INDIANA AHPERD JOURNAL

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ACTIVE BODIES=STRONG MINDS

Get up

Get out

2008

Get active

Indiana AHPERD Journal

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Indiana Association for Health, Physical Education, Recreation, and Dance

Contents

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Message from the President

Get Up and Get Involved

Greetings,

It is my honor to have been elected IAHPERD's President for 2008. I am looking forward to serving you and having a great year. The last four years have been a wonderful experience for me getting to know so many super and dedicated people. We all have the same goals in mind. How can we make our profession better, whether it is at a college, high school, middle school, elementary school, agency, or an organization for the betterment of the education of our youth!

Through IAHPERD, there are a number of ways to accomplish this. Just to name a few:

1. Advocacy---- Our efforts with the Legislative Day at the State House in Indianapolis in January. Talking with your legislators about issues that deal with our areas.

2. A.C.E.S. Day---This first Wednesday in May helps you promote your programs in your area.

3. IAHPERD State Convention---What a way to pick up new ideas to use in your classroom and hear some outstanding speakers! To be able to connect with other professionals in our field and to see some old/young friends and make new ones.

Just think, IAHPERD would not be as strong as it is without people like you being involved on committees, councils, task forces, and leadership roles. Molly Hare our President-Elect for 2008, will be looking for people to volunteer for leadership roles and to serve on committees. When she "comes calling", step up to the plate and say YES to a great opportunity! What a fantastic way to meet some really great people. Remember, IAHPERD only works if you take on the challenge!

A positive change that we are in the process of working on is changing our regional format from nine to five regions. The new regions have been drawn up by dividing the state into quadrants: Northwest, Northeast, Central, Southwest, and Southeast. This new setup will lend itself to having stronger and more centrally located workshops for each region. Be on the "lookout" for workshops in your area by either mailers or IAHPERD's website.

If you would like to get involved with IAHPERD by being on a committee or council, feel free to contact me and I will get you started. I welcome any of your thoughts and ideas to make IAHPERD a better and stronger organization. Drop me a line or phone call, "My door is always open."

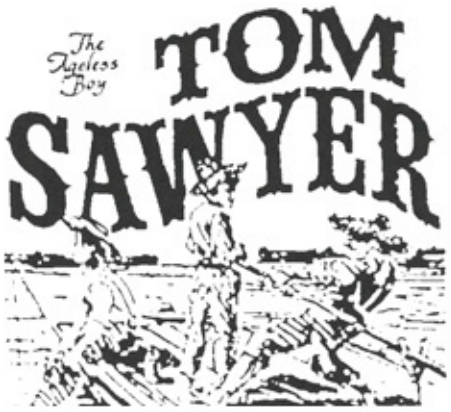
See you soon

The First Annual Fit Kids Lobby Day

February 7, 2008 The American Heart Association in affiliation with IAHPERD will sponsor Fit Kids Lobby Day. The event will take place February 7, 2008 at the Indiana State House, in downtown Indianapolis, from 10 am. till 2 p.m. Students from the Indiana Universities and Colleges, along with elementary and middle school students, will be instructed in advocacy and lobbying techniques and how to make the legislature aware of important issues in Wellness Education. They will meet with their representatives and share a luncheon and discussion time about issues on Health and Physical Education. Several groups will be demonstrating activities and introducing health information to the Indiana Representatives concerning the Wellness needs of Indiana Youth .

Come join us and "Get up", "Get out", and "Get active".

NOTIONS From YOUR EDITOR...



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New FIT Kids Act Introduced in Congress

Reston, VA, August 24, 2007 -- The National Association for Sport and Physical Education (NASPE) and the American Heart Association recently endorsed the Fitness Integrated with Teaching Kids Act (FIT Kids Act), federal legislation which addresses the nation's childhood obesity epidemic by putting more emphasis on quality physical education and physical activity for all public school children.

The FIT Kids Act, which was introduced on July 31 in the House by Representatives Ron Kind (D-WI), Zach Wamp (R-TN) and Jay Inslee (D-WA), would better integrate physical education into the No Child Left Behind Act by encouraging schools to work towards NASPE'S national recommendations of 150 minutes of physical education per week for elementary school students and 225 minutes per week for students in middle and high schools. It would also require that schools, districts, and states include the quantity and quality of physical education in the "report cards" currently sent to parents.

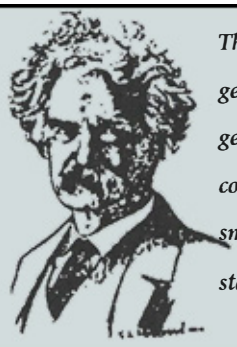
"We believe that the FIT Kids Act can make a real and meaningful difference in the fight against childhood obesity without overburdening schools, districts, and states," said NASPE President Craig Buschner, ED.D., professor at California State University, Chico. "Through its multi-faceted approach that includes accountability, reporting requirements, professional development, research, and support of children and teachers, there is an unprecedented opportunity to start to bring this epidemic under control."

In 2004, more than nine million children and adolescents ages 6 to 19 were considered overweight. By 2010, it is estimated that 20 percent of children in the United States will be obese. According to the U.S. Department of Health and Human Services and Department of Education, a decline in physical activity has contributed to the unprecedented epidemic of childhood obesity. Currently, 92 percent of elementary schools don't provide daily physical education classes that meet national goals year-round and barely a quarter of high school students take daily physical education classes.

The FIT Kids Act would also amend existing federal programs to get parents, educators, counselors, and administrators involved in teaching children healthy lifestyles. The bill also supports professional development for teachers and principals to promote children's healthy lifestyles and physical activity and would fund research and a pilot program to study effective ways to improve healthy living and physical activity for all children.

"What better place than our schools to teach kids how to best nourish their body as well as their mind," said Congressman Kind, a member of the Congressional Fitness Caucus.

"Ensuring that our schools are providing



The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and then starting on the first one.

— Mark Twain

comprehensive physical education will give every child an opportunity - regardless of their background - to learn healthy habits and get moving. We will see the benefits in their math and reading test scores, get to the root of the obesity epidemic, and get kids on a healthy path early in life."

"The statistics on childhood obesity are staggering and we need to get them going in the other direction. Research shows that healthy children learn more effectively and achieve more academically. The FIT Kids Act would ensure a strong emphasis on physical education to help bolster academic performance and provide students with the physical activity and education to lead healthy lifestyles," said Congressman Wamp, founder and co-chairman of the Congressional Fitness Caucus.

"Not all children have role modeling at home; but, this bill can make sure they have it at school. Giving kids the physical and mental benefits of exercise will help them excel in the classroom and throughout life," said Congressman Inslee.

Obesity is a major risk factor linked to increased cardiovascular disease (the No. 1 killer of Americans), cancer, diabetes, and early death. Overweight adolescents have a 70 percent chance of becoming overweight adults. Of all U.S. deaths from major chronic disease, 23 percent are linked to sedentary lifestyles that began in childhood.

For more information on the bill and how to support it, visit www.naspeinfo.org under Media & Advocacy and then NASPE Government Relations.

The preeminent national authority on physical education and a recognized leader in sport and physical activity, the National Association for Sport and Physical Education (NASPE) is a non-profit professional membership association that sets the standard for practice in physical education and sport. NASPE'S 16,000 members include: K-12 physical education teachers, coaches, athletic directors, athletic trainers, sport management professionals, researchers, and education classes that meet national goals year-round and barely a quarter of high school students take daily physical education classes.

The FIT Kids Act would also amend existing federal programs to get parents, educators, counselors, and administrators involved in teaching children healthy lifestyles. The bill also supports professional development for teachers and principals to promote children's healthy lifestyles and physical activity and would fund research and a pilot program to study effective ways to improve healthy living and physical activity for all children.

"What better place than our schools to teach kids how to best nourish their body as well as their mind," said Congressman Kind, a member of the Congressional Fitness Caucus. "Ensuring that our schools are providing comprehensive physical education will give every child an opportunity - regardless of their background - to learn healthy habits and get moving. We will see the benefits in their math and reading test scores, get to the root of the obesity epidemic, and get kids on a healthy path early in life."

NASPE seeks to enhance knowledge, improve professional practice, and increase support for high quality physical education, sport, and physical activity programs through research, development of standards, and dissemination of information. It is the largest of the five national associations that make the American Alliance for Health, Physical Education, Recreation, & Dance (AAHPERD). For more information, visit www.naspeinfo.org.

Reviewed— No Child Left Behind and Physical Education

What No Child Left Behind Means to Physical Education

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Abstract

Love it or Hate it, No Child Left Behind (NCLB) was signed into law on January 8, 2002. This piece of legislation was designed to improve the education of children nation wide. It is important that physical education somehow finds a way to be a part of NCLB. The California Department of Education (2004) conducted an extensive study to examine the relationship between the performances on the Fitnessgram tests and the California Standards Tests on school-aged children. The researchers found that the Fitnessgrams scores are linearly and positively related to the California Standards Tests scores. To be a part of NCLB, physical education teachers need to assess, promote fitness, choose vigorous activities that promote fitness, and try new things.

Love it or hate it, No Child Left Behind (NCLB) was signed into law on January 8, 2002. This piece of legislation was designed to improve the education of children nation wide and also to provide academic success regardless of socioeconomic status. President Bush (2004) states, "Nothing is more important to America's future than teaching our children the skills they need to be successful. Every child must receive a quality education if America is to be a prosperous and hopeful country" (p. 114). The theme of providing children with the best education possible is not new. The question is, how does physical education fit in with the mandate of NCLB?

The four basic principles of NCLB are: 1) stronger accountability, 2) increased flexibility, 3) more options for parents, and 4) an emphasis on teaching methods that have been proven effective (United States Department of Education, 2002). The centerpiece of NCLB is that all students should be proficient in reading and mathematics by the year 2014. Until the year 2014, test scores must improve from year to year; otherwise, teachers and administrators can be replaced (NCLB, 1116). NCLB defines core subjects as mathematics, reading or language arts, and science (NCLB 1111) (No Child Left Behind, 2001). Notice, physical education is not a core subject.

What are the ramifications if physical education is not a core subject under NCLB? Physical education as a core subject would necessitate standardized testing to assess the progress of students in physical education. However, if physical education is not a core subject, it becomes easier to be eliminated from school curriculums. The pressures of having students pass standardized tests may compel teachers and administrators to eliminate physical education in favor of students spending more time on academic work. The physical education curriculum would need to be standardized so that students are prepared to pass standardized tests (Cook, 2005).

According to a study by Dwyer, Blizzard, and Dean (1996), there is a positive correlation between academic performance and physical activity. The California Department of Education (2004) conducted an extensive study to examine the relationship between the performances on the Fitnessgram and the California Standards Tests on school-aged children. The researchers compared students' Fitnessgram tests

results (aerobic capacity, body composition, abdominal strength, trunk strength, upper body strength, and flexibility) with their scores on the California Standards Tests. The researchers found that as Fitnessgram scores increased so did California Standards Tests scores (Figure 1-4). Specifically, for every unit of increase on the Fitnessgram scores, the scale scores on the California Standards Tests increased by 8 points for 5th graders, 10 points for 7th graders, and 9 points for 9th graders (California Department of Education, 2004). It is concluded that a positive relationship between the Fitnessgram results and California Standards Tests.

Generally speaking, conditions that improve physical fitness also improve intellectual capacity. Jensen (1998) and Hannaford (1995) found that students who participated in daily physical education had higher academic performance and more positive attitude towards school. Silverman (1993) found students learn more in their academic classes if they participate in physical activities. Vail (2006) reports students who participate in regular physical education are able to: concentrate more in class, reduce absenteeism, alleviate stress, anxiety, and depression, and improve self-esteem.

So, what can we do as physical educators to ensure physical education is not left behind by NCLB?

- **Don't be afraid to assess:** Physical educators need to assess so they have evidence that their curriculum is in fact making a contribution to students' health. Assessment gives people information about their current status as compared to pre-established standards. Lambert (2000) found that when physical education programs promote meaningful assessment, students are more likely to be active. Physical educators should assess students' energy expenditure and level of intensity through the use of heart rate monitors assess students' level of fitness and discuss the impact that fitness has on their daily lives, and suggest ways students can influence their fitness by how they live their lives. Physical educators need to look at the exercise intensity level of their classes. Lastly, physical educators need to design programs in the school and community to promote the importance of physical activity on a daily basis. If students' heart rates are not in the exercise zone, they need to modify the curriculum. What physical educators need to understand is that assessment gives people answers about where they are; as a result they can decide where they are and where they want to be.
- **Promote fitness:** Give a pedometer to every person in your school. Create programs that encourage students, teachers, and administrators to walk at least 10,000 steps a day. Pangrazzi, Beighle, and Sidman (2003) claim, "Pedometers can be used to evaluate students' level of activity and teach them to be active in a low-cost, accurate, and private manner," (p. 6). Pedometers allow students to set personal, cooperative, and competitive goals. Introducing the use of pedometers throughout the curriculum can promote the integration of physical fitness with other classroom subjects. For instance, students can create hypotheses in science classes about the number of steps they may take in a day. Students can utilize different types of computer software to interpret data from pedometers. The number of steps can be calculated into miles for a geography class and an English class can utilize the pedometers by having students write fictional stories about where they have traveled while wearing the pedometer (Pangrazzi, Beighle, and Sidman, 2003).
- **Choose activities that promote vigorous physical activities in order to improve fitness levels:** Create a program that emphasizes lifetime fitness. During physical education classes, keep all students active at a moderate to intense level. Look for activities that are vigorous and include everyone: Prison Breakout (Dieden, 1995), 2 on 2 Soccer with a Central Goal (Luxbacher, 1987), 4 on 4 Four Goal Soccer (Luxbacher, 1987), and Ultimate Frisbee (Foster & Overholt, 1994) are just a few games that keep students moving and increase their heart rates. Lowry, Wechsler, Kann, and Collins (2001) found a dramatic decrease in the number of students who actively participated in physical education from 34.2% in 1991 to 21.7% in 1997. The problem is that even at 34.2%, far too many students are standing around and not being active enough in physical education class. Physical education teachers need to find ways to get 100% participation during class. Lambert (2000) claims that many physical education programs waste valuable activity time by utilizing games and drills that make students wait turns and focus on team sports that do not allow students to reach substantial levels of moderate physical activity during class time.
- **Try something new:** Lambert (2000) defines quality physical education as, "essential in helping students gain competence and confidence in a variety of movement forms, such as sports, dance, recreational activities, and fitness activities," (p. 35). It is important that physical education teachers create developmentally appropriate curricula that concentrate on skill development, improve fitness levels, provide meaningful assessment, and not concentrate on whole-class activities such as kickball, dodgeball, or just team sports. Nancy Raso Eklund provides her students with the opportunity to incorporate health concepts while participating in physical activities (Lambert, 2000). Lambert (2000) reports that Eklund, "uses mind maps, cooperative-learning activities, and

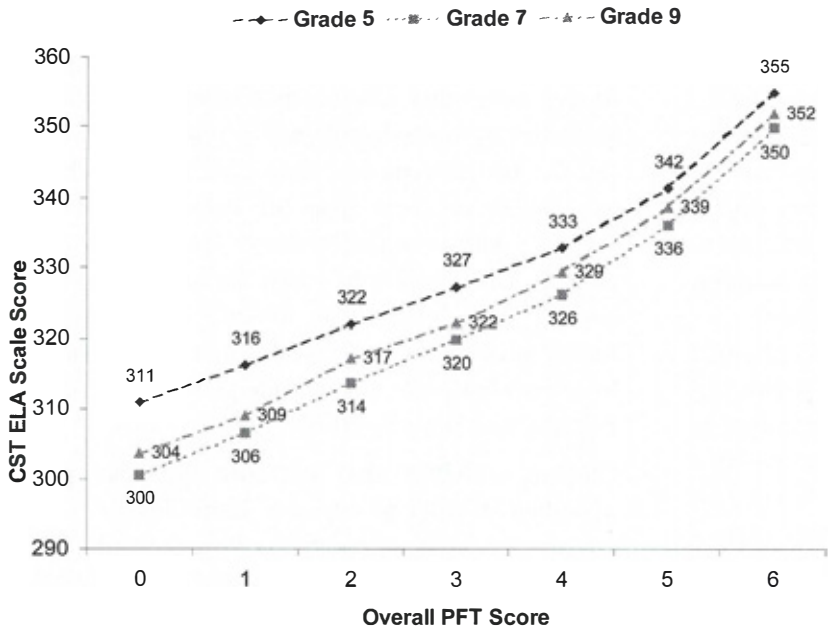

Figure 1. 2004 CST in English–language arts mean scale scores for grades 5, 7, and 9 by overall PFT scores. In grade 5, there were 371,198 students, grade 7 had 366,278 students, and grade 9 had 298,910 students (California Department of Education, 2004, p.2).

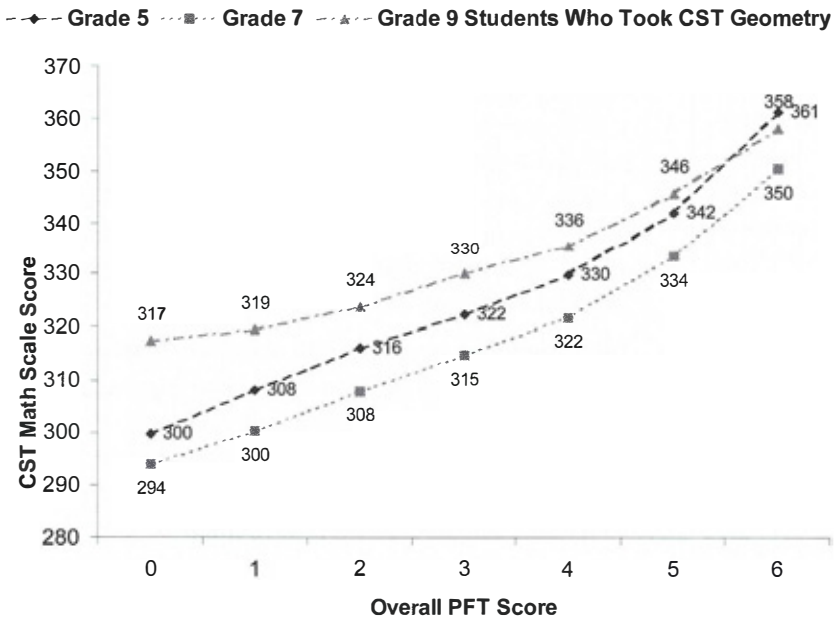

Figure 2. 2004 CST in mathematics mean scale scores by overall PFT scores for grades 5, 7, and 9. The numbers of students in grades 5 (371,198) and 7 (366,278) were the same as those in Figure 1. The number of grade 9 geometry students was 63,028 (California Department of Education, 2004, p.3).

problem-solving challenges, they study the concept of aerobic fitness while engaging in skill-development progressions," (p. 36). It would not be unusual to see Ekland's gym arranged like a heart and having the students travel through the heart just like blood cells would all the while the students are engaging in various physical activities such as dribbling blue balls representing blood cells without oxygen and red balls representing blood cells with oxygen. Students that participate in this activity are provided with an opportunity to better understand the process of how blood flows through the heart and the importance of physical activity for the heart (Lambert, 2000).

We need to aggressively reform physical education in order to be a part of NCLB. Our curriculum should include innovative physical activities that keep children moving most of the time and limit traditional programs that promote inactivity (Langford & Carter, 2003). Physical activity assessment results such as physical fitness scores, physiological responses to physical activity measured by heart rate monitors, the number of steps taken during a specified period of time should serve as a basis for physical education curriculum decisions to prove that physical education should be a part of NCLB. We need to assess so that we have evidence to support the fact that physical education is making a contribution to students' health.

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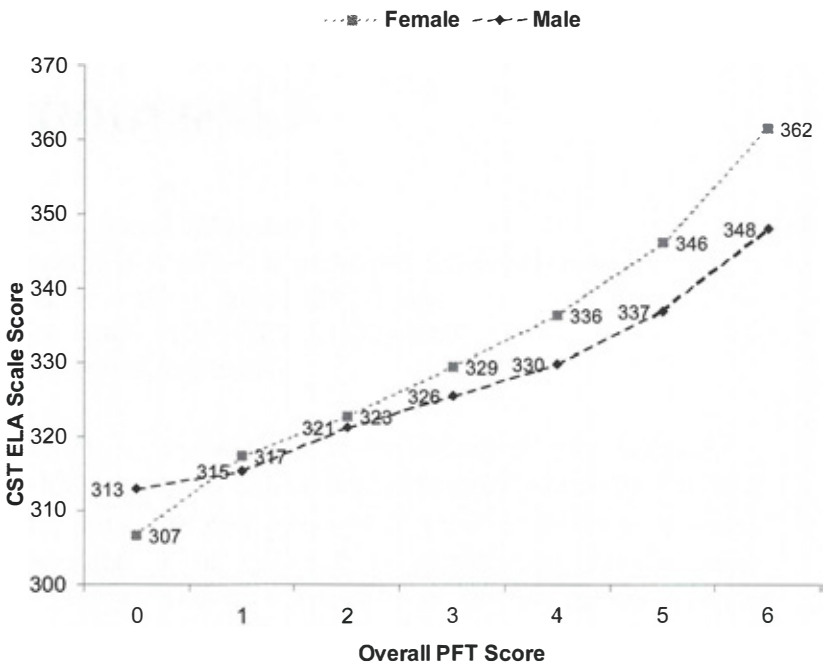

Figure 3. 2004 CST in English–language arts mean scale score for grade 5 by overall PFT score and gender. The number of female and male students was 182,287 and 188,921, respectively (California Department of Education, 2004, p.4).

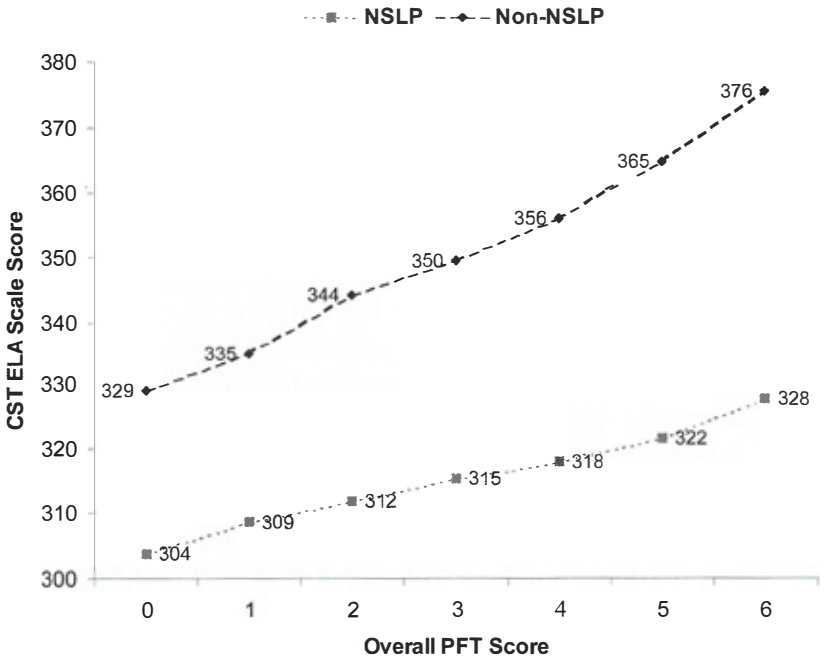

Figure 4. 2004 CST in English–language arts mean scale score for grade 5 by overall PFT score and NSLP. The number of NSLP and non-NSLP students in grade 5 was 203,726 and 167,472 respectively (California Department of Education, 2004, p.5).

The Use of Technology In and Out of the Classroom

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Research can be qualitative or quantitative. Research related to human performance may be quantitative research since it involves precise measurements and control of variables in a labratory setting and the use of statistics for data analysis. Qualitative research can also be used with human research; but, it commonly consists of field observations case studies, and narrative reports (1).

Research articles are designed to educate the reader about the research project. The introduction explains the history behind the research topic and what research questions the project is trying to answer. The methods section identifies who participated in the project, how data was collected, the type of statistics the researcher used, and the alpha level selected. The results section gives the statistical analysis of the data collected and if significance was identified. The discussion section is used by the researcher to explain the meaning of the findings. Of course, the conclusion is last and identifies the main points along with future research questions.

Common statistical tools used in quantitative research are the *t*-test and analysis of variance (ANOVA). Such tools are used to compare two or more groups. *T*-tests can be used to compare two actual groups or a single group by comparing group means and group variability. Even though two groups might be considered different, if the variablity is high, statistically, the groups are not considered different. When research warrants the comparison of more than two group means, an ANOVA is typically used in place of the *t*-test.

Statistics can also be used to identify a realationship between two variables and possibly provide a prediction. Correlations do not imply a cause and effect. Just because someone is thin does not mean she is physically active. The corrrelation is a quantitative value of the realationship between two variables and is identified with an "r" value (1). The r value will be a number somewhere between -1 and 1. An r equal to -1 indicates a perfect negative correlation or inverse relationship; as one variable increases, the other decreases (e.g. vertical jump and sprint time). An r value equal to 1 indicates a perfect positive correlation; as one variable inreases, so does the other (e.g. vertical jump and squat 1RM). An r value equal to zero suggests absolutely no realationship. It is rare for research to identify a perfect positive or negative correlation or no realationship at all. Values near zero are considered weak correlations while those closer to 1 or -1 are considered strong correlations. When the r value is squared (r2), it is known as the coefficient of determination and explains the commonality between the two variables as a percentage.

As mentioned above, correlations can be used to make predictions. However, when there is more than one independent variable, a multiple regression equation is used to predict the dependent variable. Usually, the greater the number of independent variables used, the greater the accuracy of prediction. However, too many independent variables can be a problem, too. There is a direct relationship between the corelation and the ratio of study participants to the number of variables tested. As the number of variables increase in relation to the number of study participants, the correlation

between the dependent and independent variables increases, increasing the strength of the prediction. Based on this information, with enough independent variables, just about anything can be predicted which does not make for good research. A recommended participants-to-variable ratio of 10:1 or higher is recommended (1). -

Before statistics are used to identify differences or relationships, an alpha level or chance occurance must be selected. The alpha level is the probability level used to determine if the research results are true or happened by chance. Alpha levels are typically set at 0.05 but can be set as high as 0.10 or as low as 0.01. It is used to control a Type I error which is when an invesgator concludes there is a difference (or relationship) between two groups when there is not - known as a false positive. The lower the alpha level, the lower the chance of making a type I error and the more difficult it is to identify significance. When statistical analysis is performed, a probability value ("*p*"value) is calculated. Should the *p* value be equal to or less than the predetermined alpha level (0.05), there is a 95 percent chance (or better) the differences found truly exist and a 5 percent chance (or less) they are random. An alpha level of 0.10 only provides 90 percent certainty the results are real and 10 percent chance they are random.

Most published research has identified a significaant difference or relationship in whatever was studied. It is important, however, to review this research with a keen eye. Just because significance was identified, it does not mean it is suitable for your needs. Take a look at the subjects used in the study. Were they preschool, middle school, or high school? Were they active or sedentary, athletes or non-athletes, male or female? What protocol was used? How were activity variables measured? Were the tests valid? And overall, does the research make sense? This information makes a difference in the results.

In some research, significance is not identified. This could happen for various reasons. The most likely reason is the lack of statistial power. Power is defined as the likelihood of rejecting a false null hypothesis (1). In other words, the higher your power, the greater your chances of finding statistical significance. Power can be increased three ways. The first is to increase the difference between the group means being compared. This can often be done by increasing the length of the study (i.e. train or supplement for 12 weeks rather than 6 weeks). The second way is to decrease variance. As previously mentioned, not only does statistics compare group means for differrnces but it also looks at the variability within each group. If group variablitity is large, statistical difference will not be identified despite different means. Variability can be reduced by maintaing consistency with testing. The third way to increase power is by increasing the number of participants; but, due to injury or poor adherence, numbers could be low by the end of the project reduling power and the chance of finding significance.

Sometimes, research does not identify significance because statistically, there were no differences between group means. This does not mean the research is any less important and should be disregarded. Non-significant research is important for two reasons:1) It identifies a treatment between groups that is ineffective or indicates there is no relationship between two variables. 2) Despite no statistical differences between groups due to the treatment, most likely there are differences which could be meaningful and should be taken into consideration.

In some situations when significance is not identified, researchers suggest a "trend" toward significance. Some individuals will base new research on past "trends" while others consider "trends" to be a lack of power. With no significance, there are no gray areas and there are no "trends".

One more important point has to do with sampling error. When study subjects are selected to participate in research, it is important those subjects truly represent the population from which they were selected Subjects should be randomly selected and ideally, they are a true representation of the population.

Reading research is vital to all professionals to maintain currency in the latest of what science has to offer. Understanding the meaning of significance is necessary to drawing your own conclusion of study results. The finding of statistical significance is not to measure of research value. Likewise, be sure to review the research carefully. If the study sample is not relevant to your work, regardless of the study outcome, it will not be relevant to your needs.

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Indiana Association for Health, Physical Education, Recreation, and Dance

Photo Publication Policy

Introduction:

Michael Shoemaker, Editor, JOPERD indicates he does not use a photo release, however. A few years ago, at the request of Linda Topper, the AAHPERD lawyer addressed this question, and what he said confirmed the understanding that I (Shoemaker) have always had of the subject. Because of the First Amendment, a publication has enormous latitude in what it publishes, so long as it does not (1) violate copyright and libel laws, (2) commercially trade on someone's image, and (3) violate someone's privacy to obtain the photo. This is why the paparazzi can ply their trade without using release forms.

Therefore, one should not use photos that would embarrass someone or show them in an unflattering light. Also do not use someone's photo for an ad that is promoting a product (this is commercially trading on someone's image). As for the privacy question: one has an expectation of privacy in one's own home, so someone cannot publish a photo shot through the window of your home, for example, but I think it is doubtful whether such an argument could be made for students in a public school.

Of course, people can sue about anything, and a release is an added form of protection, which is probably why photo release forms have become more popular (originally they were used only for professional models, whose images are for commercial use). However, practically speaking, it would be impossible for me (Shoemaker) to obtain releases for everything. The result would be a vastly diminished use of photos. It is already hard enough to get all our releases for article texts.

Recommended Policy:

The Indiana Association for Health, Physical Education, Recreation, and Dance will publish photos in the Indiana AHPERD Journal and Newsletter as long as they do not (1) violate copyright and libel laws, (2) commercially trade on someone's image, and (3) violate someone's privacy to obtain the photo. Further, when practical and possible the photo taker and/or provider will provide a signed copy of a Photo Release Form (see sample) to the editor.

Further, all photos submitted for publication should have names of those pictured if at all possible. The submitter can provide captions for the photos submitted. Finally, if there are multiple photos to be submitted for publications the photos should be prioritized since there is no guarantee as to the space available for pictures.

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Indiana Association for Health, Physical Education, Recreation, and Dance

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Results of a Callaborative CHD Risk-Factor Screening and Counseling Program on a University Campus

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Introduction

Coronary heart disease (CHD) is the leading cause of death and premature, permanent disability in North America (American Heart Association, 2005b).

The Global Burden of Disease study indicated that CHD was the most important cause of years of life lost in established market economies (Lopez, Mathers, Ezzati, Jamison, & Murray, 2006). One major conclusion of this study was the global burden of the disease will not change significantly from 1990-2020, in developed regions, or as a whole (Cohen, 2000).

Although considered a disease for the middle aged, heart disease is the third leading cause of death among adults aged 25 to 44 years (Center for Disease Control, (2006). Since CHD is predominantly a personal lifestyle disease, the U.S. Department of Health and Human Services began targeting adolescents and young adults for prevention efforts in Healthy People 2010 (US Department of Health and Human Services, 2000). The major risk factors related to personal lifestyle change include high stress levels related to hypertension, high blood cholesterol, high fat diets leading to overweight or obesity, physical inactivity, tobacco smoke, and excessive alcohol consumption (American Heart Association, 2005). The goal is to educate young adults in how to maintain a low-risk lifestyle over time to drastically reduce the chances of dying prematurely from heart disease (Stamler, Stamler, Neaton, & Wentworth, 1999).

In the United States and across the globe, research has identified CHD risk factors in college students and indicated they are at risk for coronary heart disease (Huang, Harris, Lee, Nazir, Born, Kaur, 2003; Pietikainen, Jokinen, Taittonen, Marniemi, Ronnemaa, & Raitakari, 2004). The Bogalusa Heart Study indicated that early-stage atherosclerosis in young people was related to the number of CHD risk factors (Berenson,

Srinivasan, Bao, & Newman, 1998). Christaina Economos, a leading CHD research scientist at Tufts University, says, "College kids are in the prime of their life and they aren't thinking about their long-term health and chronic disease. Harmful diet and exercise patterns they develop now can lead to heart disease, cancer, diabetes, osteoporosis, and obesity" (Collegiate Presswire, 2002, p. 1).

There is abundant evidence that supports even though students know about CHD risk factors, their behaviors do not lead to a low-risk lifestyle. Students are inactive, consume too much alcohol, smoke, eat unhealthy (leading to obesity, higher cholesterol levels), and experience a considerable amount of stress which put them at a higher risk for heart disease when they get older (Cardoso, 2004; Expanded Reporting, 2001, 2004). Universities provide an excellent opportunity to reach college students by providing them with CHD risk-reduction information. Therefore, there were two purposes for this study: (1) to provide normative data on CHD risk factors in a sample of college students, (2) to introduce a CHD risk- factor screening and counseling program coordinated by the Physical Education Department and the College of Nursing and Health Professions.

Methodology

Participants

The researchers used a convenience sample from a four-year public university located in the Midwest to collect data. The four-year public institution has an enrollment of about 10,000 students and grants Associates, Bachelors, and Master degrees. A pilot study provided data collection from students enrolled in Fitness/Wellness courses offered through the universities Physical Education Department during the Fall semester (n=315). The researchers used the pilot in the Fall to make any necessary modifications to survey instruments and establish a standard protocol for the program in the Spring. Thus, data was collected from two-hundred and thirty (N=230) students enrolled in Fitness/ Wellness courses offered through the universities Physical Education Department during the Spring semester.

Data Collection

Before any data was collected, all students participating in the study signed a release of liability and confidentiality statement. Data collected included the self-evaluation of cardiovascular risk and behavior modification lab and the Programs and Services survey.

The self-evaluation of cardiovascular risk and behavior modification lab was used to assess the current risk for coronary heart disease (CHD) and to develop a behavior modification program (Hoeger & Hoeger, 2004). The self-evaluation cardiovascular risk and behavior modification lab consisted of assessing cholesterol, blood glucose, resting blood pressure, BMI, physical activity, smoking, tension and stress, personal history, and age.

The Programs and Services Survey Instrument was developed by the researchers to provide information on campus programs and services offered to the students. The Programs and Services Survey Instrument included the following general demographic information: (a) sex of respondent, (b) race of respondent, (c) year in school, (d) whether the student was living on or off campus, and (e) questions about student use of programs and services related to nutrition habits, physical activity, and stress reduction techniques.

CHD Risk-Factor Screening Program

The CHD risk-factor screening program was developed to work in combination with an existing Fitness/Wellness classes taught at the University. Each class lasted between 50 to 75 minutes and could accommodate up to 25 students. During the fall semester, classroom instructors distributed the Self-Evaluation Cardiovascular Risk and Behavior Modification Lab and the Programs and Services survey to their students enrolled in their Fitness/Wellness course. The Programs and Services survey was completed and turned in during class. Students from the Fitness/Wellness classes were asked to complete parts of a CHD self-evaluation of cardiovascular risk and behavior modification lab. The parts completed by the students included the activity level, smoking, tension and stress, and personal history.

The remainder of the lab was part of the CHD risk-screening pilot program that would allow exercise science and nursing and health profession students to perform the tests. The tests included blood pressure (exercise science and nursing and health profession students), height, weight, Bioelectrical Impedance (nutrition students), and cholesterol, glucose/diabetes (nursing and health professions students). The self-evaluation cardiovascular risk and behavior modification lab was completed and turned in during the Employee and Student Hea1th Fair in the fall semester.

During the spring semester, students were scheduled for a screening at the Human Performance Lab on campus in order to complete the self-evaluation cardiovascular risk and behavior modification lab. Each student was greeted by an exercise science or nursing and health profession trained screener before entering the Human Performance Lab. The student was directed to the blood pressure, Bioelectrical Impedance (BMI), or cholesterol stations. The screener at each station explained the procedure and made sure a written consent form and the CHD Self-Evaluation Cardiovascular Risk and Behavior Modification Lab was completed. The screener then proceeded with blood pressure, BMI, or cholesterol screening.

The blood pressure screening was performed with an aneroid sphygmomanometer and stethoscope. The blood pressure screening was performed by allowing the students to rest for at least two minutes in a chair, feet flat on the floor, and arms supported at heart level. The appropriate cuff size was used to ensure accurate measurement and at least two measurements were made with a minimum of one minute apart. All measurements were completed by using the right arm (American College of Sports Medicine, 2006).

Each student's height and weight was measured before performing BMI. The students were asked to remove all footwear and to stand erect with feet flat on the standard platform scale and heels together. The student was asked to take a deep breath and the anthropometric arm was used to measure the height. The student was asked to remain on

the scale and the weight was measured to the nearest 1/4 pound (National Strength and Conditioning Association, 2004).

Cholesterol screening was performed using a portable cholesterol analyzer. The cholesterol screening, performed by the nursing and health profession students, was completed by drawing several drops of blood from the student's finger and applying the sample to a test strip. The test strip was then placed in the cholesterol analyzer for approximately 6 minutes and provided the student with a total cholesterol reading. HDL and LDL were not tested because the test strips were not feasible. Finally, each CHD risk-screening was followed by individualized counseling and recommendations for reducing risks. Each individualized session lasted approximately 5-10 minutes and was performed by a trained screener.

Data Analysis

Descriptive statistics were analyzed through the use of SPSS and provided frequency data for the self-evaluation cardiovascular risk and behavior modification lab.

Results

This results and discussion focused on providing normative data on CHD risk factors in a sample of college students and the introduction of a CHD risk- factor screening and counseling program coordinated by the Physical Education Department and the College of Nursing and Hea1th Professions.

Demographic

Demographic data of sex of respondent, race of respondent, and year in school were collected from students enrolled in several fitness and wellness courses using the Programs and Services Survey and can be found in Table I.

Table 1
Demographics

Sex of Respondent	
Male	49.3%
Female	50.7%
Race of Respondent	
African American	8.6%
Hispanic	2.1%
White	85.7%
Native American	.7%
Asian	1.4%
Arab-American	.7%
No Answer	.7%
Year in School	
Freshman	68.6%
Sophomore	16.4%
Junior	11.4%
Senior	3.6%

CHD Risk Factors and Risk Categories

According to the American Heart Association (2005c), there are three categories of risk factors: (a) uncontrollable risk factors, (b) controllable risk factors, and (c) others. The breakdown of uncontrollable, controllable, and other category of risk factors for the study may be found in Table II. The uncontrollable risk factors, ones that cannot be changed, included age, gender, family, and personal history. The controllable risk factors, ones that can be modified or treated, included physical inactivity, cholesterol, diabetes, diet, hypertension, overweight or obesity, and smoking. Finally, other risk factor included stress.

Table 2
Student CHD Risk Factors and Risk Categories

CHD Risk Factor	Percent
Category 1	
Age	
29 or younger	97.8
30-39	.7
40-49	.7
50-59	.7
Gender	
Males	49.3
Females	50.0
Unlnown	.7
Family History	
0	43.1
1 or more after age 60	28.5
1 or more between 51-60	14.6
1 or more before age 51	13.9
Category 2	
Physical Activity	
3 or more times per week	38.1
2 times per week	33.8
1 time per week	28.1
Cholesterol	
Equal to or less than 200	62.5
201-239	26.4
> than or equal to 240	11.1
Glucose	
< than or equal to 80	9.7
81-125	85.4
= to or > than 126	4.9
Diet	
Red meat fewer than 3 times per week	47.5
4 to 6 servings of red meat per week	44.4
Daily serving of red meat	8.1

(Continued)

Table 2 (Continued)
Student CHD Risk Factors and Risk Categories

CHD Risk Factor	Percent
Homocycsteine	
2-3 servings of fruits & vegetables daily	41.9
Less than servings of fruits & veg. daily	58.1
Systolic Blood Pressure	
< or = 120	37.0
121-130	39.7
131-140	93.2
141-149	2.7
> or= 150	2.7
Blank/ not answered	1.4
Diastolic Blood Pressure	
< or = 80	58.9
81-90	35.6
91-98	1.4
99-106	2.7
Blank/ not answered	1.4
BMI	
<25	57.7
25.1-29.99	24.1
30.0-39.99	13.1
>40	5.1
Smoking	
Nonsmoker for more than one year	58.4
Smoker < than 1 year or 1 cig/ day	7.3
Nonsmoker exposed to ETS	13.1
Pipe, cigar, chew/ 1-9/ day	13.9
10-19 cig/ day	6.6
20-29 cig/ day	.7
Personal History	
Never had a heart attack	97.8
More than 5 years ago	2.2
Category 3	
Stress	
Sometimes tense	53.6
Often tense	33.3
Nearly always tense	11.6
Always tense	1.4

Discussion

As indicated, students know about CHD risk factors; but, their behaviors do not support a low-risk lifestyle. Students are inactive, smoke, and eat unhealthy which place them at a higher risk for heart disease (Cardoso, 2004; Expanded Reporting; 2001, 2004). The students in this study support the philosophy of being at a higher risk for heart disease as illustrated by the measures of blood pressure, cholesterol, BMI, physical activity level, and dietary habits taken during this study.

About 52% of the students in this study had a borderline hypertensive readings. Although some of the results may be due to the order of the blood pressure reading (higher because it followed the cholesterol reading) or reader error, this hypertensive response was not unusual considering about 42% of the students were overweight (24.1%) or obese (18.2%) according to BMI standards (overweight = >25', obesity = > 30) (CDC, 2005). Overweight and obesity is closely associated with engaging in less than healthy dietary habits and being physically inactive (Thomas, Baker, & Davies, 2003). A less than healthy diet was also supported during this study. The majority of students in this study did not meet the recommended intake of at least 5 servings of fruits and vegetables per day or the minimum of 20g of dietary fiber per day (Bialostosky, Wright, Kennedy-Stephenson, McDowell, & Johnson, 2002). Sixty percent of the students actually reported eating less than 2-3 servings per day of fruits and vegetables. In terms of physical activity, 38.1% of the students reported exercising at least 30 minutes a day three or more time per week. This means 61.9% of those students were not exercising according to the U.S. Surgeon General's report recommendations released in the 1996 Physical Activity and Health Report. The report recommended people to participate in moderate-intensity physical activity for dominates most, if not all days of the week. The report also mentioned health benefits can be received by participating in vigorous activities 20 to 30 minutes in duration two to five times a week (American College of Sports Medicine, 2003). Finally, 36% of the students had undesirable cholesterol levels. Total cholesterol plays a decisive role in the development of CHD (Thomas, Baker & Davies, 2003).The National Cholesterol Education Program (NCEP) reported that elevated blood cholesterol, a primary risk factor for atherosclerosis, begins in childhood; although, little is known about national standards (Spencer, 2002). Total cholesterol of less than 200 mg/dl is considered desirable. Again, the student's diet and lack of exercise may have played a distinct role in the percentage of students with undesirable cholesterol levels.

Considering the outcome of the CHD risk factors found during this study, such as hypertension, a low homocycsteine and physical activity values and some higher cholesterol levels, one may consider paying greater attention to diet and exercise intervention in this sample of students. In addition, a CHD risk-factor screening and counseling program is likely needed on a consistent basis to provide an effective means of assessment. This screening and counseling program can help provide an accurate assessment by utilizing trained students to coordinate and perform the screening.

Implications and Future Research

There were several implications for the study. First, there was evidence of CHD risk factors among these college students that may not manifest over several decades but cannot be overlooked. Many of these risk factors could be partially or wholly modified through a lifestyle change.

Therefore, it is the recommendation of the researchers to provide a brief unscheduled screening and counseling CHD risk factor intervention program led by trained students. This is an effective, low cost means of providing college students with information and education while incorporating the program into an undergraduate health-promotion curriculum. This type of experience provides and excellent professional training and experience for health-promotion or exercise science majors. This screening and counseling CHD risk factor intervention program could also be portable. A portable screening program could be available during the academic year in various campus settings such as the lobbies of classrooms, residence halls, and fraternity/sorority houses. The program would need to include a thorough training program for the screeners. Decisions would need to be made on grade level, required courses, a practical training program, written and practical exams, and the completion of a screening under the supervision of a trainer.

Second, departments and instructors need to continue to provide awareness of programs and services, especially to new students, offered on campus. By encouraging students to participate in these programs and utilize these services, the prevalence of CHD on campuses may begin to decline instead of steadily increasing. Third, the majority of the students on college campuses may be young (18-21); but, there is still the possibility of CHD. Instructors need to be aware of the risk involved during any physical activity class offered on campus and make the necessary modifications. A health history form may need be adopted by the department offering the activity course and a doctors' release may need to be provided before attempting the activity class.

Future research needs to expand the screening to a larger scale to make sure the selected participants are representative of the campus population. This type of screening may yield a more accurate assessment of CHD risks among college students.

Conclusion

As indicated, genetic inheritance does play a role in CHD; however, the most important determinant is personal lifestyle. Since CHD is predominantly a personal lifestyle disease, the goal is to educate young adults in maintaining a low- risk lifestyle over time to drastically reduce the chances of dying prematurely from heart disease (Stamler, Stamler, Neaten, 1999). If universities can help in providing the necessary CHD risk screening program for students, the goal of maintaining a low-risk lifestyle while reducing the changes of dying prematurely may be in reach.

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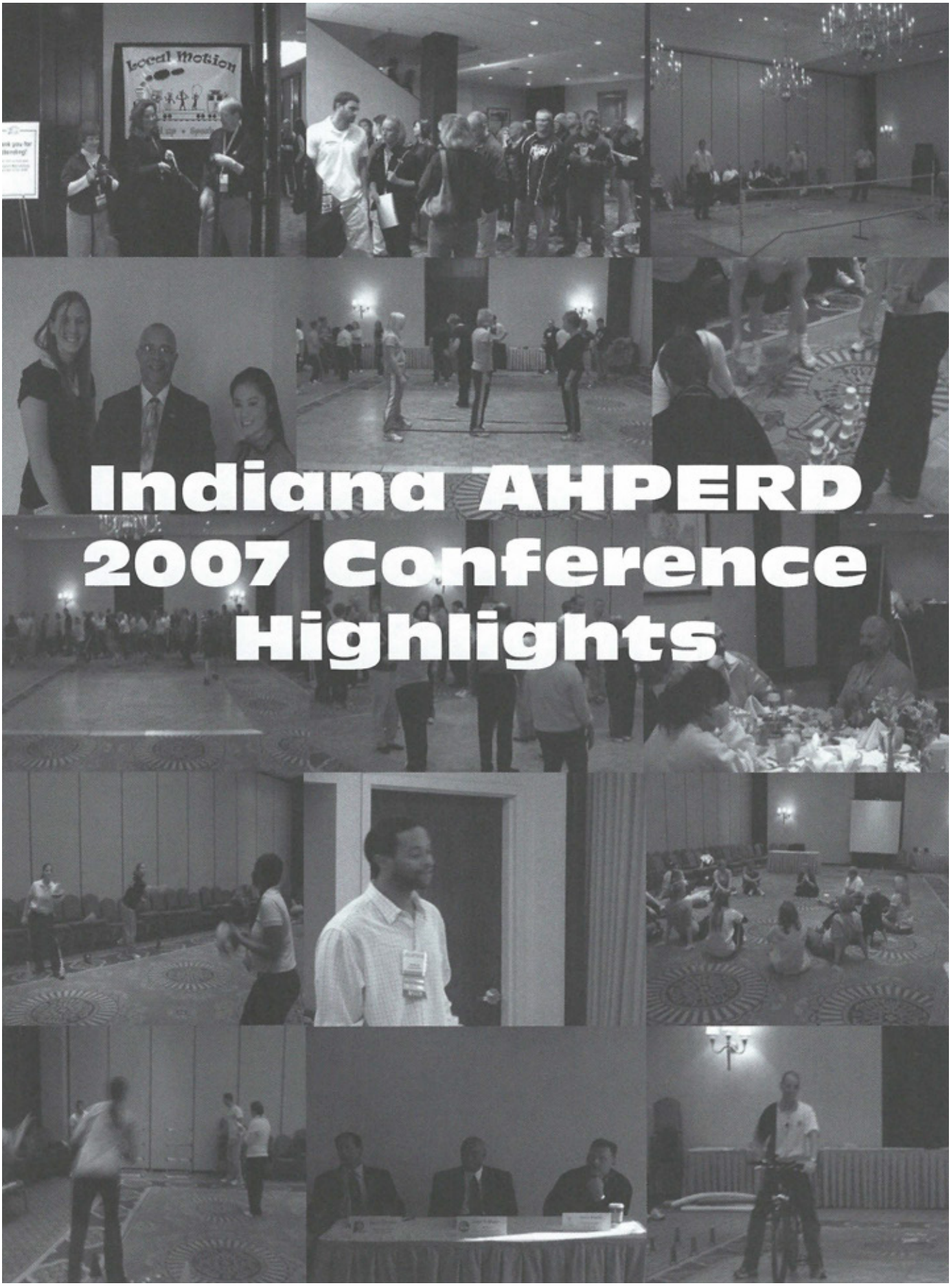


Indiana AHPERD 2007 Conference Highlights

IAHPERD 2007 Conference Exhibitors

Indiana AHPERD

Leadership

2007
IAHPERD Recognition Awards

Members of the Association who have distinguished themselves in service to the professional and were recognized at the Awards Celebration at the 96th State Conference at the Radisson Hotel City Centre in Indianapolis on November 8, 2007. Various awards and scholarships were given to recognize the achievements and contributions of outstanding health, physical eduction, recreation, dance, and sport professionals.

The Honor Award is the highest recognition by IAHPERD to one of its member who is clearly outstanding in his/her profession with long and distinguished service to health, physical education, recreation, dance and/or allied areas.

Suzanne Crouch (Suzie) is the Director of the Coordinated School Health Program at the Indiana Department of Education. She is responsible for educating Indiana teachers about the most current research based health curricula. She also works with Indiana public health coalities to improve the health of youth and all Hoosiers. Suzie has also had an exeemed career in teaching. She taught elementary physical eduction in Ozark, AL, and high school physical education in Texas and became the first civilian trainer for the U.S. Army's Physical Fitness Academy in Ft. Benjamin Harrison. Suzie worked for the American Alliance as coordinator of Jump Rope for Heart and Physical Best. Suzie was also the executive director for a therapeutic equestrian center in Manassas, Virginia. Suzie served as consultant for health and physical eduction at the Indiana Department of Education. She directed the development of the first Indiana Academic Standards for Physical Education and Health. She received a $104,000 grant from the CDC to provide Physical Best and Fitnessgram training throughout Indiana. Suzie continues to do what she loves best, teach at University of Indianapolis. She is very active in association work serving as a member of the Alliance Executive Committee of the Middle and Secondary School Physical Education Council and president of the Society of State Directors of Health, Physical Education, and Recreation. There isn't enough space to list the contributions Suzie has made to IAHPERD. She writes, "For the past 35 years I have been privileged to work in a field I love. Each adult member of a school has a role to play in a student's acquisition of a healthy body. Each of us should model a healthy lifestyle for personnel health and to influence attitudes of other."

The Legacy Award is designed to recognize persons who have given long and distinguished service to the Association. This award is not intended to overshadow the Honor award but recognize persons who have left a legacy, a benchmark or a standard in professional service, scholarship, and leadership.

Barbara Greenburg spent her professional career, 42 years, at Butler University where she taught a variety of courses ranging from softball, coaching theory, physical education for the classroom teacher, and she also supervised student teachers. Barbara developed a lasting coaching legacy at Butler. During her tenure, she coached field hockey, volleyball, tennis, and softball. She was a NAIA, IHSAA, and NCAA national referee for volleyball and basketball. She was also a ruler for the national referee organizations. Barbara conducted many coaching clinics for new and aspiring coaches of women's sports. Barbara is particularly proud of being inducted into the Butler Athletic Hall of Fame. Barbara is a model professional. She has served the profession in a number of ways serving on IAHPERD committees, president at meetings, and presenting her ideas at state conferences. Barbara leaves a legacy of dedication and commitment to teaching, coaching, and the profession.

Special Contributions Award

The Special Contribution Award recognizes an individual who is outside of health, physical education, recreation and dance but who, through his/her work, has contributed significantly to the general purposes of the Association.

Wilma Willard is the Director and co-founder of PATH, A Positive Approach to Teen Health. The mission of Path is to equip students to make healthy choices through abstinence and to develop healthy relationship skills. The program that Wilma and PATH instructors have developed enhances the health education opportunities in the schools and communities. Wilma was selected as the IAHPERD Health Educator of the Year in 2000. Wilma has presented many health education sessions at IAHPERD state conferences. Path was a participant and exhibitor in the IAHPERD Health Program Council and participated in may Leadership Conferences. A friend writes, "Wilma and her PATH group have affected the practice of educating today's youth by providing age-appropriate information that empowers youth so assess their own behaviors and encourages them to resist pressures that have negative health consequences."

Teacher of the Year Awards

The Teacher of the Year Awards recognizes the work of outstanding health, physical education, and dance teachers. A teacher is defined for the purpose of the award as an individual whose primary responsibility is teaching students health, physical education, and/or dance in kindergarten through twelfth grades for a specific school corporation with dance being a possible exception.

Physical Education Teacher of the Year - Secondary School

Tod Held teaches physical education and health at Lincoln High School in Vincennes. He stresses the ABC's (Any Body Can) of total fitness. Students learn how to assess their physical fitness and take responsibility for planning and developing physical activity and fitness programs to meet their individual needs. Tod feels his program helps students begin to associate the benefits of fitness and wellness in terms of looking good, thinking better, feeling good, meeting emergencies, and being physically fit. He writes, "The most rewarding part of my program is seeing students demonstrate responsibility for being physically active while promoting respect for differences among people in physically active settings."

Physical Education Teacher of the Year - Middle School

Missy Harvey teaches physical education, health, and serves as Department Chair at Decatur Middle School in Indianapolis. Missy's achievements include developing programs that satisfy the National Standards, implementing a class, C.H.A.N.C.E., Combining Health Awareness and Nutrition with Cardio Exercise, which combines physical education and health curricula, and using sophisticated technology as a motivational tool to encourage student participation in physical activity. Goal setting, assessment, and personal best are paramount in her physical education classes. Missy practices what she preaches (goal setting, assessment, and personal best) by participating in the Indianapolis mini-marathon. She is active in her community serving on committees which influences health and safety policies. She has presented her ideas at IAHPERD advocacy workshops and conferences. Her principal writes, "Missy is not just some teacher that meets the state standards to keep the administration happy and parents off her back. She is an individual who seeks opportunities to improve a classroom through student-centered activities by exceeding state standards."

Leadership Award

The Leadership Award recognizes an individual who has demonstrated significant leadership in terms of program development in health, physical education, recreation, dance, and/or allied areas and whose contributions reflect prestige, honor, and dignity as the Association.

Kim Duchane epitomizes the image "leader". Kim is an Associate Professor of Exercise and Sports Science at Manchester College. Kim has worked at Manchester College to develop a physical education program that links pre-service teachers with students who are home schooled so each group gains valuable skills in teaching and learning. He has developed community relationships in Wabash County and has been instrumental in developing cooperative programming with the Special Olympics. Kim has worked tireless to promote his profession serving on the IAHPERD Board of Director. Chair of the Advocacy Committee, and President of the association. His work on a previous state conference insured a record number of attendees and his attention to detail and support of individual's in leadership positions demonstrated his effective leadership style. Kim is a prolific writer. He has authored or co-authored over 20 articles in peer-reviewed journals and has given over 50 presentations at professional meetings. Kim was selected as Midwest Scholar for the Midwest District AAHPERD in 2007. A colleague writes, "Kim exemplifies devoted services to the profession. He has been an outstanding leader in our state organization and his influenced countless young professionals to also become involved."

Pathfinder Award

The Pathfinder Award was established to honor a member who has and/or continues to advocate, recruit, and enhance opportunities for girls and women in sports and sport leadership.

Pat Zeruls has made significant contributions to promote women in sports throughout her 37 year career as teacher, coach, and administrator at Huntington College. Pat has been instrumental in the evolution of women's athletic as we know it today through what some of us remember as college team, play days and sports days. For 15 years, she was the head coach for every women's sport as Huntington College. In 1982, she was named women's athletic director at Huntington College making her the first female intercollegiate athlete director in Indiana. Pat served as state chair of the Indiana Women's Intercollegiate Sports Organization and worked on numerous committees to promote women's sports programs. She was inducted into the Huntington College Hall of Fame, 2003.

The Young Professional Award recognizes a younger member of IAHPERD who has demonstrated outstanding potential in teaching, scholarship, and services. The recipients shall have demonstrated a quality of performance that if continued, indicates that he/she will develop into a distinguished member of the profession.

Glenna Bower is an Assistant Professor of Physical Education in the University of Southern Indiana. Prior to becoming an Assistant Professor, she served as an adjunct instructor in the Sport Administration Program at the University of Louisville and as an Assistant Director of Recreation, Fitness, and Wellness at USL. Glenna brings a wealth of practical fitness experience to her students having served in corporate fitness at Mead Johnson Nutritional in Evansville, Ameritech in Chicago, and General Electric in Evansville. Dr. Bower is a prolific writer. She has authored two books and has made numerous presentations too many to mention, to various scholarly associations at the state, regional, and national levels. Her main research interest is advancing women into leadership positions in sport and physical education through mentoring. Glenna is an active member of IAHPERD serving as Program Director for Higher Education Research and as a member of the Regional and Sport Management Councils. She has also been active in other organizations include the National Intramural Recreational Sports Association when she served on the Standards committee and the Indiana Recreational Sports Association where she was the founder and Chair of the IRSA Scholarship Program. Glenna has also worked the 2004 Summer Olympics Games in Athens, Greece.

Physical Education Teacher of the Year - Elementary School

Pamela Hesting teaches physical education at Lincoln Elementary in Huntington. Pam's program embraces the goal of NASPE... "to develop physically educated individuals who have knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity." The theme in her gym is "Get Movin." She is a member of the Huntington school corporation IMPACT teams which is responsible for developing thematic unit in music, physical education, and art with reading and writing across the curriculum. Some of her students' creative works have been published in "Great Activities". She obtained an Global grant which funded as interactive circulation obstacle coarse. She was also awarded the Huntington County Community School Corporation grant to purchase fitness equipment. She has implemented a walking program for students and staff. Pam is very active professionally sponsoring Jump Rope for Heart and Project A.C.E.S. events. She also coaches both girl's and boy's cross country teams. She serves on several school committees – General Education Intervention, Policy, Behavior Plan, Family Involvement Committees, and is a member of the IAHPERD Elementary Physical Education Council. Her principal writes, "Her willingness to do whatever it takes is inspiring to the entire staff."

Dance Educator of the Year

Teresa McCullough teaches dance and is director of the dance minor at Indiana State University. Teresa finds teaching beginning and upper level dance courses challenging and rewarding. Teresa's goal is to help each student succeed at their own level. Students learn that dance is a universal language through which culture barriers can be broken and lines of communication opened. Teresa and Sherry McFadden founded Fusion, a combined dance and theater company. The company provides performance and educational opportunities in the community. Teresa is a member of IAHPERD and the Alliance. She is NETA certified aerobics instructor and teaches at the YMCA and local dance studio. She freelances at Crossroads Repertory Theater and Smith-Wallbridge camps and clinics. She presented a workshop to prepare actors for movement auditions at the Kennedy Center American College Theater Festival this year. Teresa is active in her community serving as a member of Tri-Kappa and on the board for St. Vincent Clay County Hospital.

Recreation Profession of the Year

The Recreation Professional/Lecture Educator of the Year Award recognizes the work of an individual who exhibits outstanding and creative leadership in the recreation profession or as an innovative leisure educator at the college/university level.

Connie Updike is an Assistant Professor and Chair of the Kinesiology and Recreation Management at Huntington University. She teaches recreation management courses, supervises internships, and advises recreation majors at Huntington University. Connie has served and continues her service record on a member of university committee. She received an Eli Lilly grant to develop programming through the Thornhill Mindscape Program to promote outdoor environmental eduction. She has been active in her community sharing her time, talent, and ideas with others. She has presented Career Day at local schools, consulted on curricular issues at Manchester College, developed a sports ministry position for a church in Tennessee, consulted with a professor teaching a camping class at a Christian university in California and with a special needs teacher development writes, "Connie is a forward thinking educator constantly making connections between the academic world and the recreation profession. She is tireless in her efforts to enhance the learning opportunities for student. Professor Updike is a role model of an innovative leisure educates for our students."

Sport Management

Jeff Peterson is an Assistant Professor of Sport Administration and coordinator of the undergraduate sports administration program at Ball State University. Jeff teaches a number of undergraduate and graduate courses in sports administration. Jeff uses a variety of hands on projects, Dubuque Thunderbirds Hockey Fan Survey, Bix 7 Projects, BSU Football/Basketball Student Fan Survey. High School Basketball Media Guide Project to bridge the gap between theory and practice. He was first to use Ball State's Global Media Network to provide students from BSU and England the opportunity to exchange ideas and experiences in sports management. He too contributes to other professionals through his publications and presentations of facility design. Jeff is active professionally. He is the IAHPERD Sport Management Program Director. He has worked tirelessly to elevate the status of sport management in the association and to increase its visibility through state conference presentations. He is also Chair of the Alliance Council for Facilities and Equipment.

Outstanding Student

This Award recognizes an undergraduate student who has displayed distinctive leadership and meritorious service to his/her profession.

Melanie DeGrandchamp attends Manchester College majoring in Adapted Physical Education. Melanie leads an active lifestyle. She plays a variety of intramural sports and often serves as captain of her teams. She is secretary for the college Student Education Association and a board members of the Council for Future Professionals. Melanie is a fitness technician at Curves for Women. She also coaches grade school basketball at the YMCA. A professor writes, "Melanie is a very capable future professional and will be the kind of teacher who accomplishes great things with her students. She serves as a positive role model epitomizing personal health and enjoyment of physical activity."

Jean Lee/Jeff Marvin Collegiate Scholarship Awards

The Jean Lee/Jeff Marvin Scholarship Awards were established by IAHPERD to recognize outstanding undergraduate students preparing for a career in a health, physical education, recreation dance, and allied fields.

Melanie DeGrandchamp is majoring in Adapted Physical Education at Manchester College. Melanie plans to teach physical education and health to students with or without disabilities helping them be the best they can. She hopes to coach volleyball or basketball. Melanie is a member of IAHPERD and the Alliance. She is an officer in the Student Education Association and a member of the SHAPE Club promising healthy lifestyles on the Manchester campus. She volunteers with the Manchester Special Olympic program. She coaches athletes with disabilities and tutors children to improve their reading skills. Melanie is also the recipient of the 2007 IAHPERD Outstanding Student Award.

Sarah Longnecker is majoring in General Physical Eduction at the University of Southern Indiana. She aspires to be a wellness program director where she can develop health and fitness programs for people of all ages. Sarah hopes to do a master's in public administrations with focus on restructuring the state health insurance to reduce cost to members. Sarah works at the YMCA and in the athletics department at USI. She has been instrumental in such community programs as Healthier Evansville, Fit Kids/Fit Families, Jump Start, and 13 Weeks to 13 Miles.

Landon Buesching is majoring in Physical Education and Health at Ball State University. Landon has worked several jobs to pursue his dream of becoming a physical education teacher. Landon supervises sports in the recreation department at Ball State. He is an IHSAA licensed baseball official. Landon was chosen to represent the College of Applied Science and Technology at a university donors event and was selected from 160 majors to represent Ball State at the IAHPERD Conference, 2006.

Mary Sutliff is majoring in Health and Physical Education at Purdue University. Mary plans to teach health and physical education upon graduation for Purdue. She coaches volleyball at Central Catholic Jr/Sr High School. She gives swimming lessons and has worked as a camp counselor. Mary is President of the Health and Kinesiology Majors Club, a member of Kappa Delta Pi, and is a member of IAHPERD Council for Future Professionals.

High School Scholarship Awards

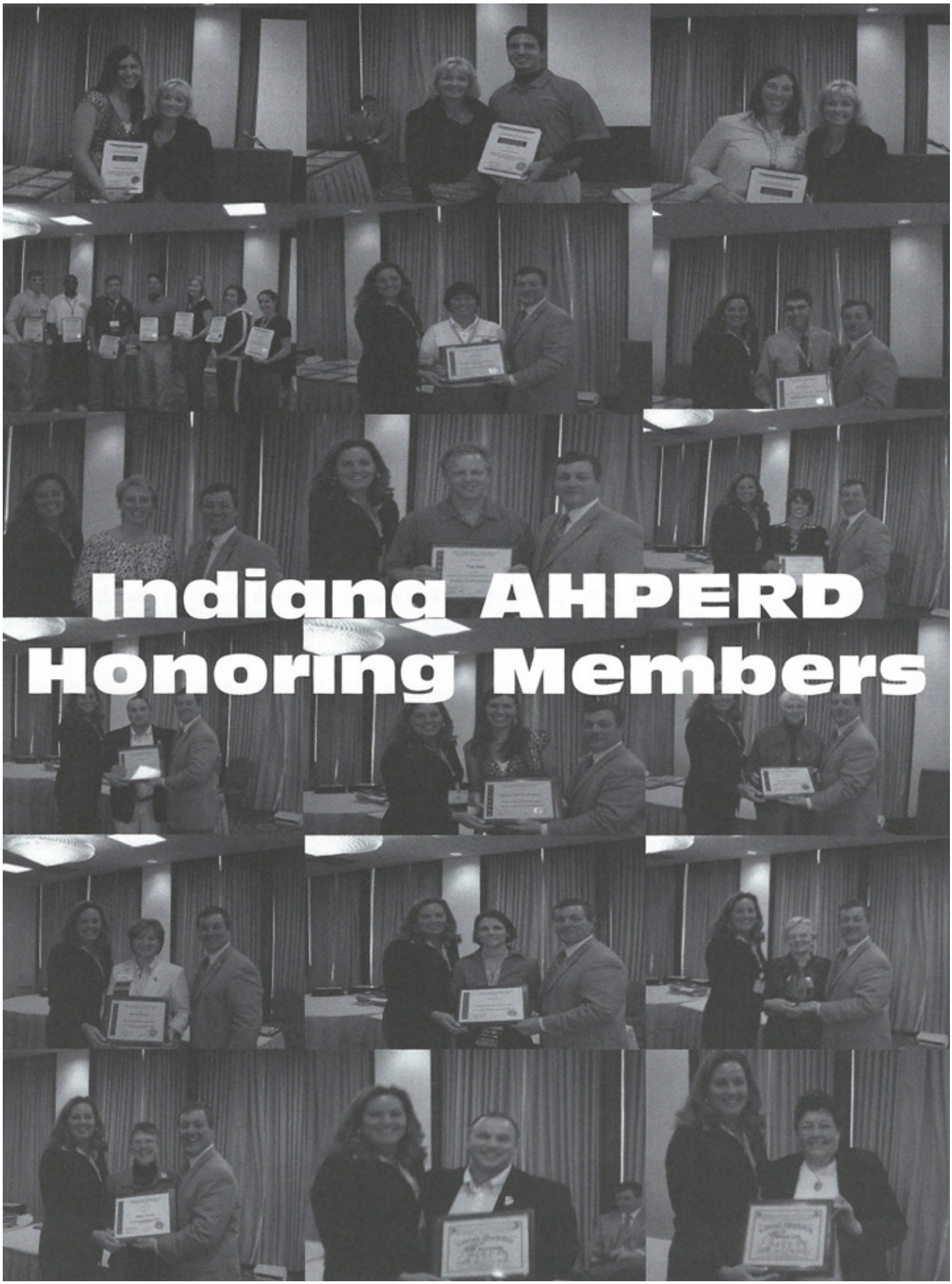
The IAHPERD High School Scholarship Award was established to recognize outstanding high school seniors who enroll in an Indiana college or university to prepare for a health, physical education, recreation, dance, and allied career.

Tyler Mikel graduated from Lakeland High School in LaGrange. He plans to major in sports administration at Taylor University. Tyler loves football. He was a four-year academic letterman at Lakeland. He aspires to coach football at the collegiate level. His Principal writes, "While achieving high honors in school, Tyler volunteers his time outside school to help students who need tutoring as well as positive social influence. He has proven to be balanced in his focus of self and others. Tyler's teachers admire sense of community."

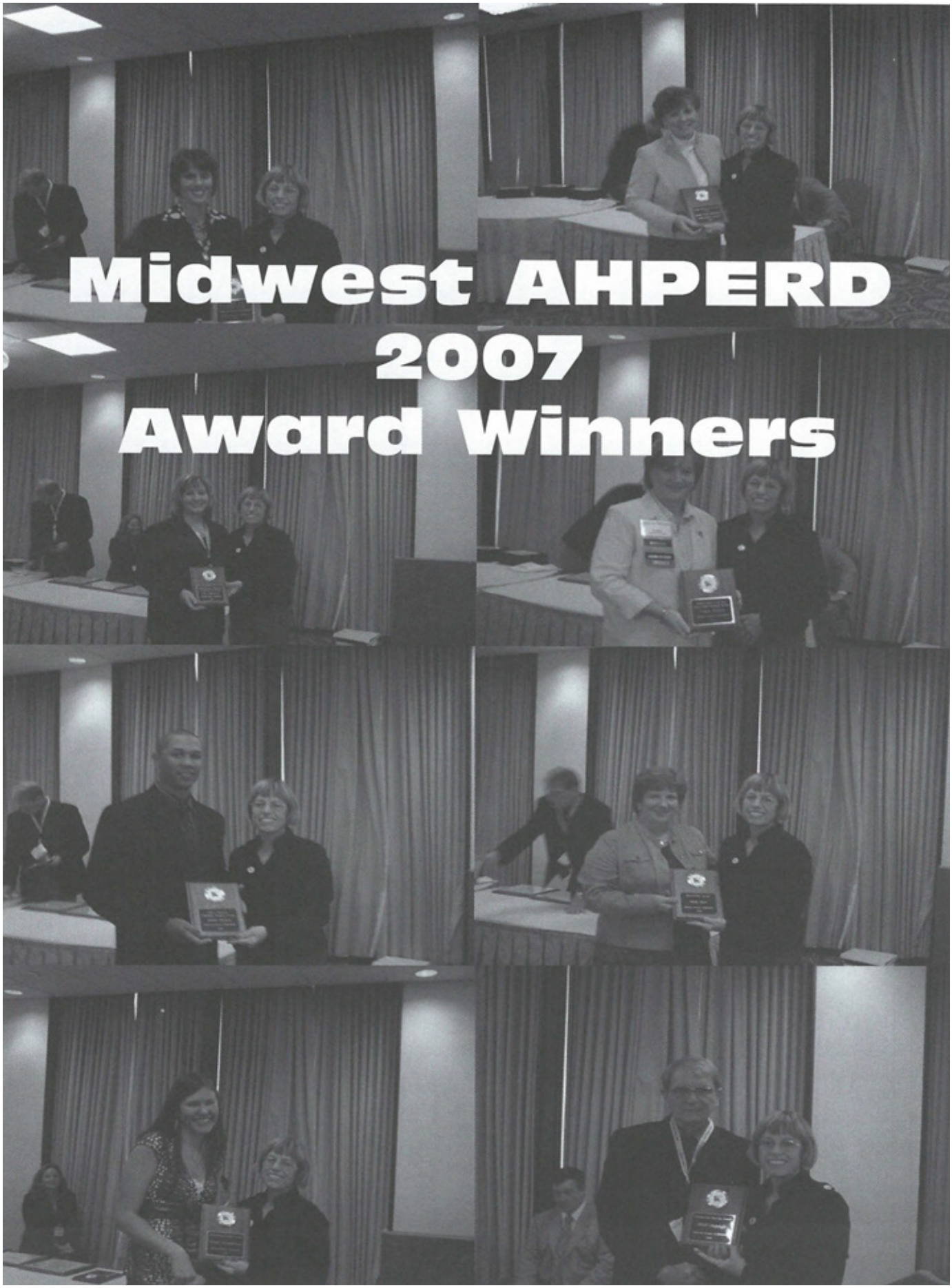
Andrew Fortner graduated from Mooresville High School in Mooresville. He plans to major in sports marketing/management at Indiana University. He participated in varsity soccer and baseball at Mooresville High. He was a member of the National Honors Society. He writes, "I love sports and would like to work in the sporting industry after college. I worked for the Indianapolis Indians, a minor league baseball team. I enjoyed it so much I plan to work there again next summer." His principal writes, "Andrew is a true leader in our school and community. Andy is a young man who upholds the highest of moral standards. He is a person of integrity, honor, and character."

Jennifer Smith graduated from North Posey High School in Poseyville. She plans to major in physical education at the University of Southern Indiana. Jennifer hopes to teach physical education in the Evansville area. Her teacher/coach writes, "Jennifer is full of vim and vigor. Her dedication to work in the classroom, on the track, and with the Hoosier Bowl, regardless of how hard it is, greatly influenced me and others."

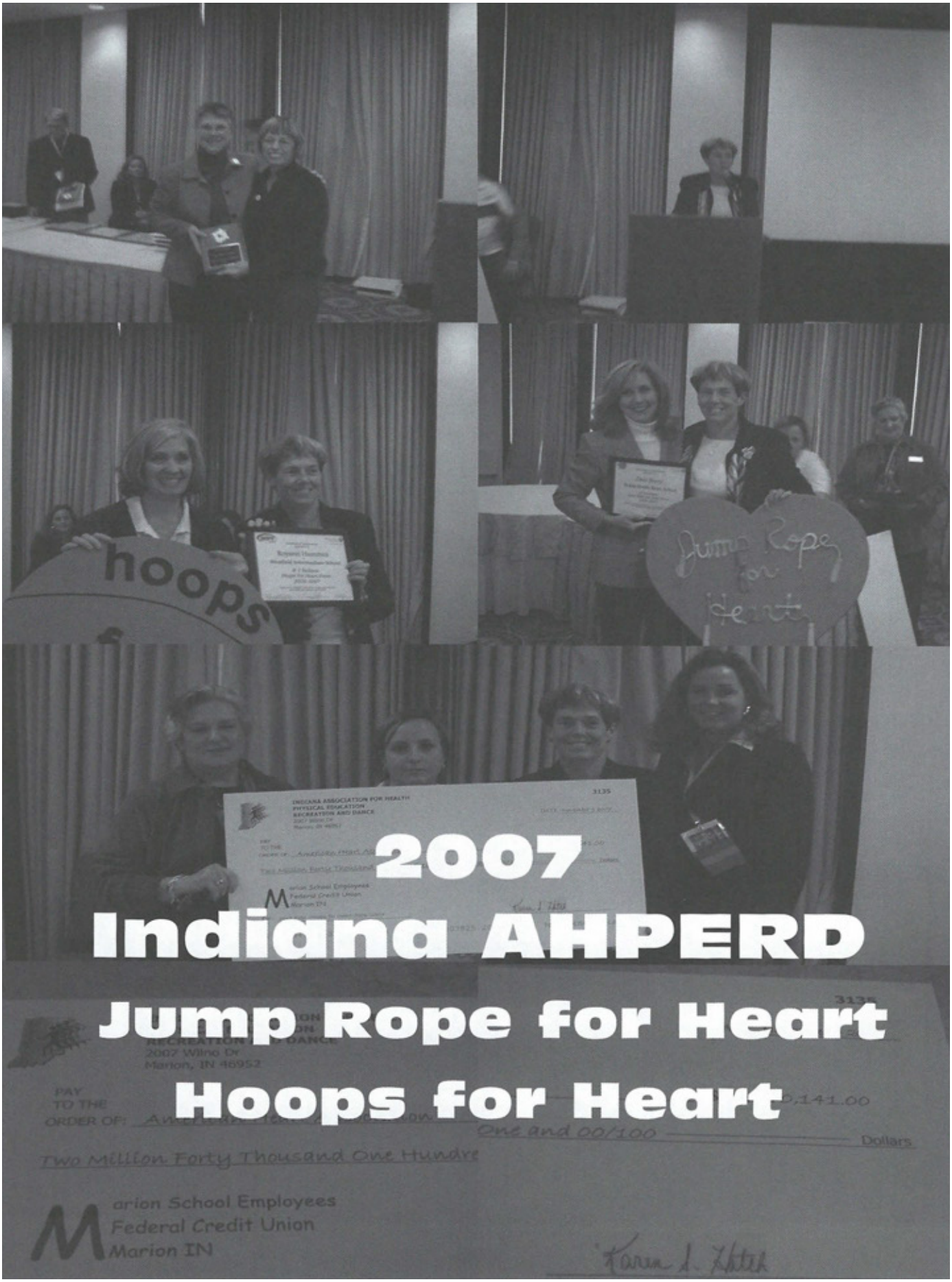
Kyle Chumley graduated from Jeffersonville High School in Jeffersonville. He plans to major in physical education at Indiana University Southeast. He hopes to teach physical education. He enjoyed teaching basketball adults and children at the Transplant Games of America. His football coach writes, "Kyle is an innovative self starter of impeccable character and integrity. His work ethic and ability to lead others in times of adversity will help him for the rest of his life.



Indiana AHPERD Honoring Members



Midwest AHPERD 2007 Award Winners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The Relation Between Exercise Frequency and Mood Disturbance in College Students

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Abstract

An important issue in the promotion of mental health in college students is the frequency and duration of exercise needed to successfully manage mental health during the stressful college years. The purpose of this study was to compare mood disturbances in college students based on the frequency of exercise (aerobic and anaerobic). Significant differences in mood scores were found for students who exercised once weekly or a few times a week. Hence, college administrators and counselors may wish to suggest that college students engage in moderate exercise programs to maintain good mental health.

The college student experience, although often exciting, empowering, and invigorating, can also be stressful, anxiety producing, and lonely (Kohn & Frazer, 1986; Miller & Rice, 1993). In fact, data has indicated disturbing trends in health problems in college students in the United States in the past decade (American College Health Association, 2005; Courtenay, 1998; Douglas et al., 1997). Furthermore, research has shown a dramatic increase in the levels of stress experienced by college students over the past thirty years (Sax, 1997).

Although many colleges and universities have an infrastructure in place to assist students who experience mental health problems (Stone & Archer, 1990; Tyrrell, 1997), most mental health services that are offered on college campuses are treatment-oriented in nature, focused on assisting students who have already developed at least some level of psychological dysfunction. The emphasis on the treatment of mental health services on college campuses seems to come at the expense of preventative mental health services that are designed to help students avoid developing mental health problems in the first place (Albee, 1990; Brown, 2002). In other words, current approaches to dealing with mental health problems in college students tend to be reactive rather than proactive and, as a result, many students may develop mental health problems and other difficulties in functioning because preventative strategies are either not in place or are underdeveloped.

Some colleges are now investigating possible prevention strategies. Although preventative mental health interventions with college students can take many forms, the purpose of the present study was to investigate the relation between exercise frequency and college student mental health, as evidenced by mood states. Although there is increasing evidence to support a positive relationship between exercise and mental health (Giacobbi, Hausenblas, & Frye, 2005; Rocheleau, Webster, Bryan, & Frazier, 2004), specific recommendations for exercise intensity, mode, frequency, and duration are not well established (Buckworth & Dishman, 2002). Research has tended to examine either changes associated with a single acute exercise session or changes resulting from long-term regular participation in an exercise program (e.g., chronic exercise). Such studies have typically relied on self-report questionnaires that measure various aspects

of mental health, such as anxiety or mood states (Raglin, Wilson, & Galper, 2007). Although temporary reductions in state anxiety have been reported following acute bouts of exercise (Petruzzello et al., 1991; Rosa, de mello, Negrao, & Oliveria de Souza-Formigoni, 2004), as have short-term mood benefits (Berger & Owen, 1998), other studies have suggested that acute exercise is no more effective in these reductions than is quiet rest or meditation (Bahrek & Morgan, 1978; Breus & O'Connor, 1998; see Puetz, O'Connor, & Dishman, 2006, for similar null findings using chronic exercise and a placebo control group). Importantly, although reporting qualitative similarities between quiet rest and exercise conditions, these studies have found significant quantitative differences, reporting that the anxiolytic effects of exercise may persist up to several hours following the completion of a single exercise bout (Buckworth & Dishman, 2002).

In addition, although less research has been conducted on the relationship between chronic exercise and anxiety, reviews of the extant literature suggest modest reductions in anxiety through long-term participation in exercise regimens (Petruzzello et al., 1991; Raglin, 1997). In a meta-analysis of the literature examining the relationship of mental health and exercise, Petruzzello and colleagues (1991) found moderate but significant effect sizes for both acute exercise (.24) and chronic exercise (.34) to reductions in anxiety. Petruzzello and colleagues thus concluded that based on extant studies, the benefits of exercise upon mental health were greater than those associated with non-treatment control conditions. Moreover, based on their review, Petruzzello et al. suggested that a minimum of 10-weeks are necessary for significant reductions in trait anxiety to occur with the largest reductions occurring at 16-weeks. However, reduction in milder mood disturbances can be seen as early as 8 weeks of mild activity (Osei-Tutu & Campagna, 2005) and exercise for as little as eight days can increase positive moods (Giacobbi et al., 2005). In addition, 12 weeks of exercise is enough to improve body esteem in women (Annesi, 2005a) and tension and depressed mood in 9 to 12 year olds (Annesi, 2004a).

Studies of older adults (Strawbridge et al., 2002; van Gool et al., 2003) and adults of various ages (Dimeo, Bauer, Varahram, Proest, & Halter, 2001, North et al., 1990; see Lawler & Hopkins, 2001 for questions on the reliability of validity of studies examining exercise and depression) have demonstrated that physical activity reduces incidences of clinical depression (see also Annesi, 2005b, Braun, 2006 for similar evidence for negative mood states). Moreover, in this age group, exercise has also been demonstrated to improve mental health, reduce anxiety, depression, and negative mood, including tension, depression, vigor, and fatigue (Annesi, 2004b; Annesi and Westcott, 2004; Callaghan, 2004), improve self-esteem, cognitive functioning (Callaghan, 2004), and to lower stress as well as increase quality of life (Callaghan, 2004; Hassan, Joshi, Madhavan, Amonkar, 2003).

Another question of interest is whether the effects of exercise are limited to aerobic exercise, which is the most frequently studied type of exercise, or whether benefits for anaerobic activity exist as well. Although research indicates a mental health benefit for aerobic exercise (e.g., Dimeo et al., 2001; Osei-Tutu & Campagna, 2005; Rocheleau et al., 2005), the effect of anaerobic exercise is not as clear (Lox, Martin, & Petruzzello, 2003). In a study of college students, Rocheleau et al. found no difference between the benefits of a single session of aerobic or anaerobic activity on mood, as both improved mood. In addition, a study of older women found that respondents indicated strength training made them "feel good" (Bopp, Wilcox, Oberrecht, Kammermann, & McElmurray, 2004). Similarly, Tsutsumi and Don (1998) found that after anaerobic exercise, older adults displayed a decrease in tension and state anxiety. Nonetheless, other studies have found inconsistent relationships between anaerobic exercise and mental health (Petruzello et al., 1991; Raglin, 1997).

Despite these findings, very few studies have examined the effect of acute and chronic exercise participation on mood states in college age populations. This issue is important because previous research has shown a dramatic increase in the levels of stress experienced by students over the past 30 years (Sax, 1997) due to higher academic standards, feelings of isolation (e.g., Abouserie, 1994; Pascolo-Fabrici, de Maria, Corigliano, Aguglia, & Gregori, 2001), managing multiple responsibilities, and apprehension about graduating, finding suitable employment, or applying to graduate school (e.g., Bishop, Bauer, & Becker, 1998; Chandler & Gallagher, 1996). Because mood states are related to stress (Shirka, 1997) and have been shown to affect academic performance (Tobey, 1997), identifying effective ways of handling the pressures of college life before mental health issues emerge are of the utmost importance.

The purpose of this study was to assess the relationship between mood states in college students and frequency of exercise (aerobic and anaerobic). Because psychological responses to either acute or chronic bouts of exercise are normally assessed through self-report questionnaires that measure various aspects of mental health, such as anxiety, depression or mood states (Petruzzello et al., 1991; Raglin, 1997; Raglin, et al., 2007), we followed the same protocol as previous studies to examine mood states of female and male college students. We hypothesized that students who exercised more frequently (both aerobically and anaerobically) would display more positive mood states as well as fewer mood disturbances or negative mood states.

Method

Participants

One hundred eighty seven students in introductory psychology and exercise science courses were surveyed (72% female, which is a result of the gender distribution at the college where the survey took place, where approximately 65% of the students are women). Students ranged in age from 18 to 33 (M = 19.32, SD = 1.67). These courses were chosen as a convenience sample to ensure a variety of student majors and classifications (Freshmen = 91, Sophomore = 32, Junior = 39, Senior = 25). The University's Subcommittee for the Protection of Human Subjects approved all procedures before we began the study.

Measures

Psychological health symptoms. To measure psychological adaptation, students responded to a 30-item short version of the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1981). This measure has been used successfully with adolescent populations (Lira, White, & Finch, 1977). The POMS is divided into six 5-item subscales and assesses tension, depression, anger, vigor, confusion, and fatigue. Responses were measured on a 5-point scale, from 1 (not at all) to 5 (extremely). We created an overall negative affect score (see McNair et al. for scoring information, as well as reliability and validity), with higher scores indicating more negative affect.

Exercise behaviors

Students were asked "How often do you engage in aerobic exercise such as running, swimming, or aerobic dance?" as well as "How often do you engage in non-aerobic exercise such as sit-ups, push-ups, bowling, golf, or weightlifting?" Students responded on the following scale: daily or almost daily (1), a few times a week (2), about once a week (3), 2 or 3 times a week (4), about once a month (5), or less than once a month or never (6). Questions were adopted from the Exercise Habits scale from Chappellow, Schaffer, Wilson, and Pritchard (2002).

Results

We compared total mood disturbance scores on the POMS based on exercise frequency. As presented in Table 1, aerobic exercise exhibited a significant association upon POMS total mood disturbance scores, $F(5, 178) = 3.05$, $p < .01$. Follow-up tests using LSD revealed that there were significant differences in total mood disturbance scores between individuals who exercised daily or almost daily and those who exercised a few times a week (MD = 7.89, SE = 3.41, $p < .05$), as well as between individuals who exercised daily or almost daily and those who exercised once a week (MD = 8.11, SE = 3.62, $p < .05$). In addition, there were differences between those who exercised a few times a week and those who exercised 2 or 3 times a month (MD = -9.36, SE = 4.01, $p < .05$) and those who exercised less than once a month or never (MD = -14.04, SE = 5.11, $p < .01$) in total mood disturbance scores. Finally, there were differences in total mood disturbance scores between those who exercised once a week and those who exercised 2 or 3 times a month (MD = -9.59, SE = 4.20, $p < .05$) and those who exercised less than once a month or never (MD = -14.27, SE = 5.26, $p < .01$). However, as displayed in Table 1, there was no effect of non-aerobic exercise on total mood disturbance scores, $F(5, 178) = 1.60$.

Discussion

Anxiety disorders are the most common form of emotional illness and several studies have indicated that during the course of a single-year, 17% of American adults will develop an anxiety disorder requiring professional treatment (Raglin, et al, 2007). This same societal trend can now been seen on college campuses across this country where student stress levels (Sax, 1997) and health issues (Douglas et al., 1997) are becoming an increasing greater concern. This had prompted many colleges to investigate new preventative mental health options for students. Moreover, a growing body of published research over the past decade has shown physical activity to be associated with improvements in mental health (Raglin, et al, 2007). However, specific recommendations for exercise intensity, frequency and duration are not well established for reductions in depression or anxiety (Buckworth & Dishman, 2002) and increases in cardiovascular fitness are not believed to be significantly associated with improvements in mental health (Raglin et al., 2007).

While fitness guidelines for intensity, duration and mode of exercise must be individually based and dependent on current fitness levels, college students need to be encouraged to participate in periodic bouts of exercise for successful stress management and improved mental health. Hence, it is important to help students develop individual programs for reducing stress via physical exercise. Moreover, it appears that "time" is an also an important consideration. For example, one study found that 69% of truant exercisers cited a "lack of time" as a major barrier to participation in physical activity (Canadian Fitness and Lifestyle Research Institute, 1996). For college student populations, it is likely that "time" represents a major perceived obstacle to regular participation in physical activity, thus eliminating a potential effective means of preventing increases in mental health issues, such as depression and anxiety.

Results from the current study suggest that college students seem to benefit the most from moderate exercise (a few times a week or once a week) more so than daily exercise or less frequent exercise. This finding supports previous work conducted by Dunn and colleagues (2005)

that compared the benefits of various exercise regimens on depression in order to identify effective minimal dosages. Although a main effect was not found for frequency, reductions in depression were significantly greater for moderate energy expenditure exercise programs when compared to low energy expenditure placebo groups. Although the present study did not measure energy expenditure, self-report measures provided by college students appear to support these findings.

Limitations

Several limitations of this study need to be acknowledged. One limitation of this study is that we examined mood states, which may be transitory in nature (Schutte, Malouff, Segrera, Wolf, & Rodgers, 2003). Second, the majority of our participants were female. Because there are gender differences in some mood states (Krause, Broderick, & Broyles, 2004) and females exhibited higher total mood disturbance scores in the present study, future studies should make efforts to recruit more equal numbers of men and women. Finally, although we suggest that moderate exercise may lead to positive increases in mood states, this research is not causal in nature. There could be other variables that affect college student mood that were not addressed in this study. Furthermore, it could be that increases in mood states make it more likely that one will exercise. Future studies should examine this question longitudinally.

Conclusion

When assessing the psychological benefits of exercise for college students, it is important to differentiate between the exercise dosage required for physical benefits and that needed to maintain positive mental health. Although the optimal intensity, duration, and frequency of exercise for mental health have not been adequately determined, this study supports the contention that moderate levels are effective in the providing overall mental health benefits. Although further information is needed concerning exercise prescription before definitive statements can be made, college students need to be encouraged to participate in moderate levels of physical activity as a way of maintaining or improving mental health. College health, wellness, and fitness facilities may wish to alert students to these recommendations, perhaps suggesting different forms of moderate activity levels for students with different interests and needs. Campuses might also consider sponsoring stress relief events that focus on group exercise classes or walking groups to help students get the moderate exercise they need to minimize stress and improve overall mood and well-being. Finally, future research in this area needs to assess the effects of exercise frequency and college life stress over a longer duration (e.g., semester or academic year) in order to differentiate the role of exercise frequency on mood compared to other potential variables such as workload, personal relationships, course loads, etc.

Table 1
Realationship between Exercise Frequency for Aerobic and Non-aerobic Activity and Mean Total Mood Disturbancee Score on the POMS (and Standard Deviations)

Exercise Frequency	Aerobic	Non-aerobic
Daily or almost daily	83.84 (17.59)	78.10 (17.34)
A few times a week	75.96 (17.03)	77.88 (16.03)
Once a week	75.73 (15.04)	82.31 (16.57)
2 or 3 times a month	85.32 (15.30)	82.71 (18.55)
Once a month	82.38 (12.64)	89.79 (16.98)
Less than once a month/never	90.00 (21.17)	85.73 (19.97)

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Reviewed— Club Barriers: Where are the Students

Where Are The Students?
Perceived Barriers To Participating in Professional Student Organizations

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Abstract

Student involvement plays a meaningful role in the college experience. On college campuses across the country, academic departments have instituted "professional student organizations" (PSO) in an effort to promote professional development, increase networking opportunities, provide opportunities for application, analysis, synthesis, and evaluation, and integrate students into the institution. Yet, participation in PSO activities and events is less than optimal. This paper is the first of three reports and provides study results related to PSO participation and perceived barriers to PSO participation. Suggestions for managing barriers are provided.

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Introduction

Student involvement plays a meaningful role in the college experience (7). Involvement in co-curricular activity develops the "whole person" by expanding educational opportunities, encouraging personal development, improving academic skill, and enhancing the health and lifestyle of the members of the university community (5). Furthermore, participation in co-curricular activity can provide opportunities for students to apply knowledge and skills to "real world" situations (6).

On college campuses across the country, academic departments have instituted "professional student organizations" (PSO) in an effort to promote professional development, increase networking opportunities, provide opportunities for application, analysis, synthesis, and evaluation, and integrate students into the institution. Yet, participation in PSO activities and events is less than optimal. The purpose of the study was to assess club participation and perceptions of barriers to PSO participation, benefits of PSO participation, and programming PSO activities and events at one Midwestern institution.

Literature Review

Defining Extracurricular and Co-Curricular Activity

Student involvement is comprised of extracurricular and co-curricular activities. Montelongo (2002) describes extracurricular activity as a learning event that occurs outside the classroom which contributes to or supplements the overall academic experience. A co-curricular activity is similar in that it is an out of the classroom learning event; but, there is a clear connection to a particular course or professional competency. Moreover, academic credit is provided for completing co-curricular activities. This is often not the case for extracurricular activities.

Perceived Barriers to Participation

Researchers have investigated student services and student affairs (e.g., student orientation, student governance, student clubs, Greek life, community service activities, and peer mentor programs) and campus recreation and intramural sport in order to assess the barriers of extracurricular and co-curricular activity participation (7). Barriers to participation are often referred to in the literature as constraints (8). Intrapersonal constraints involve the psychological attributes associated with activity. Examples of

intrapersonal constraints include anxiety, fear, shyness, lack of perceived skills, and a subjective evaluation of the activity. Interpersonal constraints refer to the lack of a partner or group to engage with in the activity. These constraints, for example, could result from scheduling conflicts or different interests. Structural constraints are concrete factors derived from external conditions. For instance, user fees that exceed students' discretionary income may prohibit participation.

Young, Ross, and Barcelona (2003) found the most frequently cited constraints to activity participation were lack of time and lack of knowledge about offered programs. Chang (2002) reported work and family responsibilities as well as commitments to other university sponsored events can act as barriers to participation. Anxiety was identified as a constraint because students feared their academic performance would suffer from participation. As a result, students would avoid those activities and organizations they perceived as time consuming. Interestingly, student involvement increased as extracurricular organizations demonstrated a greater commitment to academic work (1).

Several authors stressed the importance of reviewing institutional factors as well as the nature of the student body when examining non-participation (2)(3)(4). For instance, participation may be hindered if institutions use ineffective marketing strategies or provide insufficient information on how to become involved. Further, the lack of engaged faculty advisors may undermine student involvement. Chang (2002) suggested an institution with primarily commuter students will have a higher level of non-participation. Students tend to be less integrated or invested in the college and therefore, they are less likely to become involved in institution sponsored activities.

Methodology

Population and Sample

Undergraduate students majoring in the recreation and sport management department at a Midwestern university were asked to participate in an evaluation study of professional student organization functioning and structure. Cluster sampling was used in the evaluation study. Four classes were randomly selected from the spring 2007 course schedule. All students enrolled in the selected classes and present on the day of data collection were asked to participate in the study (N = 159).

Evaluation Design

Data was collected in February 2007. Data collection, time, and location were provided by the instructor. Teams of graduate students read uniform instructions and answered questions prior to questionnaire distribution. Students completed the surveys independently and placed the completed questionnaire in an envelope at the front of class. Students enrolled in more than one course completed the questionnaire only one time. Students who did not want to participate in the study placed the blank questionnaire in the designated envelope.

Instrumentation

The questionnaire was derived from current literature. Word selection and response scales were selected to reflect research question, enhance consistency, and maximize reliability.

Questions for respondents.

The survey consisted of 26 items. Fourteen program and service questions were divided into five sections addressing PSO participation, PSO structure and resources, barriers to PSO participation, benefits of PSO participation, and programming PSO activities and events. Additionally, there were six demographic questions and six open-ended questions requesting feedback on programs and services. This paper reports on PSO participation and perceived barriers to PSO participation.

Club participation.

The section consisted of seven questions. Participants reported their membership status in each professional student organization: American Humanics, Park and Community Recreation Club, Recreation Therapy Club, and Sport Management Club (Member =1, Non-member =2). Students were asked to indicate how often they attended PSO sponsored activities in a typical semester on a five point scale (0 =0, 1-2x =1, 3-4x =2, 5-6x =3, 7+x =4). Respondents were asked to specify their participation in university sponsored activities on a dichotomous scale (Yes =1, No =0) and the number of hours per week. Participants were also asked to indicate their participation in non-university sponsored activities on a dichotomous scale (Yes =1, No =0) and the number of hours per week. Participants were asked to respond to a question which asked whether they attended a PSO sponsored activity in order to fulfill a class requirement (Yes =1, No =0) and whether they attended a PSO sponsored activity after the course requirement was completed (Yes =1, No =0). Finally, as an open-ended question, respondents were asked to indicate whether they found the PSO sponsored activity enjoyable and why.

Barriers to club participation

Respondents were asked to indicate their level of agreement with statements addressing reasons for not participating in PSO activities on a five point scale (Don't Know = 0, Strongly Disagree = 1, Disagree = 2. Agree = 3, Strongly Agree = 4). Participants responded to sixteen statements (Table 5). Also, an open-ended question asked students to indicate other barriers that would prevent students from participating in PSO activities.

Demographics.

The survey requested all participants respond to six demographic questions: gender, race/ethnic background, classification, enrolled credit hours, status in department, and commute time.

Validity and Reliability

Items used in this evaluation study were adapted from the literature. A panel of faculty advisors analyzed the instrument's wording, structure, and appropriateness to determine the content validity. Student workers in the academic department, not enrolled in selected courses, were used in the pilot study to ascertain instrument readability, face validity, and time needed to complete the questionnaire. Minor revisions to grammar and organization

were made to the instrument prior to use in the evaluation study.

Statistical Analysis

Descriptive statistics including mean, standard deviation, and frequencies were generated for the variables included in the survey. Common themes were identified in the open ended questions through content analysis.

Results

Eighty-nine completed questionnaires were collected (56% response rate). The results are as follows.

Demographics

The survey asked participants to respond to six demographic questions concerning gender, race/ethnic background, academic standing, enrolled credit hours, status in department, and commute time. The majority of surveys were completed by men (64%). Most of the respondents were Caucasian students (83.0%) and African American students (11.4%). Participation was evenly distributed between seniors (29.9%), juniors (34.5%), and sophomores (31.0%). The majority of respondents were enrolled in 15-17 credit hours (69.8%). Participants indicated they were majors (96.6%) and commute 0-14 minutes on a typical day (72.1%).

Club Participation

The composite frequency of professional student organization participation is provided in Table 1. The majority of respondents indicated they had never attended a PSO activity. When participation was analyzed by demographic (Table 2), it appears members attend PSO activities 1-2x in a typical semester. Men were more likely than women to attend functions. Participation appeared to be evenly distributed among sophomore, junior, and senior students.

Table 1
Frequency of Professional Student Organization Participation (N=89)

Item	Never		1-2 times		3-4 times		5-6 times		7+ times	
American Humanics	65	73.0%	10	11.2%	1	1.1%	1	1.1%	1	1.1%
Park & Community	66	74.2%	6	6.7%	2	2.2%	1	1.1%	0	0.0%
Recreation Therapy	68	76.4%	5	5.6%	0	0.0%	2	2.2%	0	0.0%
Sport Management	52	58.4%	20	22.5%	10	11.2%	2	2.2%	1	1.1%

Table 2
Profile of Professional Student Organization Participation by Frequency (N=89)

Item	1-2 times		3-4 times		5-6 times		7+ times	
Membership								
AH - Member	6	15.4%	2	5.1%	3	7.7%	1	2.6%
P&C - Member	4	10.3%	2	5.1%	2	5.1%	1	2.6%
RT - Member	1	2.6%	0	0.0%	1	2.6%	0	0.0%
SM - Member	22	47.8%	11	23.9%	3	6.5%	2	4.3%
Gender								
Men	23	51.1%	11	24.4%	2	4.4%	1	2.2%
Women	17	37.8%	2	4.4%	4	8.9%	1	2.2%
Classification								
Freshman	0	0.0%	1	1.2%	0	0.0%	0	0.0%
Sophomore	12	26.7%	3	6.7%	1	2.2%	1	2.2%
Junior	14	31.1%	3	6.7%	3	6.7%	1	2.2%
Senior	11	24.4%	5	11.1%	2	4.4%	0	0.0%
5th Year+	3	6.7%	1	2.2%	0	0.0%	0	0.0%

University sponsored and non-university sponsored activity participation are outlined in Table 3. Sixty four percent of respondents reported participation in other university sponsored activities. On average, students spend 9.53 hours (SD 8.86) per week engaged in these activities. Women tend to spend more hours than men engaged in university sponsored activities. Seniors are more likely to engage in university sponsored activities than freshman, sophomores, juniors, and fifth year seniors.

Table 3
Profile of University & Non-University Sponsored Activity Participation (N= 89)

Item	University Sponsored		Hours per wk		Non-University Sponsored		Hours per wk	
	Yes	No	Mean	SD	Yes	No	Mean	SD
Composite	57	30	9.53	8.86	40	47	6.86	6.16
Membership								
AH - Member	4	2	4.00	2.65	6	0	6.40	3.36
P&C - Member	3	1	5.00	2.83	4	0	6.33	4.93
RT - Member	0	2	0.00	0.00	0	2	0.00	0.00
SM - Member	28	8	10.00	9.78	17	19	8.20	8.06
Gender								
Men	34	22	8.97	7.43	24	33	7.75	7.29
Women	22	8	10.95	8.80	16	13	5.67	4.17
Classification								
Freshman	0	1	0.00	0.00	0	1	0.00	0.00
Sophomore	15	11	8.33	7.96	12	14	5.18	4.26
Junior	19	10	8.17	7.93	14	15	5.25	3.86
Senior	21	5	12.35	7.88	11	15	9.89	9.35
5th Year+	1	2	3.00	0.00	3	0	10.33	5.69

Additionally, 45% of respondents indicated participating in non-university sponsored activities. On average, students spend 6.86 hours (SD 6.16) per week in these activities. Men tend to spend more hours than women engaged in non-university sponsored activities. Fifth year seniors and seniors spend more time engaged in non-university sponsored activities than freshman, sophomores, and juniors.

Professional student organization participation to fulfill course requirement and post course requirement are provided in Table 4. The majority of respondents (71.9%) indicated they attended a PSO activity to fulfill a course requirement. However, only 38.2% of students indicated they attended a PSO activity once the course requirement was completed.

In an open ended question, participants were asked to respond to the following statements, "Did you find the club sponsored activity enjoyable? Why or why not?" Three themes emerged from participate responses. Students indicated the PSO activity: (a) was an opportunity to meet and/or work with others with similar interests and (b) provided information or was educational in nature. Students also indicated the (c) club activity was boring or not interesting enough to warrant future participation.

Table 4
Professional Student Organization Participation With Respect to Course Requirement (N= 89)

	Fulfill Course Requirement				Post Course Requirement			
Demographic	Yes		No		Yes		No	
Composite	64	71.9%	24	27.0%	34	38.2%	55	61.8%
Membership								
AH - Member	5	6.5%	0	0.0%	6	7.7%	0	0.0%
P&C - Member	3	3.9%	0	0.0%	3	3.8%	1	1.3%
RT - Member	2	2.6%	0	0.0%	1	1.3%	1	1.3%
SM - Member	30	34.5%	6	6.9%	21	23.9%	15	17.0%
Gender								
Men	42	48.3%	15	17.2%	22	25.0%	35	39.8%
Women	21	24.1%	9	10.3%	11	12.5%	20	22.7%
Classification								
Freshman	1	1.2%	0	0.0%	1	1.1%	0	0.0%
Sophomore	18	20.9%	9	10.5%	11	12.6%	16	18.4%
Junior	23	26.7%	7	8.1%	9	10.3%	21	24.1%
Senior	19	22.1%	6	7.0%	11	12.6%	15	17.2%
5th Year+	2	2.3%	1	1.2%	1	1.1%	2	2.3%

Barriers to Club Participation

Participants were asked to respond to sixteen items outlining barriers to PSO participation (Table 5). The top five barriers include time conflict related to academics, time conflict related to work, time conflict related to other commitments, not know what activities are scheduled, and not know when activities are scheduled. These trends are stable across demographics.

Table 5
Perception of Professional Student Organization Participation Barriers (N= 89)

Item	Don't Know	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	SD
Not know what activities are scheduled	2	3	21	54	9	2.73	0.78
Not know when activities are scheduled	2	3	25	49	10	2.70	0.80
Not know where activities are scheduled	2	4	26	46	10	2.66	0.83
Make plan but forget to go	3	14	39	29	3	2.17	0.86
Time conflict related to work	1	5	24	38	18	2.78	0.89
Time conflict related to family	1	7	47	28	5	2.33	0.75
Time conflict related to academics	1	2	15	54	17	2.94	0.74
Time conflict related to other commitments	0	6	22	47	14	2.78	0.79
Lack of transportation	0	29	50	6	3	1.81	0.71
Lack of money	0	11	40	35	2	2.32	0.72
Activities are not well organized	12	3	40	29	5	2.13	1.10
Dislike club leadership	12	11	50	12	4	1.83	0.98
Do not know anyone who attends	4	9	37	33	5	2.30	0.90
Not interested in activities	7	6	57	17	2	2.01	0.82
Do not see the benefit of activities	7	9	50	22	1	2.01	0.85
Academics would suffer	8	7	58	15	0	1.91	0.78

In an open ended question, respondents were asked to indicate "other barriers which you or students you know face when considering club participation". Participants indicated such barriers as time management, inconsistency in communicating program plans, and a perception of disorganization within the clubs. Moreover, participants indicated the clubs serve no purpose.

Discussion

There are several benefits associated with participation in co-curricular activities such as personal and professional development and opportunities to apply knowledge and skill (5)(6). As such, professional student organizations have been instituted on campuses across the nation. Yet, participation is less than optimal. In this case, the majority of students indicated never attending PSO activities. Students who indicated they were members of the club typically stopped attending after 1-2 events. Given this unfortunate lack of participation, it seems safe to say the PSO activities are not contributing to the personal and professional development of students in a consistent manner over the course of the academic calendar.

In an effort to connect students, instructors often link participation in PSO activities to course requirements. The aim is to provide some initial motivation to attend and perhaps inspire continued engagement as well as expand educational opportunities and integrate students in the institution. This approach seems to have mixed effect. Students do attend PSO activities in order to fulfill course requirements but walk away with perceptions that the PSO events are boring, disorganized, and serve no purpose. These perceptions are difficult to overcome. As a result, only about half of students return to club events once the course requirement is complete.

Perhaps this is where the faculty advisor can make a significant impact. The advisor should assess PSO leaders' skills. Remediation may be necessary in certain skill areas such as creating and following an agenda, running a meeting (e.g., Robert's Rules of Order), and presentation. The event schedule may be reviewed to determine if there is an imbalance in how the PSO is being programmed. Moreover, it is important to help leaders identify the purpose or outcome goals of each activity in order to use this information, through various promotional strategies, to persuade students to attend.

Scholars have reported several perceived barriers which impact participation in co-curricular activities. The top three barriers found in this study were time conflicts related to academics, work, and other commitments. In this case, nearly two thirds of students indicated they participate in other university sponsored activities. In addition, 45% of respondents report participating in non-university sponsored activities each week. These results are consistent with the literature. Students have multiple and varied responsibilities and have a hectic schedule. Given their self reported time management concerns, it seems reasonable to stop attending PSO events which are perceived to be boring or serve no useful purpose.

Students also reported they did not know what activities or when activities were scheduled. Participation may be hindered if institutions use ineffective marketing strategies or provide insufficient information on how to become involved (2)(3)(4). Again, an effective faculty advisor can assist student leaders resolve these issues. Advisors may provide feedback on student devised promotional plans and provide assistance in utilizing multiple forms of media (e.g., online meetings, Podcasts, etc.) to facilitate participation.

Conclusion

Student involvement plays a meaningful role in the college experience. Yet, students are busy people. If they are to be persuaded to make an engaged commitment to professionals student organizations, clear outcomes for participation must be identified and marketed, activities and events must be programmed in a way that is both stimulating and accessible, and student leaders and faculty advisors must work together to continually assess and minimize student perceived barriers.

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Reviewed: Emotionally Intelligent Leadership

Emotionally Intelligent Leadership in Sports & Physical Education: A Practical Approach

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Authors's Statement
I certify that this article has not been previously published or submitted for publication elsewhere, either in identical or modified form.
-Jennifer L. Vansickle

Leadership at any level, whether in the classroom or on the athletic field, is complex. It contains intellectual, social, and emotional components. According to Humphrey (2002), the most effective leaders have a combination of both task-oriented leadership skills and relationship-oriented leadership skills. Managing relationships skillfully boils down to handling one's own and other people's emotions (Goleman, Boyatzis, McKee, 2002). This capacity for recognizing our own feelings and those of others for motivating ourselves and for managing emotions in us and in our relationships is known as emotional intelligence (Goleman, 1995, 1998).

Over the past decade, the benefits of emotional intelligence have been touted both in the business world and in the world of education. A study of the heads of forty-two schools in the United Kingdom conducted by Hay McBer in 2000 discovered that when the leader of the school was flexible in leadership style and demonstrated a variety of emotional intelligence competencies, the teachers' attitudes were more positive and the students' grades higher (Cherniss & Goleman, 2001). However, when the leader relied on fewer emotional intelligence competencies, teachers tended to be demoralized and students underperformed academically. According to Goleman (1998), competency research in over 200 companies and organizations worldwide suggests that about one-third of this difference in leadership competency is due to technical skill and cognitive ability while two-thirds of the difference is due to emotional competence. Additionally, the search firm Egon Zehnder International analyzed 515 senior executives and discovered that those who were primarily strong in emotional intelligence were more likely to succeed than those who were strongest in either relevant previous experience or IQ (Cherniss, 2003).

If emotional intelligence competencies can truly enhance leadership abilities, then the question becomes, "How can I harness the power of emotions and emotional intelligence to become a more effective teacher or more effective coach?"

Emotional Intelligence

Emotional intelligence as defined by Goleman (1995, 1998) is the ability to be aware of and to handle one's emotions in varying situations. According to Goleman, there are 4 dimensions to emotional intelligence: Self-awareness, Self-management, Social awareness, and Relationship Management (Goleman et. al, 2002). Each of these dimensions contains a set of emotional competencies which can be learned and can result in outstanding performance at work (Goleman et. al, 2001). What follows is a short explanation of each of the four dimensions of emotional intelligence and practical tips on how you can begin to harness the power of emotions and perhaps increase your own emotional intelligence.

Tune In

Before you can learn to be "smart" with your emotions, you must be able to recognize what you are feeling and why. In other words, you must be self-aware. According to Goleman, self-awareness includes recognizing our emotions and their effects, knowing our strengths and limits, which he calls accurate self-assessment, and possessing self –confidence which he defines as a strong sense of our self-worth and our

capabilities (Goleman, 2000). The first step in self-awareness is what I call "tuning in". "Tuning in" can give you valuable information about your emotional responses in difficult and stressful situations. While "tuning in" may come easy to some, others will struggle. It is important to note that emotional intelligence, according to Goleman, seems to be largely learned and continues to develop as one goes through life and learns from one's experiences (Goleman, 1998). Therefore, "tuning in" can be learned. Practicing the art of self-awareness can be easily accomplished. Every time you enter a new room or every time your watch "chimes the hour", simply ask yourself, "What am I feeling right now?" Take note of that feeling and the situation.

The next step in "tuning in" is to take an emotional inventory. Goleman would call this an accurate self-assessment. Spend some time asking yourself these questions:

Do my emotions affect how I treat people? If so, when? How?

How do I react when I am stressed? Tired? Feel under attack?

How is that reaction different from when I am relaxed? Comfortable? At ease?

Do I have any hot-buttons that cause me to overreact? (A "hot-button" is defined here as something that causes an emotional or passionate response.)

Tune in & Maintain control

The second dimension of emotional intelligence is self-management. Self-management has been defined by Goleman (2000) as keeping disruptive emotions and impulses under control. Self-management is not just counting to ten when you find you are angry or upset. Instead, it is taking the time to think before you speak or react. The first step in taking the time to think before speaking or reacting is embracing silence. Often times, we are uncomfortable with silence.

Like self-awareness, self-management can be practiced and learned. To do this, start with an assessment of, "What am I feeling now?" or, if it was after the emotional outburst, ask yourself "What was I feeling at the time?" After your self assessment, ask yourself, "How do I want to be feeling now" and "What do I do to change?"

Self-management also includes recognizing the hot-buttons that caused the feelings of anger and rewiring those buttons so that the next time you don't get angry. Ignoring these hot-buttons can result in emotional "blind spots" - like the blind spot of a car. When you drive without being aware of your blind spot, you're open to being blindsided by another car. When you know about the blind spot though, you can take precautions by turning your head to examine the blind area or setting your mirrors to eliminate it. For example: You may over-react to your superiors' critical comments, even when they are well meant. It's as if their criticism pushes a button; you react automatically. And, you don't learn what you need to because you can't see the situation realistically; it's in your blind spot.

How do you get rid of the "blind spots"? Start by using your friends and closest coworkers, like rear-and side view mirrors, to help you see what's hidden in your blind spot(s). Ask them questions such as:

Do you think I'm overly sensitive to criticism?

Do I react defensively when something goes wrong?

Do I tend to take things personally that aren't meant that way?

Is there anything important about me you've noticed of which you believe I am unaware?

Social radar

The third dimension of emotional intelligence is social awareness. According to Goleman (2000), social awareness includes empathy or understanding others and taking active interest in their concerns. Empathy is being attuned to how others feel. It has often been said that "People don't care how much you know until they know how much you care." This is the essence of empathy. By expressing empathy, you create empathy in others. Once again, conducting a simple self-assessment can help you develop your social awareness skills. This can be done by asking yourself these questions after a class, individual conference with a student, or team meeting:

Did I allow the student to express his/her feelings?

Did I interrupt him/her while he/she was speaking?

Did I consider his/her perspective?

Can I describe the look on the student's face during our talk?

If you are still struggling, ask your closest friends or coworkers to help you tune your radar by asking them to answer the previous questions about you.

Do as I Say and Do!

The final dimension of emotional intelligence is

relationship management. As the coach, teacher, athletic director, or principal, you are the leader. You set the standard. Relationship Management, as defined by Goleman (2000) includes:

developing others--sensing others' development needs and bolstering their abilities
leadership--inspiring and guiding groups and people,
influence--wielding interpersonal influence tactics,
communication--sending clear and convincing messages
conflict management--resolving disagreements
building bonds--nurturing instrumental relationships
teamwork and collaboration--creating a shared vision
synergy in teamwork--working with others toward shared goals

Relationship management is about putting it all together. Using all of the other competencies to motivate and inspire yourself and others to achieve goals.

In closing, Adolus Huxley said, "There is only one corner of the universe you can be certain of improving... and that's your own self." While there is no fixed formula for superb leadership, incorporating the competencies found in Goleman's theory of emotional intelligence can help you learn to acknowledge and value your own emotions and the emotions of others. Then, you will be able to respond appropriately therefore enhancing the power of emotions and their influence upon your daily life.

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Hoops

Westfield Intermediate

Royann Hammes — 1st in State, 51 in Nation

Westchester Intermediate

Nicole Wilson — 2nd in State, **76 in Nation**

Liberty Intermediate

Nick Bamer — **3rd in State, 100 in Nation**

Jump

Watson Elementary

Jerry Micher — 1st in State, 95 in Nation

Jump/Hoops

Geist Elementary

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3. Solicit programming for the State Conference or Regional Workshops.
4. Serve as host to greet and direct presenters during the conference.
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