowing provision of quality daily physical education. Wide dissemination of this brochure is anticipated among publics that can make a difference.

The second piece is a grassroots action kit to be used by physical educators. Its purpose is to provide a "recipe" of facts and procedures to get the message about quality daily physical education and Fit to Achieve to the public. Included in the kit are fact sheets about quality daily physical education and fitness, data from the *Shape of the Nation* survey, copies of the Physical Education Resolution with Congressional sponsors and supporting organizations noted, tips on dealing with legislators and policy makers, sample news releases, feature articles and editorials, public service announcements, and instructions on how to use all these items.

A Public Relations/Legislative Action workshop at the convention on Wednesday provided valuable hints on how the media can be utilized to get a message out to the public. "Making Your Program a Public Affair" included a media panel that offered practical tips and suggestions, a legislative panel with much information on dealing with policy making groups, a report on recent Alliance promotion efforts, and a look ahead to projects underway. The status of Fit to Achieve was noted at this session.

1988 HIGH SCHOOL SCHOLARSHIP WINNERS ANNOUNCED

The Indiana Association for Health, Physical Education, Recration and Dance (IAHPERD) has selected two students to receive 1988 High School Scholarships. Awarded annually, the scholarships recognize outstanding high school seniors who intend to pursue college degrees in one of the four IAHPERD disciplines.

Julie Bogard, a 1988 Austin High School graduate, will enter Indiana University, Bloomington, this fall to begin study of sports medicine. Active in numerous high school and community organizations, Julie participated in four interscholastic sports, including playing on the school's "Final Four" basketball team her freshman year. She also served as class president all four years of high school.

JULIE BOGARD

The IAHPERD Scholarship Committee also selected Deborah Niewyk to receive a 1988 award. Deborah will major in dance and theater at Indiana University, Bloomington, starting this fall. A 1988 Fort Wayne Snider High School graduate, Deborah represented her school as a delegate to Hoosier Girls' State, and has performed with the Fort Wayne Dance Collective and Fort Wayne Ballet.

DEBORAH NIEWYK

IAHPERD is a 1000-member professional organization dedicated to promoting and enhancing quality of life in Indiana through school and community programs in health education, physical education, recration and dance. The Association hosts a series of workshops and seminars throughout the state, sponsor's research, and provides scholarships for high school and college students.

Health Today in Indiana . . . .

DRUG ABUSE: PREVENTION STRATEGIES FOR SCHOOLS

Joan Barrett

American Association of
Colleges for Teacher

Education

Drugs threaten our nation's youth. The average age of initial marijuana use has dropped to 11 (Towers 1987). During a 30-day period in 1985, 65 percent of high school seniors drank alcohol, 30 percent used marijuana, 15 percent took an illicit drug other than marijuana, and 7 percent snorted cocaine (Tarlov et al. 1986). Drug abuse can lead to physical problems, emotional damage, and a decline in educational achievement and productivity. Efforts to fight drug abuse must occur in the schools since they provide a major influence in transmitting values, standards, and information to children (U.S. Department of Education 1986). This article discusses the extent of drug abuse among youth, why drug abuse occurs, the effects of drug abuse, what schools can do to combat the problem, prevention programs, what teachers and principals can do, and future needs.

Extent of Drug Abuse Among Youth

Teenage drug use in the United States is the highest of any industrialized nation (U.S. Department of Education 1986). Sixty-one percent of high school seniors have used drugs. During the last decade the percentage of children using drugs by sixth grade has tripled.

Alcohol, an illegal drug for minors, represents an even more serious problem than drugs such as marijuana, cocaine, and amphetamines (Education Week 8 October 1986). The average age for beginning alcohol consumption is 12, and approximately 20 percent of U.S. high school students drink alcohol daily (Towers 1987).

All communities throughout the United States, urban and suburban, show a high use of illicit drugs (U.S. Department of Education 1986). More males use drugs than females, but the gap between them has become smaller.

WHY DRUG ABUSE OCCURS

Studies show peer pressure plays the largest role in causing children to begin using drugs (Englander-Golden 1984; Towers 1987; U.S. Department of Education1986). Acceptance by peers becomes especially important when children leave elementary school and begin junior high. At this critical age, "adolescents seem to be either unwilling or unable to successfully resist peer pressure in substance abuse situations" (Englander-Golden 1984).

Other reasons for taking drugs include the constant exposure to our chemical society of pills and liquor through ads, movies, and television; a need to experiment; rebelliousness; and low self-esteem. Often simple pleasure serves as a motive. The user may feel good after taking drugs but may be unable to enjoy activities such as hobbies and sports (Towers 1987).

Effects of Drug Abuse

Drugs produce many effects, including distortions of memory, perceptions, and sensation (U.S. Department of Education 1986). For example, cocaine and amphetamines give users a false sense of performing at a high level when on the drug. So-called designer drugs, chemical variations of illegal drugs, have caused brain damage and

death (Towers 1987).

Frequent drug users often skip school or arrive late to class (Wagener 1984). Regular marijuana users are twice as likely as their classmates to receive low grades (U.S. Department of Education 1986). Continued marijuana use can cause memory gaps and also lead to decreased physical endurance (Wagener 1984). Marijuana users often develop sinusitis, pharyngitis, bronchitis, and emphysema within a year of beginning use Wagener 1984).

Experimenting with drugs, particularly at a young age, often leads to dependence (Towers 1987). Those dependent on drugs sometimes support their habits by stealing, selling drugs to others, and sexually prostituting themselves.

What School Can Do

Early intervention and prevention activities should characterize a school's drug abuse program (Towers 1987). School administrators should determine the extent of the drug problem within their jurisdiction before initiating a new intervention program. This can be accomplished by an anonymous survey of students and consultation with local law enforcement officials. Collaborative plans should be made with parents, should boards, treatment agencies, and concerned groups within the community to ensure successful programs.

The U.S. Department of Education (1986) further recommends that school officials establish clear, consistently enforced drug-use policies that specify drug offenses, consequences (including notification of police), and procedures. Security measures should be implemented to eliminate drugs from school premises and school functions. A comprehensive drug curriculum from kindergarten through grade 12 is needed. Teachers should receive appropriate training to participate in the program.

School systems generally combine two approaches to preventing drug abuse (Lachance 1985). One emphasizes discipline - what school personnel should do when drug abuse or peddling is encountered at the school. The other emphasizes education-instructing students about drugs and helping them develop skills and attitudes that will keep them away from drugs.

Prevention Programs

Programs popular in the 1960s and 1970s that focused only on drug information have been shown to be of questionable value (Lachance 1985). Research reviews indicate the two most promising prevention approaches are the social influences model and a strategy that emphasizes personal and social skills training (botvin 1986). The social influences model teaches skills for resisting drug use. The personal and social skills approach expands the social influences model to include skills in problem solving, decision making, assertiveness, and conversation as well as strategies for reducing stress. Both approaches have led to significant reductions in cigarette smoking. Preliminary evidence suggests the approaches also work to reduce marijuana use and excessive drinking.

"Saying No" is one example of a drug abuse prevention program that emphasizes teaching students to resist peer pressure by understanding and practicing reasons for not taking drugs (Lachance 1985). The approach, targeted to sixth, seventh, and eighth graders, uses methods such as role modeling, videotaped practice, and assertiveness training to help students learn how to refuse drugs. The National Institute of Drug Abuse sponsors "Just Say No" clubs that offer booklets, pins, and T-shirts (Towers 1987). Members find the clubs give them a reason and way to say no.

What Teachers and Principals Can Do

Teachers exert a significant influence on students' attitudes, knowledge, and opinions. They can complement a school's drug abuse program by incorporating drug abuse prevention strategies into their subject at any grade level (Towers 1987). For example, techers can structure activities that require students to consider several options before making a decision. This classroom practice will increase the students' ability to identify options in other situations. The National Institute on Drug Abuse (1980) provides prevention ideas that can be incorporated into existing junior high school curricula. Towers (1987) lists additional in-class prevention activities for all grade levels.

In addition, teachers must inform students that they disapprove of drug abuse (Towers 1987). Remaining quiet gives the impression of approval or unconcern. Students should be told that they will be reported if they come to school in possession of drugs or under their influence.

Any teacher who believes a student is abusing drugs should take action (Towers 1987). Signs that may indicate drug abuse include redness around the eyes, dramatically changed appearance such as dirty hair, dialated pupils, reduced motivation, slurred speech, short attention span, changes in school appearance, failing grades, and uncompleted assignments (Towers 1987; U.S. Department of Education 1986; Wagner 1984). The first step when suspecting drug abuse is to notify the appropriate school committee if one exists. Otherwise, the teacher should express concern to the student and to the parents, citing observed behaviors (Towers 1987). Students who have been abusing drugs should be referred to professionals for help.

Intervention strategies must be supported by the school principal (Towers 1987). Principals need to provide opportunities for teachers to meet for discussions about drug use and how they can fight the problem. They must inform students and par-

ents that teachers have been authorized to communicate their concern. They need to have professionals available to counsel students. Finally, principals should follow up with students and/or parents after school personnel have intervened.

Future Needs

Today only 27 states have mandatory K-12 drug abuse prevention programs (National Association of State Boards of Education 1986). Most states do not collect information on the programs nor evaluate their effectiveness. The prevention models that have shown promise need further research. A data base is needed about the status and success of drug abuse prevention programs in each school so decisions can be made about allocating resources.

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AIDS Update

Implications for Health Educators

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Approximately seven years have passed since acquired immunodeficiency syndrome, hereafter referred to as AIDS, came out of Africa and created the "viral war" of the decade. During this period of time a causative virus was discovered, named and renamed. Since Rock Hudson went public, AIDS has become one of the most common words in the American vocabulary and one of the most feared and misunderstood plagues of modern times. AIDS is defined by the Center for Disease Control (CDC) as the presence of one of 12 specified infectious diseases or two types of malignancies, predominantly Pneumocysits Carinii pneumonia (PCP) and/or Kaposi's sarcoma (KS) in addition to a positive antibody test. As clinical experiences with AIDS patients grew other members of groups at risk for AIDS developed clinical syndromes that appeared to be related to AIDS but did not meet the CDC's criteria for AIDS. These individuals were given the diagnosis of AIDS-related complex (ARC).

The AIDS epidemic had claimed more than 37,195 lives through June 27, 1988. During this same time frame the CDC also reported a total of 65,780 cases of AIDS with 1,049 of these under 13 years of age at the time of diagnosis and an additional 273 between the age of 13 and 19. Presently there are 1,000 to 2,000 new cases of AIDS reported to the CDC each month with a case fatality rate of 56 percent. It is estimated that one to two million persons have been exposed and the predictions are that 300,000 new cases may develop by 1991. It is also estimated that by 1991 children under the age of 13 who have been infected with the HIV virus may total 10,000 to 20,000. It is intuitively obvious that AIDS education is a topic with which the public schools are going to have

to deal with. Health educators are in a unique position to offer objective information about AIDS thus improving the public's perception of this problem and reducing the hysteria fanned by ignorance and an inflammatory press. The intention of this article is to provide health educators with current unbiased information about AIDS and to encourage widespread distribution of this information.

This new disease entity was first recognized in the late 1970's with the CDC being alerted and investigation begining in June of 1981. Since it was first identified in 1981, AIDS has touched off one of the most intensive investigations in medical history and has become a major issue with public and school health significance.

Although the origin of the virus is unclear, epidemiological and serological data suggest that the viral infection began in Central Africa where the illness affects primarily heterosexual individuals.

In the early epidemiological investigation, several doctors noted that previously healthy individuals, predominantly young men were developing pneumocystis pneumonia and Kaposi's sarcoma. These diseases had been previously seen in young children undergoing treatment for Leukemia and elderly men of Mediterranean origin. The predominance of homosexual men in the affected groups during this early investigation suggested that some aspects of homosexual lifestyle may have contributed to the epidemic. Present epidemiological investigation indicated that the predominant affected group in the United States remains homosexual/bisexual males--63 percent, followed by I.V. drug abusers, homosexual male and I.V. drug abusers, and heterosexuals with percentages of 19, 7, 3.9, respectively.

The similarity of AIDS to a disease in cats caused by a retrovirus, feline leukemia virus, led Dr. Robert Gallo and others to isolate retroviruses from patients affected with AIDS. Their efforts led to the isolation of a virus that had been called human T-cell lymphotropic virus type III (HTLV-III) or AIDS related virus (ARV) but recently human immunodeficiency virus (HIV). This virus is believed to be the etiologic agent of AIDS. Although there is some question as to the exact incubation period, length of time between infection with the virus and expression of the disease, the average seems to be approximately 4 years. It may be as high as 14 years or more.

After the development of enzyme-linked immunosorbent assay (ELISA) system to test for antibodies to HIV infection, it was found that many individuals who had been exposed to the virus did not manifest any signs of the infection, but were asymptomatic carriers an could infect others. It should be noted that ELISA is merely a screening test not a diagnostic test. Although progress has been made in the detecting of antibodies for the HIV virus, therapy directed against the infection has been disappointing. Azidothymidine (AZT) has increased life expectancy by stabilizing the growth of the HIV virus but is not curative in nature. The best hope is for control of the viral infection not cure. Attention must be focused on prevention. The most powerful tool for the prevention of HIV infection is the dissemination to all members of the population of explicit information on how AIDS is spread and specific lifestyle behaviors which must be altered in order to reduce the possibility of contracting this deadly disease.

In spite of the opinions of public health officials, providing educational services to children who are suffering from AIDS or ARC has become a volatile issue throughout the United States. Involved in this controversy are educators, parents, local community members and health officials as well as the media. The AIDS issue requires that the Indiana public school corporations have strong clear cut policies on the matter of student attendance and employee's rights.

In a survey of superintendents of Indiana High Schools, conducted by Plummer and Spear in the Spring of 1987, eighty-six percent of the public school corporations surveyed reported that they had no written policies regarding the admittance of an AIDS/ARC child into school. Concerning the question of written policies for the employment of continued employment of an employee with AIDS/ARC, less than 10 percent reported an affirmative response. In the same survey when asked to respond to the knowledge of an AIDS/ARC child presently attending, 96.6 percent of the superintendents responded negatively. Only .05 percent, one school corporation, responded yes. The remaining superintendents did not respond to the question.

The overall responses regarding procedures for handling an AIDS/ARC child who was enrolled in the school almost paralleled those regarding admittance. Overall, 12 percent of the corporations surveyed responded yes, 86 percent responded no and 2 percent did not respond at all. Additionally, almost 10 percent indicated that they had no written policies on procedure(s) for handling a certified or non certified employee with AIDS or ARC.

Public school corporations should provide a comprehensive inservice effort for all staff in order to make them aware of the nature of AIDS/ARC, i.e., the medical background, methods of transmission, and body spill clean up procedures. Written information, resource personnel from health agencies, and audio visual materials should be utilized to promote the best possible understanding of the potency nature of this disease and precautionary measures. In the Plummer-Spear survey, when asked to respond to the question of inservice education on AIDS for students, faculty, administration, parents and staff, the responses were overwhelmingly no by more than 50 percent of all respondents in all of the aforementioned groups. Overall, Indiana schools tended to

direct educational programs toward school administration but it was significant to note that only one third of the corporations had actually implemented such programs. Only 9.7 percent deemed such a program important for parents.

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Another issue facing Indiana schools will be the implementation of AIDS education into the curriculum. Curriculum specialists in concert with appropriafe health and other advisors should develop course content dealing with all aspects of AIDS/ARC for high school students. Information covered should contain material on the nature of the AIDS/ ARC disease and what is known medically about the disease. The curriculum content should be included in the existing health or science content areas. When Plummer-Spear asked the superintendents if they had included education on AIDS in their curriculums, only about half of the school corporations reported such inclusion. Regarding the area of curriculum inclusion, of the school corporations which has included education on AIDS in their curriculum, over 85 percent indicated that instruction was to occur in the health education classes. It would appear that the job ahead in AIDS education will fall to the profession of the health educators.

Public school corporations, if not already, will be faced with the problems associated with allowing students with AIDS/ARC to attend school. If these children are to attend school, what precautions would be needed to protect other students and staff? At the same time in recognition of the possibility that students or employees with AIDS/ARC might be identified it is prudent for public schools to develop positions on providing educational services to students who may be identified as suffering from AIDS or ARC and also a position with respect to employees who develop AIDS or ARC.

In compliance to the rather widespread acceptance of students with AIDS in the classroom, the state of Indiana and the federal government have established guidelines and positions on the questions of AIDS. These guidelines were developed by the Indiana State Board of Health (ISBH) and provided to all school corporations upon request. Two sets of guidelines were developed. The first set of guidelines, July 1985, were exerpted and adapted by the Indiana State Board of Health from guidelines and recommendatons developed in Florida and Connecticut. The second set, Fall 1986, were developed through modification of the original guidelines and are presently being recommended for use. These guidelines were developed to assist school officials and local health departments in dealing with the HIV infected student, K-12.

jump rope for heart

IAHPERD COORDINATOR

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IAHPERD Membership

THE PROFESSIONAL ORGANIZATION

The Indiana Association for Health, Physical Education, Recreation and Dance is a voluntary professional organization dedicated to improving and promoting the quality of life in Indiana through school and community programs of health education, physical education, recreation and dance.

The purposes of IAHPERD are as follows:

Research and Demonstration

To employ the necessary means to foster, advance and promote the kind of research, studies and demonstrations necessary to advance the fields of health, physical education, recreation and dance.

Education and Training

To hold meetings and disseminate relevant educational information to members and to encourage training for the advancement of health, physical education, recreation, and dance.

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To provide scholarships to deserving students preparing for careers in health, physical education, recreation and dance.

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