INDIANA AHPERD JOURNAL

Volume 41, Number 2 Spring Issue 2012

Moving into the Future

Indiana AHPERD Journal

Volume 41, Number 2 **Spring 2012**

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

Contents

President's Message 1
Future AAHPERD National Conventions 2
Notions from Your Editor 3
Thomas H. Sawyer, Ed.D.
Events & Resources 5
Important Information for Members 6
An Experiential Learning Experience that Fights Childhood Obesity: The Implementation of the SMART Fitness, Sport, and Nutrition Summer Camp 7
Glenna G. Bower, Renee Frimming, and Julie McCullough
An Examination of Factors Impacting the Academic Progress Rate of First-Year Football Student-Athletes at a Football Bowl Subdivision Institution 11
James E. Johnson
Drug-Testing Policies of Professional Sports in America 17
Tyler Fields, Laura Simon, Kyle Napiontek, Lawrence W. Judge, Ph.D., David Bellar, Erin Gilreath, and Emese Ivan
Featured Game: Press Ball 26
Nick Henke, Junior and Evan Dodd, Freshman
Negligent Supervision 27
Tonya L. Gimbert and Thomas H. Sawyer
The Effects of a Wellness Camp on Children's Health-Related Quality of Life 31

The **Journal** is published three times a year (Fall, Winter, Spring) by the Indiana Association for Health, Physical Education, Recreation, and Dance. Karen Hatch, 2007 Wilno Drive, Marion, IN 46952. Third class postage paid at Terre Haute, Indiana. The Indiana Association for Health, Physical Education, Recreation, and Dance is a professional organization serving education in these four related fields at the elementary, secondary, college, and community levels. Membership in Indiana AHPERD is open to any person interested in the educational fields listed above. Professional members pay annual dues of $40.00. Students pay $20.00. Institutional rate is $65.00. Make checks payable to IAHPERD, Karen Hatch, 2007 Wilno Drive, Marion, IN 46952, telephone (765) 664-8319, hatch@comteck.com.

CHANGE OF ADDRESS

In order to receive the **Indiana AHPERD Journal**, your change of address must be mailed to Karen Hatch, 2007 Wilno Drive, Marion, IN 46952. A change of address sent to the Post Office is not adequate since **Journals** are ***not*** forwarded. When individuals fail to send changes of address, a duplicate copy of the **Journal** cannot be mailed unless the request included funds in the amount of $5.00 to cover postage. Requests for missed issues will be honored for eight weeks following publication date.

POSTMASTER: Send address change to Karen Hatch, 2007 Wilno Drive, Marion, IN 46952.

Keith Buetow
Martinsville High School
1360 E. Gray St.
Martinsville, IN 46151
Phone: 765-342-5571
Cell: 765-318-1623
buetowk@msdmail.net

Moving into the Future

President's Message

Hello to all my fellow IAHPERD members

It has been a busy time since our November State Convention. The executive committee and board of directors have met and have started the work of moving our organization into the future. Several advocacy grants have been distributed along with several mini-grants. Through our advocacy committee IAHPERD had a presence at the American Heart Association Lobby Day at the Indiana State House and developed a one page pamphlet about IAHPERD to use as a source of talking points. We also helped sponsor 2 IAHPERD members to attend the NASPE Speak Out Day on Capitol Hill in Washington D. C. Our representatives were able to talk to our two Senators and several House of Representative members. Topics of discussion were inclusion of physical education as a part of ESEA and continuation of the PEP Grant program.

Other initiatives have been to update our website with continued additions and work to fix any bugs that may be found. IAHPERD now has a Facebook page that will be continued to be monitored and improved as needed. We are also looking into updating and cleaning up our constitution, by-laws and operating codes to also reflect some of the informal changes that have already been adopted.

Work has started on the Regional Workshops that will take place next fall. Locations and dates of these workshops are: Friday October 12th at Vincennes University in Vincennes, Saturday October 13th at Decatur Middle School in Indianapolis, Friday October 19th at Indiana Wesleyan in Marion, and Friday November 2nd at Purdue University in West Lafayette. There will also be a workshop from the Sports Management Council as well. The different program councils have started the process of getting presentations ready for each of these workshops. However, there is an opportunity for all members to get involved in the process as well. There is currently an open call for proposals from the membership. This allows you as individual members of IAHPERD to propose topics of particular interest to you and put yourself in the running for a presentation if that is something you would wish to do. Proposals may be submitted by use of the online form through our website.

I was fortunate enough to represent Indiana at the National Summit for State Physical Education Leaders that was held at the National AAHPERD Convention in Boston during the week of March 13th to 17th. There were at least 29 states represented and it was a chance to learn more about the issues facing all of us in the area of physical education as well as a time to start developing a blueprint for action in the future. I was joined in Boston by Karen Hatch our executive director and Missy Harvey our president-elect to represent IAHPERD in several other meetings at the national convention. Unfortunately, the convention itself was cancelled due to a major power outage in the area of Boston where the convention was being held. This obviously was not only a disappointment to us but also to the many other individuals that had put time and effort into preparing presentations and those hoping to attend sessions where they could hear nationally recognized speakers.

However, there is still a chance to experience a mini-national convention feeling for those who could not attend the national convention in Boston or who missed out because of the power outage. This opportunity comes in the way of the Midwest District AAHPERD Centennial Convention and Celebration in the Chicago, Illinois area this April 25th through the 28th. If you are an IAHPERD member you will be able to register just as if you were an AAHPERD member even if you are not. This would prove to be a cost savings to you. This will be a chance then to hear nationally recognized speakers along with a chance to network and enjoy the company of your fellow professionals. Registration and session information is available on the AAHPERD website.

I also want to speak to the area of professional growth and development. Attending conventions and making presentations are excellent ways to gather professional growth points toward re-certification. Being an active member in your state association is also another means of accumulating professional growth points. Serving on committees and task forces are a way to earn growth points as well. There are ample opportunities for anyone to get involved on the state level. It doesn't even take a huge amount of time to serve on a committee or task force but gives you that chance to voice your concern and add to the total professional experience. Besides this, at least being a member of IAHPERD and maybe additionally AAHPERD is just a part of being the true professional in your field. By being a member you become part of a large network of individuals that are all interested in

Message from the President

the same thing, and that is being the best that you can be in your chosen field of endeavor whatever that may be. You gain further knowledge, new ideas, and a means of staying current and up to date in your chosen field. This may take the form of seminars and conventions but it also includes newsletters, journals, websites, and chances to network with others that are available to you as members. I know that if you are reading this you most likely are already a member and that you understand the importance of being part of your professional organizations. I know this from my own experiences of coaching and teaching. I have gained a wealth of valuable information and associations through my membership and involvement in my professional organizations. With this in mind how about we challenge ourselves to reach out to those around us that are not members and try to encourage and see if we can each get at least one new member. I feel this is an easy enough challenge for all of us to embrace.

With that said, it is time to get off my soapbox so to speak. I want to thank all of you for your continued support of IAHPERD and what we as an organization represent. I wish you all the best for the remainder of your school year and hope that you have a summer that allows you to rest and prepare for the challenges that are ahead of us in the upcoming year. I also want you to remember that we at IAHPERD, the leadership and members alike are here to help in any way that we can. Just contact us and we will do whatever we can to assist you.

Future AAHPERD National Conventions

2013

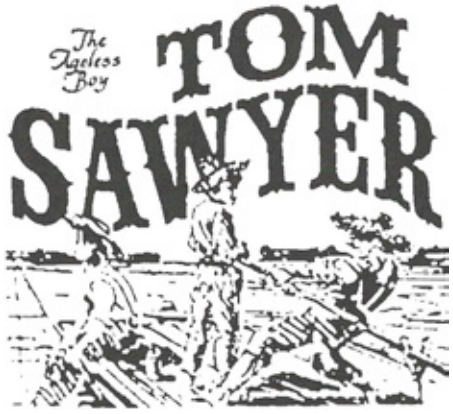
April 21-27
Charlotte, North Carolina

Truly a dynamic city, the changing face of Charlotte will surprise you. Walk along the bustling streets of Center City, step aboard the Historic Charlotte Trolley in South End, or stroll along the tree-lined streets of Dilworth to experience the warmth and Southern hospitality that visitors to the Queen City have come to know.

2014

April 21-27
St. Louis

Meet me in St. Louis, the gateway to the west. Here you can take in the view from the top of the Arch, America's tallest manmade monument, observe nature's power at the confluence of the Missouri and Mississippi rivers. You can get up close and personal with the Clydesdales and tour the historic Anheuser-Busch brewery, or cheer for one of the home teams, including baseball's Cardinals, the Rams football or the Blues hockey team. In the evening enjoy some authentic blues and jazz at one of many St. Louis night spots.



Thomas H. Sawyer, Ed.D., Professor, NAS Fellow
Graduate Coordinator for Sport Management
Professor of Kinesiology, Recreation, and Sport
Department of Kinesiology, Recreation, and Sport
Indiana State University
Terre Haute, IN 47809
(812) 240-0872, (812) 237-2645
thomas.sawyer@indstate.edu

NOTIONS From YOUR EDITOR...

Primary Assumption of Risk but not Recklessness

GRISHAM v. PORTER
Los Angeles County Super. Ct. No. VC041368
2006 WL 1381654 (Cal.App. 2 Dist.)
May 22, 2006

Introduction

On March 26, 2003, plaintiff (Grisham) and defendant (Porter) were students at Lakewood High School and members of the varsity softball team. On that day, they were participants in a softball game on their home field. At the time of the incident in question, the Lakewood High team was at bat in the first inning and the second batter was up.

Porter, who was next to bat, was warming up in an area adjacent to the low chain-link fence of the Lakewood High dugout. Porter and certain witnesses contend she was standing in an area normally used as an on-deck circle. Grisham and other witnesses contend that Porter was not standing in the normal on-deck circle, which they contend was usually closer to home plate. Both sides agree that the on-deck circle was not delineated by chalk or paint on the day in question.

The coach required all members of the team to stand in the dugout against the fence when their team was at bat. At the time of the incident, Grisham contends she was learning against the dugout rail.

Porter contends she had "cleared" the area outside the dugout before she began taking practice swings and then took three practice swings while standing in the area outside the dugout where she contends the on-deck circle was normally located. Although Porter testified she did not hear anyone in the dugout tell her to move, Grisham and another team member testified that that team member told defendant to "scoot up. You're too close to the dugout," and Porter took two steps towards the third base line.

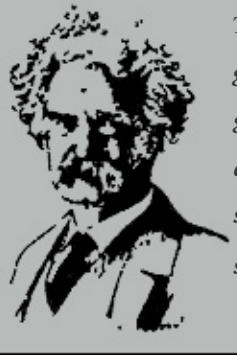
On the fourth practice swing, Porter heard what she believed was her metal bat hitting the metal pole of the dugout fence. Porter, however, had hit Grisham in the face with her metal bat, causing plaintiff to lose at least one tooth and damaging others.

Complaint

Grisham sued defendant and the Long Beach Unified School District (District) for damages she sustained as a result of the incident. Grisham alleged Porter was negligent in taking practice swings too close to the dugout. She further alleged the District was negligent for (1) failing to paint an on-deck circle, (2) requiring players to stand at the dugout fence, (3) allowing on deck batters to warm up too close to the dugout, and (4) failing to supervise defendant and direct her to stand away from the dugout.

Porter moved for summary judgment on the grounds that Grisham's negligence cause of action against her was barred under the doctrine of primary assumption of the risk. Grisham opposed the motion on the grounds that the risk created by Porter's conduct in taking practice swings too close to the dugout was not a risk inherent to the sport of softball and that Porter's conduct was reckless. In support of her opposition, Grisham submitted, inter alia, the declaration of a purported expert on the risks inherent in playing softball. The expert opined that taking practice swings in the near proximity of the dugout violated a fundamental rule of baseball/softball and created a risk that was not inherent in that sport.

The District filed a "response" to Porter's motion. It contended that, if the doctrine of primary assumption of the risk barred Grisham's claim against Porter, then Grisham would be collaterally estopped from asserting



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

her negligence claims against the District.

Trial Court Decision

The trial court granted defendant's motion for summary judgment. Grisham timely appealed from the judgment entered after the trial court's order granting summary judgment in favor of Porter.

Key Discussion Points:

A. Primary Assumption of Risk

In Knight v. Jewett (1992) 3 Cal. 4th 296 [11 Cal.Rptr.2d 2, 834 P.2d 696] (Knight), a plurality of this court explained that there are in fact two species of assumption of risk: primary and secondary. (*Id.* at pp. 308-309 (plur. opn. of George, J.) Primary assumption of the risk arises when, as a matter of law and policy, a defendant owes no duty to protect a plaintiff from particular harms. (*Ibid.*) Applied in the sporting context, it precludes liability for injuries arising from those risks deemed inherent in a sport; as a matter of law, others have no legal duty to eliminate those risks or otherwise protect a sports participant from them. (*Id.* at pp. 315-316.)

Under this duty approach, a court need not ask what risks a particular plaintiff subjectively knew of and chose to encounter, but instead must evaluate the fundamental nature of the sport and the defendant's role in or relationship to that sport in order to determine whether the defendant owes a duty to protect a plaintiff from the particular risk of harm. (*Id.* at pp. 313, 315-317.)

Whether the primary assumption of risk doctrine applies "depends on the nature of the sport or activity in question and on the parties' general relationship to the activity." (*Id.* At pp. 313) The overriding consideration in the application of primary assumption of risk is to avoid imposing a duty which might chill vigorous participation in the implicated activity and thereby alter its fundamental nature." (*Ferrari v. Grand Canyon Dories* (1995) 32 Cal. App. 4th 248, 253.)

The primary assumption of risk doctrine "does not grant unbridled legal immunity to all defendants participating in sporting activity." (*Campbell v. Derylo* (1999) 75 Cal. App. 4th 823, 827.) A participant injured in a sporting activity by another participant may recover from that co-participant for intentional infliction of injury or tortious behavior "so reckless as to be totally outside the range of the ordinary activity involved in the sport" but not for mere negligence. (*Knight* at pp. 320-321.)

Under the circumstances of this case, defendant's conduct was within the risks normally associated with softball. Pursuant to the doctrine of primary assumption of the risk, she owed no duty to plaintiff to protect her from the risk of being struck by a practice swing. A risk is inherent if its elimination would "chill vigorous participation" in the sport of softball and "alter" the fundamental "nature" of that sport. (*Ferrari, supra,* 32 Cal. Ap. 4th at p. 253.) The practices in the sports activity in question help reflect the fundamental "nature" of the sport. (*American Golf Corp. v. Superior Court* (2000) 79 Cal. App. 4th 30, 37.) Plaintiff (Grisham) argues that imposing a duty of care on softball players to ensure that they are taking practice swings at a safe distance from the dugout will not chill participation in the sport. According to Grisham, since the incident, Lakewood High players have been required to take practice swings only in a delineated on-deck circle which is located a safe distance from the dugout.

Vigorous participation in a softball game, however, includes warm up bat swinging prior to actual batting. The waiting batter normally takes full swings that simulate that player's batting stroke for the upcoming at bat. Contrary to Grisham's assertion, imposing a duty of care based on the circumstances of this case could affect baseball or softball players taking practice swings with the bat, a common warm up activity.

B. Recklessness

The imposition of a duty of care under these circumstances could also alter the nature of the sport of softball and baseball. If on deck batters are held liable for careless conduct while warming up, the warm-ups of pitchers and other fielders might be vulnerable if mere carelessness (as distinguished from recklessness) in the performance of those time-honored routines could subject participants to liability. The risk of a participant in a baseball or softball game being struck by a bat, released or not (see *Napoli v. Alvernia* (N.Y.1997) 657 N.Y.S.2d 197 [danger of person swinging bat on sideline warming up for a child's softball game was a risk inherent in the game of softball that the child assumed]), or a ball is one that is inherent in those games. A player in a dugout, depending on the nature of the dugout and the position of the player, is not immune from risks of bats and balls. Finally, allege recklessness has occurred the plaintiff must show that the causing the injury was intentional and nor merely carelessness.

Appeals Court Ruling

We affirm the judgment of the trial court and award costs of appeal to defendant Devin Porter.

Risk Management Advice

The following risk management is offered:

The coach should prepare a written document with appropriate graphics explaining and demonstrating the likely inherent risks in the sport involved in by the student-athlete. This document should be revised annually and distributed to players and parents.

The athletic director should require the coach to inform the student-athletes orally and in writing of all inherent risks in the sport before each season begins.

The coach should inform students and their parents that they assume a risk for all inherent risks in the game. The players and parents should sign an "agreement to participate" which should be kept on file with the coach.

The athletic director and coach should make sure the field is lined as specified in the rule book.

The athletic director should reinforce with the coach prior to beginning of each season his/her supervisory duties.

National Physical Education and Sport Week, May 1-7 is just around the corner! Building upon the success of our Let's Move in School initiative, we have incorporated five NEW activity lesson plans specifically tailored for the elementary, middle and high school levels that meet the national standards for physical education:

- Celebrating Skill Movement
- Celebrating the Moving Brain
- Celebrating a Fit Body
- Celebrating Moving in Harmony
- Celebrating Move as One

Head to NASPE's NPESW webpage to see all of the FREE RESOURCES available to help you create a successful week filled with fun, creative and exciting physical activity plans for students of all ages.

Check out the key message points to share with your students, parents and community about the benefits of physical activity along with statistics related to childhood obesity.

While you're there, don't forget to download the press release template to fill in with details about your physical activity plans to post on the school or organization's website, send to parents and the local media, a proclamation announcing your participation as well a certificate of participation to give to students at the end of the week as a keepsake!

Finally, be sure to share your ideas for National Physical Education and Sport Week with us, here at NASPE, to potentially gain NATIONAL EXPOSURE in a press release we send out highlighting the various NPESW events taking place around the country! Send us your event ideas TODAY! Write to spatel@aahperd.org.

Lastly, show your commitment to getting students to stay active, with the entire physical education community on NASPE's Facebook and Twitter pages. Upload your photos and videos capturing student involvement! Be sure to post Twitter messages with the hashtag #natpeweek!

So, hurry, Let's Get Moving!

NASPE's Teachers Toolbox and April's Let's Move in School Physical Education Teacher Toolkit are now available!

This month's Teachers Toolbox features an **instant activity, a family fitness activity**, and even fun ideas to **get your colleagues moving**! Find them under the **activities tab**.

Teach students the importance of a warm up and cool down during a workout and help them make a connection between dance and healthy living—in the "**You Should Be Dancing**" activity also under activities tab.

April is National Alcohol Awareness Month and is the perfect time to challenge students to live a healthy lifestyle. Download and send the "**parents letter**" home featuring The Century Council's *Ask, Listen Learn Challenge,* which emphasizes saying **YES! to healthy choices** and **NO! to underage drinking!** Your school could win free physical education equipment and a visit from an Olympic athlete!

And, do you need fun ideas for April's rainy days? This month's toolbox has tons of **indoor suggestions** like scavenger hunts, racing ideas and fun ways to get the body moving while standing in place you can customize for any grade level!

April's Let's Move in School Physical Education Teacher Toolkit: **Celebrate Recess and Play!**

This month's Let's Move in School Toolkit raises awareness of the importance of making time for **recess**.

Read NASPE's **position statement** on the issue and find **a list of ways to get your local PTA/PTO involved** in supporting your school recess program.

What's a PE Toolkit without **physical activity break ideas**? Download information on how to incorporate yoga into your school with the help of a **FREE** yoga-recess DVD.

As always, **a parent letter** is available to customize and send out sharing the importance of unstructured play in school.

Post your enthusiasm for recess with a **free colorful downloadable LMIS bulletin board message** to hang in the classroom!

Don't forget about our monthly LMIS webinar series which takes place the 2nd Wednesday of every month! The next three will focus on:

- **Integrating Nutrition Education into PE**
- **Director of Physical Activity Certification**
- **Summertime Physical Activity**

For more information about the national AAHPERD Let's Move in School initiative, visit www.letsmoveinschool.org.

Important Information

IAHPERD INFORMATION FOR JOURNAL

IAHPERD has sent numerous e-mails since the January of 2012. Several are coming back as undeliverable since the address is a school address and the school has IAHPERD filtered out. Please check your SPAM folder to see if indianaahperd@aol.com is in there and work with your school to change that and see that our communications are reaching you. Another solution is to send your home e-mail to: indianaahperd@aol.com for an update.

Thanks!

Attention IAHPERD Members

As an association, in the future more of our communications will be done through e-mail. If you did not receive an e-mail in January or February from: indianaahperd@aol.com – please update your e-mail address.

This may be done by e-mailing your current e-mail, name, and address to:

indianaahperd@aol.com

Any questions? Contact Karen Hatch, Indiana AHPERD Executive Director at the above e-mail or by telephone at:

765-664-8319

Thanks for keeping the IAHPERD membership records up-to-date.

Fund Your Project

APPLY FOR AN IAHPERD GRANT
Contact: Carole DeHaven
Purdue University
800 West Stadium Ave.
West Lafayette, IN 47906
cdehaven@purdue.edu

An Experiential Learning Experience that Fights Childhood Obesity: The Implementation of the SMART Fitness, Sport, and Nutrition Summer Camp

Glenna G. Bower, Renee Frimming, and Julie McCullough
University of Southern Illinois
Direct correspondence to:
Glenna G. Bower, Ph.D.
University of Southern Indiana
8600 University Blvd
Evansville, IN 47712
812-760-3617
gbower@usi.edu

Abstract

The prevalence of childhood obesity has increased dramatically from 5% to 16.9% since 1960 with more than 23 million American children (one in every three) overweight or obese. The primary contributors to overweight and obesity in children and youth are increased sedentary behavior, decreased physical activity levels, and increased intake of high fat, high calorie and non-nutrient dense foods. There is an overwhelming need to offer culturally appropriate overweight and obese intervention programs that target children of various ages. The Students Mentoring At-Risk Teens (SMART) Youth Fitness & Nutrition Program that was developed to focus on the prevention of childhood overweight and obesity through physical activity and nutrition with diverse middle school students from a low-socioeconomic background. The SMART Youth Fitness & Nutrition Program was expanded to offer a Students Mentoring At-Risk Teens (SMART) Fitness, Sport, and Health Summer Camp. The purpose of this article was to introduce the SMART Fitness, Sport, and Health Summer Camp as an experiential learning experience for college students. Through this experience college students learned how to make modifications to activities and deal with children that come from troubled homes. In addition, relationships were established between the university, School Corporation and the community.

Keywords: Experiential Learning, Childhood Obesity, Obesity Intervention Programs

Introduction

Childhood obesity has reached epidemic proportions in the United States and is a significant public health concern. The prevalence of childhood obesity has increased dramatically from 5% to 16.9% since 1960 with more than 23 million American children (one in every three) overweight or obese (Larrier, Bakerson, Linton, Walker, & Wooldford, 2011).

The primary contributors to overweight and obesity in children and youth are increased sedentary behavior, decreased physical activity levels, and increased intake of high fat, high calorie and non-nutrient dense foods (Costley & Leggett, 2010). Childhood obesity cannot be left unaddressed, as it places children at risk of physical, mental, and social health disorders. Physical health disorders may include type 2 diabetes, coronary artery disease, hypertension, and hypercholesterolemia (U.S. Department of Health and Human Services, 2011). Children and adolescents are stigmatized in American society for being overweight which leads to emotional disorders including poor self-esteem and depression and social health disorders including discrimination, stereotyping, teasing, and bullying (Larrier, et. Al, 2011).

The environment, heredity and family, dietary patterns, and socioeconomic status are the primary contributors to overweight and obesity amongst children (Obesity Action Alert, 2011). First, the environment shapes the perceptions of children through television commercials that promote unhealthy food and demotes the importance of physical activity (Center for Disease Control, 2011a). In addition to commercials, the term "screen time" has been an environmental factor that has contributed to the increased sedentary behavior or lack of physical activity among children. Screen time refers to children that spend excessive hours watching television, movies, playing video games, and spending

time on the computer (Bower, Bennett, & Frimming, 2009). Genetics also contribute to overweight and obesity in 5 to 25 percent of children, however the environment can play a role in learned behavior as well. Genes do not necessarily dictate whether a child is overweight or obese (Obesity Action Alert, 2011). Children are eating more fast food with high fat, high calorie, and non-nutrient dense calories. The option to "super size" or to eat more at buffets also leads to the consumption of more calories than they can burn off. Soft drinks with high fructose corn syrup has been under scrutiny as many researchers found that 20% of children that consume soft drinks on a regular basis are more likely to be overweight or obese (Obesity Action Alert (2011). This is unfortunate considering the consumption of soft drinks by children has increased by more than 300 percent over the last 20 years (Obesity Action Alert, 2011). The final contributor to the obesity epidemic is lower socioeconomic status. Low-income families do not have the option of purchasing healthy food options because of their low-income. It is easier to opt to eat convenience foods. In some cases it is the parents that have little or no education about proper nutrition and healthy food choices (Obesity Action Alert, 2011).

The Obesity Interventions

There is an overwhelming need to offer culturally appropriate overweight and obese intervention programs that target children of various ages. Many schools are utilizing intervention techniques to address childhood obesity by focusing programs on healthy changes to modifications to school lunch options, better selections or removal of vending machines, and the addition of extracurricular after-school programming to increase physical activity. The initiatives are coordinated by the National Governors Association (NGA) Center for Best Practices formed the "Shaping a Healthier Generation Advisory Council" in response to the childhood obesity epidemic. The Council was charged with putting into place childhood obesity prevention strategies for governors to implement in their state (Mulheron & Vonasek, 2009). These childhood obesity prevention strategies focus on decreasing "screen time," improved dietary selections, and increased physical activity.

There are several school-based physical activity and nutrition intervention programs aimed at supporting healthy weight among children and adolescents (Center for Disease Control, 2011b). The State Nutrition Physical Activity and Obesity (NPAO) program, the Coordinated Approach to Child Health (CATCH) and Eat Well & Keep Moving. The State NPAO was developed by state and community partners of the Centers for Disease Control and Prevention (CDC) to help in development, implementation, and evaluation of an array of nutrition and physical activities that aim to prevent and control obesity and other chronic diseases. CATCH promotes healthy eating habits and increased physical activity amongst children and adolescents. Eat Well & Keep Moving was designed to increase physical activity and promote healthy dietary habits among 4th and 5th grade students (Center for Disease Control & Prevention, 2011b).

Although there are many national programs that are aimed at supporting healthy weight among children and adolescents there are also local and regional programs being developed to increase awareness in conquering the epidemic of obesity and to provide workable framework to assist in the implementation of intervention programs. To support the childhood obesity prevention strategies from a local level, the Students Mentoring At-Risk Teens/ Tweens (SMART) Program was implemented during the spring of 2008 by two college professors and students from a local university. The purpose of the SMART Youth Fitness & Nutrition Program was developed, "to focus on the prevention of childhood overweight and obesity through physical activity and nutrition with diverse middle school students from a low-socioeconomic background" (Bower, McDowell, Chamness, Grace, & Nelson, 2008, p. 13). The program is still in existence and was expanded to offer a Students Mentoring At-Risk Teens (SMART) Fitness, Sport, and Health Summer Camp. The purpose of this article was to introduce the SMART Fitness, Sport, and Health Summer Camp as an experiential learning experience for college students.

The Experiential Learning Experience

Methods of learning are numerous and educators have recognized the need to balance a student's theoretical knowledge with practical experience. The practical experiences are critical precursors for a future career within kinesiology and sport. An experiential learning experience allows a student to learn by doing and is associated with active engagement. Students have the opportunity to discover, process, and apply information while reflecting on what they have done (Conley, 2008). Faculty have the opportunity to link "academic knowledge and practical skills" (Ruhaneu, 2005, p. 34) and "stresses practical application of knowledge to real-world situations" (Hawkins & Weiss, 2004, p. 3). Faculty members often search for practical experiences that may spark a student's interest in learning vital material. One example of a practical or experiential learning experience that sparked the interest of many students was the SMART Summer Fitness, Sport, and Health Camp introduced during the summer of 2011. The SMART program was funded by an Indiana Association for Health, Physical Education, Recreation, and Dance (IAHPERD) grant.

The Participants

There were a total of twenty-three (N=23) participants including college students, faculty, and children that participated in the SMART Summer Fitness, Sport, and Health Camp. The leadership team consisted of eight (n=8) college students under the direction of three (n=3) faculty members and two (n=2) former coordinators. The two former coordinators were Physical Education Department graduates that had lead the SMART Fitness and Nutrition programs from spring of 2010 to the spring of 2011. The students were enrolled in a practicum, a special topics or school health course. The students came from a variety of majors including kinesiology (5), sport management (1), exercise science (1), Physical Education Teaching (1), and

Nutrition (2). The faculty members included an Associate Professor with concentrations in sport management and kinesiology, an Associate Professor with a concentration in nutrition, and an Assistant Professor with a concentration in health and safety education. One of the graduates (student coordinators) obtained a degree in Kinesiology with a specialization in sport management while the other student obtained a degree in kinesiology with a specialization in sport management. The leadership team (professors and coordinators) was responsible for planning, organizing, leading, and implementing the SMART camp with the help of student volunteers. The children for the program included eight (n=8) students, ages 9-11 from two low socioeconomic schools.

The SMART Fitness, Sport, and Health Program

The SMART Camp was offered on a university campus. The SMART Camp met for one week from 8:30 am – 4:00 pm Monday through Friday. In the morning the students participated in yoga poses to begin their warm-up. The yoga poses were followed by a fitness activity. The fitness activities consisted of body shop (circuit training), weight training, boot camp (strength & conditioning), calisthenics, and jump roping activities. Students followed each fitness workout with an outdoor adventure activity. Students participated in rock climbing, fishing, and hiking. Once the students were finished with their outdoor adventure activities they were in the classroom learning about healthy eating. The healthy eating lesson plans led right into the lunch. Once students were finished with their lunch they completed lessons that trained and certified them in CPR, First Aid, and Babysitting training. In the afternoon, students were back in the gym for a sporting activity. Students were taught sports skills and had the opportunity to play basketball, volleyball, disc golf and wiffle ball. Finally, the last session of the camp was by far the student's favorite activity – swimming. Each session of the program lasted approximately 75 minutes with 15 minute breaks provided to the children. See Table 1 for an example of a typical day.

Conclusion

This experiential learning experience provided students with several opportunities to gain knowledge in the classroom and experience in the "real world". With the prevalence of childhood obesity, the SMART Fitness Sport, and Health Summer Camp focused on offering an intervention program focused on fighting childhood obesity. The SMART Fitness, Sport, and Health Summer Camp allowed college students to develop a strong ownership in their learning while providing a quality summer camp that motivated and inspired children. College students learned in a more meaningful and productive way to develop lesson plans that focused on fitness, outdoor adventure, sport, and health activities specific to students from a low-socioeconomic background. The lesson plans were actually implemented in working with the children. College students had to learn how to make modifications to activities and deal with children that come from a troubled home. In addition, relationships were established between the university, School Corporation and the community.

Table 1 The SMART Fitness, Sport, and Health Summer Camp Example

Time	Activity	Details
Day 1		
8:30 am-8:45 am	Yoga Pose of the Day	Cat Pose
8:45 am-9:30 am	Fitness	Body Shop
9:30 am-9:45 am	Break	Break
9:45 am-11:15 am	Outdoor Adventure	Hiking
11:15 am-11:30 am	Break	Break
11:30 am-12:00 pm	Nutrition	Fruits (Fruit Kabobs)
12:00 pm-12:30 pm	Lunch	Spaghetti
12:30 pm-1:45 pm	Red Cross Education	CPR
1:45 pm-2:00 pm	Break	Break
2:00 pm-2:45 pm	Sport	Basketball
2:45 pm-3:00 pm	Break	Break
3:00 pm-3:50 pm	Swimming	Water Baseball
3:50 pm-4:00 pm	Snack	Granola Bar/Apple

References

Bower, G. G., Bennett, S., & Frimming, R. (2009). Connect the SMART way: Implementing a youth fitness and nutrition program. *Indiana Health, Physical Education, Recreation, & Dance (IAHPERD) Journal*, 38(2), 11-14.

Bower, G. G., McDowell, C., Chamness, V., Grace, D., & Nelson, V. (2008). Be SMART and connect with the community: The development of a youth Fitness & Nutrition DVD. *Indiana Association for Health, Physical Education, Recreation & Dance Journal*, 37(2), 13.

Center for Disease Control. (2011a). *Children's Food Environment State Indicator Report*, 2011. Retrieved August 14, 2011 from http://www.cdc.gov/obesity/downloads/ChildrensFoodEnvironment.pdf

Center for Disease Control (2011b). *The State Nutrition, Physical Activity and Obesity (NPAO) Program.* Retrieved August 14, 2011 from http://www.cdc.gov/obesity/downloads/TA_Manual_1_31_08.pdf

Conley, W. J. (2008). Play to learn. In *Ideas That Work in College Teaching*, R. L. Badget (ed). State University of New York Press: Albany, NY, 147-162.

Costley, K. C., & Leggett, T. (2010). Childhood obesity: A heavy problem. Online submission, 1-10.

Hawkins, D. E., & Weiss, B.L. (2004). Experiential education in graduate tourism studies: An international consulting practicum. *Journal of Teaching in Travel and Tourism*, 4(3), 1-29.

Larrier, Y. I., Bakerson, M.A., Linton, J. M., Walker, L. R., & Woolford, S. J. (2011). The role of school counselors in childhood obesity epidemic. *Journal of School Counseling*, 9(3), 31.

Mulheron, J., & Vonasek, K. (2009). Shaping a healthier generation: Successful state strategies to prevent childhood obesity. *NGA Center for Best Practices*, 1, 1-64.

Obesity Action Coalition. (2011). *Obesity Action Alert*. Obesity in the news. Retrieved from http://www.obesityaction.org/educationaltools/OAA/2011/april.php.

Ruhaneu, L. (2005). Bridging the divide between theory and practice. Experiential learning approaches for tourism and hospitality management education. *Journal of Teaching in Travel and Tourism*, 5(4), 33-51.

American Heart Association®

JUMP ROPE FOR HEART™

HOOPS FOR HEART

IT TAKES HEART TO BE A HERO!

DEREK, Age 4

"I can't wait to do Jump Rope For Heart next year to help other kids like me! The money raised for the American Heart Association really does save lives … it saved mine!"

Jump Rope For Heart and Hoops For Heart are national events sponsored by the American Heart Association and the American Alliance for Health, Physical Education, Recreation and Dance. Students in these programs have fun jumping rope and playing basketball — all while becoming empowered to improve their health and help other kids with heart health issues.

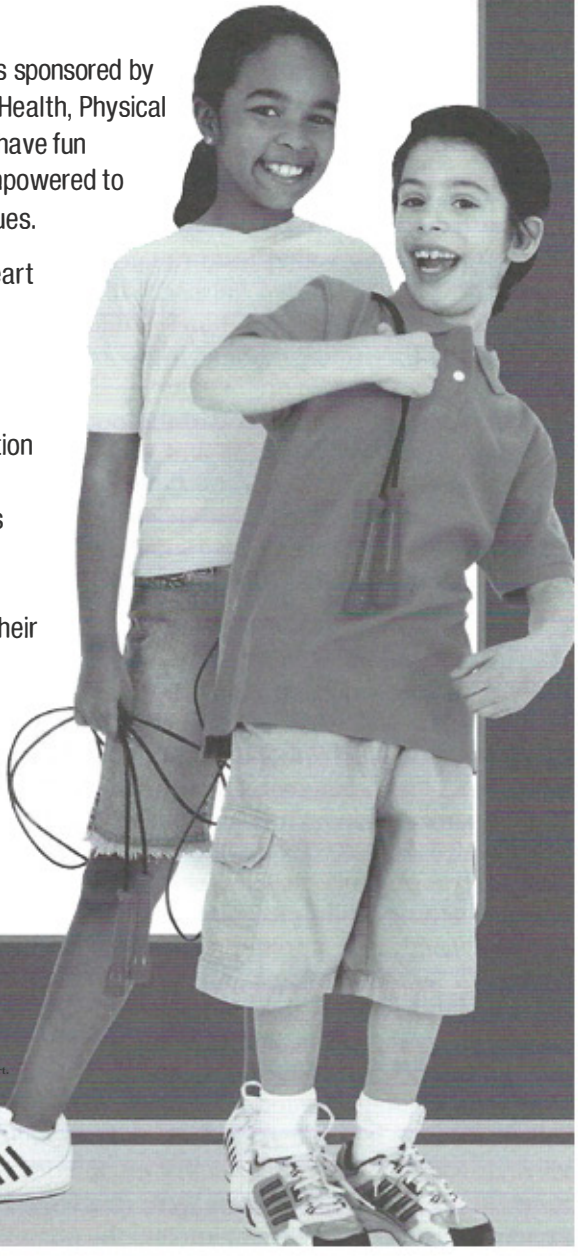
Funds raised through Jump Rope For Heart and Hoops For Heart give back to children, communities and schools through the American Heart Association's work:

- Ongoing discovery of new treatments through research
- Advocating at federal and state levels for physical education and nutrition wellness in schools
- CPR training courses for middle and high school students

Jump Rope For Heart and Hoops For Heart help students:

- Learn the value of community service and contribute to their community's welfare
- Develop heart-healthy habits while being physically active
- Earn gift certificates for free school P.E. equipment from U.S. Games

Call 1-800-AHA-USA1 or visit heart.org/jump or heart.org/hoops to get your school involved.



American Alliance for Health, Physical Education, Recreation and Dance

AAHPERD is a proud program partner of Jump Rope For Heart and Hoops For Heart.

An Examination of Factors Impacting the Academic Progress Rate of First-Year Football Student-Athletes at a Football Bowl Subdivision Institution

James E. Johnson
Assistant Professor of Sport Administration
Ball State University
School of Physical Education, Sport, and Exercise Science
2000 W. University Avenue
HP223
Muncie, IN 47306
765-285-0044
jejohnson1@bsu.edu

Abstract

The Academic Progress Rate (APR) is the relatively new academic metric introduced by the National Collegiate Athletic Association (NCAA) in 2004 as part of a comprehensive academic reform package. The premise of the APR was to provide a semester-by-semester score reflecting the academic culture of a particular team. Since its creation, this metric has become the benchmark for academic evaluation of NCAA member institutions. Despite the APR's emergence as the metric of choice by the NCAA, there is relatively little empirical evidence regarding factors which influence the APR. Therefore, the purpose of this study was to determine if there was a relationship between APR and five easily identifiable factors readily available to coaches and administrators. A total of 170 first-year football student-athletes at a NCAA Football Bowl Subdivision (FBS) university were evaluated over a five-year period (2006-2010) to determine if five selected factors were significantly related to APR score. The five factors under consideration were race, distance from home, major declaration, head coaching change, and playing time. Results of five independent two-way contingency tables utilizing Pearson chi-square analysis revealed that coaching change was the only variable significantly related to APR. Additionally, the results confirm that APR is a unique construct independent of other traditional academic metrics (e.g., GPA, graduation rates, etc.).

Keywords: Academic Progress Rate, College Student-Athletes, NCAA

Introduction

Investigating the academic performance of student-athletes is not a new endeavor. As college sports have grown, so too has the interest in studying the academic lives of collegiate student-athletes. Within the past decade, however, a new academic measure has emerged. The Academic Progress Rate (APR) was the centerpiece of the National Collegiate Athletic Association's (NCAA) academic reform package adopted in 2004. From an empirical standpoint, little is known about this new metric or factors by which it might be influenced. The goal of the current study is to begin the process of identifying factors potentially related to the APR.

Review of Literature

APR

The APR was designed to represent a more accurate reflection of semester-by-semester student-athlete academic performance than previous academic markers. Most of the previous markers used prior to the APR were largely pre-admission (e.g., test scores, high school GPA, etc.), or post-graduation measures (e.g., graduation rates), which are calculated six years after students enter an institution (Brown, 2005). The APR allows a semester-by-semester evaluation of team academic culture at a particular institution, as well as national comparisons of APR scores across sports and conferences via a national database compiled by the NCAA (APR, 2011a).

Only student-athletes receiving financial aid for athletic ability, or recruited student-athletes on teams

that do not offer financial aid, are used to calculate the APR. The calculation involves a combination of academic eligibility and retention. During each semester a student-athlete may earn one point for remaining academically eligible, and one point for being retained at the institution the following semester. Therefore a 2/2 is the best score a student-athlete can receive in a semester, and a 4/4 is the best score they can receive in a year. After each individual student-athlete is scored, a team score is calculated by dividing the total points earned by the total points possible. The raw decimal score is then multiplied by 1000 to make the score more easily understood. Therefore, a perfect team APR score is 1000 (APR, 2010).

The designated cut-off score for penalties was established at the 925 mark. This score was chosen because it was originally estimated to equate with a 60% graduation rate (NCAA, n.d.). Additionally, a 925 mark was established because it allowed a cushion of acceptable attrition rates to be factored into the calculation. The rationale for this decision acknowledged that retaining 100% of student-athletes was unrealistic. Teams falling below the 925 mark are subject to a variety of contemporaneous and historical penalties. Contemporaneous penalties occur when a student-athlete is a 0/2 in the APR calculation. In this case an institution cannot renew a scholarship to a new student-athlete the following year. Historical penalties occur when the four-year rolling APR average falls below 900. These penalties may include postseason bans, loss of scholarships, and potential loss of NCAA membership (Hamilton, 2005).

Since its inception in the 2003-04 academic year, the APR has dramatically impacted college athletics. In general, the sports of football (946), men's basketball (945), and baseball (959) have demonstrated the lowest national average APR scores. As a result, these sports have received the most frequent, and harshest of penalties (NCAA, 2011). With these general observations in mind, it is paramount to begin empirical evaluations of the APR. To date, there are only a handful of studies examining the APR, and none of those investigate potential factors related to APR scores. This study attempts to address this gap in the literature, and provide a starting point for determining what factors relate most to APR. The variables chosen are variables readily available to coaches and administrators. Each variable is hypothesized to impact APR scores.

Race

Analyzing race with regard to academic performance is not a new idea. In general, race has been investigated from two paradigmatic frameworks. The first is to view race as one variable that is part of a bigger picture. This framework, consequently used in this study, does not focus on race as the primary factor, but as one of many potential factors within the framework of a research question (Babington, 1997; Chee, Pino, & Smith, 2005; Kane, Leo, & Holleran, 2008; Killeya, 2001; Sedlacek & Adams-Gaston, 1992; Sellers, 1992; Shapiro, 1984; Siegel, 1994; Walter, Smith, Hoey, Wilhelm, & Miller 1987; Waugh, Micceri, & Takalkar, 1994). The second framework is to focus on race as the primary source of study. Within the sport literature, this framework has traditionally investigated the experiences of African American student-athletes in revenue sports of football and basketball (Institute of Diversity and Ethics in Sport, 2008; Person & LeNoir, 1997; Siegel, 1994; Young & Sowa, 1992).

Both frameworks conclude that, in general, minority student-athletes tend to perform at lower levels than Caucasian student-athletes in many of the traditional academic measures, especially in the men's revenue sports of football and basketball. For example, literature investigating student-athlete graduation rates (Kane et al., 2008; Shapiro, 1984; Siegel, 1994; Waugh et al., 1994), standardized tests (Babington, 1997; Capraro, Capraro, & Wiggins, 2000; Killeya, 2001; Sedlaceck & Adams-Gaston, 1992; Sellers, 1992; Walter et al., 1987), and grade point average (Babington, 1997; Chee et al., 2005; Killeya, 2001; Sedlacek & Adams-Gaston, 1992; Sellers, 1992; Walter et al., 1987) confirm race as a relatively stable predictor of academic performance. Because APR is calculated using academic eligibility, it is logical to hypothesize race would also be related to APR scores.

Distance From Home

In the general student population, the distance one attends college from their hometown has been found to be an influential factor for college selection and retention. For example, the Higher Education Research Institute (2008), found 20.1% of college students indicated it was very important to live close to home, while 29.3% indicated it was somewhat important. Additionally, 52.8% of college freshman lived within 100 miles of their home. Similarly, Lam (1984) found that distance from home accounted for eight percent of the probability of dropping out. Jonas and Popovics (1990), Cunningham (1997), and Cunningham and Fickes (2000) all found distance from home were powerful indicators of college choice. Similar studies outside of the United States have confirmed these findings. Briggs (2006) and Martin (1996) both found distance from home as a primary indicator of college choice in Scotland and Australia respectively.

With specific regard to distance from home and retention, Fisher (1989) identifies the concept of homesickness as critical. Fisher's logic is predicated on two reasons. First, "the greater the distance incurred, the greater the likelihood of change in culture – hence the greater the likelihood of "culture shock" (p. 72). Second, the greater the distance, the more students are likely to feel cut off from home and unable to visit. This second reason is particularly likely for student-athletes given their busy practice and competition schedules that often spans weekends. In the only study linking distance from home to academic performance of student-athletes, Johnson, Wessel, & Pierce (in press) found this factor to be significantly correlated with retention. This evidence, combined with the previous research on the general student population and homesickness, provides reason to believe APR might be influenced by distance from home.

Major Declaration

Declaring a major upon college admittance is generally thought to be one of the most important decisions in a student's career. St. John (2000) noted that no college decision is "more thought-provoking, gut-wrenching and rest of your life oriented – or disoriented – than the choice of a major" (p. 22). It is not a surprise, therefore, that Roese and Summervile (2005) report the most frequent life regret identified by Americans are educational choices, including major choice. These ideas give credence to the literature which suggests being undecided generally reflects a less prepared and focused type of student. For example, Cooney (2000) found students in community college that were undecided were most in need of assistance from faculty and student services, and ultimately did not perform as well as students that chose a major. Similarly, St. John, Hu, Simmons, Carter, and Weber (2004) found Indiana college students from state institutions were less likely to remain in college if they were undecided. Furthermore, Ridener (1999) found undecided students had lower levels of environmental responsibility than students in social science or hard science majors.

Although the preceding literature supports major declaration as an indicator of academic potential, there is evidence that being undecided does not impact academic performance. Kroc, Howard, Hull, and Woodard (1997), as well as Knight (1994), reported that students who enter college as undecided graduate at the same rate as those students who declare a major. Given the somewhat inconsistent findings of major declaration, it is a worthwhile endeavor to determine if the contemporary marker of student-athlete academic performance, the APR, is impacted by major declaration. If APR is related to major declaration, intervention strategies can be developed upon entry into the institution to combat any lack of focus or preparedness.

Coaching Change

The influence of a coach begins well before a student-athlete arrives on a campus. During the recruiting process a college coach makes decisions about the type of student-athlete that will fit in their program. Oftentimes, recruiting visits are the first point of contact, and serve to begin the rapport-building process, which ultimately leads to a commitment. This process can create a strong bond between student-athlete and coach (Baldwin, 1999, Looney, 1989). After student-athletes commit, they are under the leadership of the coach, which can take many forms.

In addition to the athletic responsibilities of expert and mentor in the nuances of their sport, coaches must also create practice plans, hire assistant coaches, budget, schedule, and determine punishments. These responsibilities create a great deal of interaction with, and influence upon, student-athletes. Beyond the role of athletic leader, research has suggested college coaches resemble teachers (Brubaker, 2007), guardians (Schilling, 2007), business mentors (Lattman, 2008), counselors (Bradley, 2005), disciplinarians (Schilling, 2007), injury evaluators (Lewis, 2004), emotional caretakers (Gagne, Ryan, & Bargmann, 2003), and psychologists (Amorose, 2003; Thelwell, Weston, Greenlees, & Hutchings, 2008). Given the number of roles coaches appear to have with student-athletes, it is reasonable to assume coaches also exert a considerable amount of influence over the academic performance of their players. Therefore, if a student-athlete loses their head coach, it seems reasonable to expect the APR of a specific team to be significantly impacted.

Playing Time

College student-athletes, particularly for football at the Football Bowl Subdivision (FBS) level, were likely the most skilled and revered athletes at their high school. Upon entrance to college, however, those skilled high school athletes often find themselves further down the depth chart than they are accustomed, resulting in limited playing time. For athletes having a strong athletic identity (Murphy, 1991), this change in playing time may have consequences. In one of the earliest studies investigating playing time, Kauss (1978) found the players receiving the most playing time on the UCLA football team were more prepared emotionally and physically. This finding was important because it suggested college athletes who experienced more playing time were better equipped to handle changing emotional and psychological states. Petlichkoff (1993a, 1993b) extended these ideas by suggesting that playing time should be viewed more on a continuum than a dichotomous concept. As student-athletes moved up or down the playing time continuum, they were likely to be impacted both from a motivational and satisfaction standpoint. These factors, argued Petlichkoff, demonstrate a strong link between playing time and perceived competence, which has consistently been found to influence enjoyment of physical activity (Weiss, McAuley, Ebbeck, & Wiese, 1990).

Weiss and Frazer (1995) found similar results at the high school level. Student-athletes with the most playing time on a female basketball team were found to have higher perceived peer acceptance, perceived success, and enjoyment. Demaine and Short (2007), as well as Rainey and Schweickert (1991), found similar results and concluded that increased playing time fosters more confidence and commitment to team goals. Regarding the specific influence of playing time on academic measures, the literature is limited. The only two studies to investigate FBS athletes concluded that playing time is a significant predictor of retention (Johnson et al., in press), but not of GPA (Johnson, Wessel, & Pierce, 2010). Given the initial indications that playing time is an important factor for motivation and enjoyment, as well as retention, it is prudent to consider its potential impact on APR.

Method

A total of 170 first-year football student-athletes at a NCAA FBS university were evaluated over a five-year period (2006-2010) to determine if any of five selected factors were significantly related to APR score. These factors were chosen because they are likely to impact one or both of the factors that are used to compute the APR (i.e., academic eligibility and retention), and are easily identifiable for coaches and administrators, thus making them practical

factors to consider. First-year football student-athletes were chosen because the first year of college is the most critical in terms of retention (Tinto, 1993), and because football has been one of the lowest achieving sports in terms of national APR scores (NCAA, 2011). Archival data for race, distance from home, and major declaration was gathered using the central information database at the university. Information regarding coaching change and playing time was gathered using a combination of hard copy and electronic media guides produced by the Institution's Sports Information Department. APR data was accumulated using the APR database available online through the NCAA (APR, 2011b). Each factor was hypothesized to be significantly related to APR.

To determine if a relationship existed between each factor and APR scores, a series of two-way contingency tables utilizing Pearson chi-square analysis was conducted. For the factor of race, a 5 x 2 analysis (yearly APR score x race) was performed. The two levels for race were Caucasian (n = 84) and minority student-athletes (n = 86). For distance from home, a 5 x 3 analysis (yearly APR score x distance) was conducted. Distance from home was divided into three levels; small (0-100 miles, n = 59); medium (101-250 miles, n = 48); and large distances (250+ miles, n = 63). Major declaration was evaluated using a 5 x 2 analysis (yearly APR x major). The two levels for major declaration were undecided (n = 47) or declared (n = 123) as determined on the first day of their first college semester. The coaching change factor was evaluated using a 5 x 2 analysis (yearly APR x coaching change). The two levels for coaching change were defined as a head coaching change during the academic year (n = 29), or no head coaching change during the academic year (n = 141). The final variable, playing time, was analyzed using a 5 x 3 contingency table (yearly APR x playing time). Playing time was divided into three levels; low (played in 0 to 1/3 of the possible games, n = 131); medium (played in 1/3 to 2/3 of the possible games, n = 9), or high (played in more than 2/3 of the possible games, n = 30).

Results

For the five years under investigation, single year APR scores were as follows: 2005-06 = 928; 2006-07 = 930; 2007-08 = 959; 2008-09 = 922; 2009-10 = 944 (APR, 2011b). For each of the five factors investigated in this study, a two-way contingency table analysis was conducted to evaluate whether the factor in question was related to the team APR for each year. Results indicated none of the variables were significantly related to team APR except for coaching change. APR and coaching change, however, were found to be significantly related, Pearson χ (4, N = 170) = 170, $p < .01$. The proportion of coaching change versus no coaching change was 17.6 and 82.4, respectively. These results indicate that a change in APR, specifically a lower APR, was significantly related to a head football coaching change. Furthermore, these results indicate APR was not impacted by race, distance from home, major declaration, or playing time. Table 1 provides Pearson chi-square and alpha values for each factor.

Table 1: Comparison of Pearson chi-square and Alpha Values for Factors

Factor	Pearson chi-square	p value (alpha)
Race	.5	.974
Distance From Home	10.69	.220
Major Declaration	4.43	.351
Coaching Change	170.00	<.01*
Playing Time	4.189	.84

*p<.01

Discussion

Although each of the five factors under investigation were hypothesized to be significantly related to APR scores for FBS football student-athletes, only coaching change proved significant. These results are somewhat surprising given the amount of literature that supports the other four factors as determinants of various academic performance (e.g., GPA, graduation rates, retention, etc.). This outcome provides evidence that APR is a relatively unique metric that may not be influenced by these factors. This explanation is logical considering APR is comprised of eligibility and retention, two variables with a variety of their own unique influences (Johnson et al., 2010, in press). Given the non-significant results of the four factors investigated, as well as the rationale that the APR is a unique academic metric, more research is necessary to determine what types of factors are related to APR.

With regard to coaching change, the findings suggest a change in head coach negatively impacts APR scores. This result was a consequence of the coaching change that occurred during the 2008-09 academic year. Specifically, the APR score of 922, which coincidentally was the only year under the 925 cutoff, was the lowest APR score in the five-years under investigation. The fact that the only coaching change occurred during the year with the lowest APR score suggests one or both of the variables used to calculate APR (i.e., eligibility and retention) were impacted by a head coaching change. Given the variety of relationships forged between coaches and student-athletes, as well as the influence coaches have over the academic policies, this result was anticipated. It should be noted, however, that the head coach in 2008 left the university for another coaching position at approximately the mid-point of the academic year following a successful football season. This study did not take into account the time of the coaching change, or the manner in which the coach left the program. Investigating these variables in future research would be advisable.

Although the results of this study are an important first-step in identifying factors related to the APR, there are some limitations and additional recommendations for future research. First, this study only examined five factors potentially related to APR. Future research should continue to identify different factors that have been linked to eligibility or retention (e.g., injury, scholarship level, etc.). Second, this study only examined FBS football student-athletes from one institution in their first year of college.

Broadening the scope of the participants to include other sports, institutions, NCAA divisions, and year in school is warranted. Third, there was a relatively low number of student-athletes that experienced a coaching change (n = 29). Future research should identify a larger sample of coaching changes within different NCAA divisions to confirm the results of this study.

The aforementioned limitations and suggestions are crucial to understanding the value of the current study as an initial investigation of the APR. This study was not meant to provide a comprehensive understanding of the APR. It was, however, designed to begin building a body of knowledge on this important new academic metric. The findings confirm the uniqueness of this metric, and provide a variety of potential directions for future research.

References

Amorose, A. (2003). Reflected appraisals and perceived importance of significant others' appraisals as predictors of college athletes' self-perceptions of competence [Electronic version]. *Research Quarterly for Exercise and Sport*, 74, 60-71.

APR (2010). *How is the Academic Progress Rate calculated?* Retrieved from http://www.ncaa .org /wps/wcm/connect/public/NCAA/Academics/Division+I/How+is+APR+calculated

APR (2011a). *Academic Progress Rate Database* [data file]. Retrieved from http://fs.ncaa.org /Docs/newmedia/public/rates/index5.html

APR (2011b). *DI Head Coach Academic Progress Rate Database* [data file]. Retrieved from http://fs.ncaa.org/Docs/newmedia/public/rates/index5.html

Babington, C. A. (1997). Traditional and non-traditional predictors of academic success of freshmen student-athletes at Indiana University. *Dissertation Abstracts International*, 58(03), 141. (UMI No. 9724511)

Baldwin, B. (1999). The factors that head football coaches at NCAA Division IA Universities use to evaluate a potential athlete during the recruiting process. Unpublished master's thesis, Ball State University, Muncie, Indiana.

Bradley, B. (2005). The coach as guidance counselor. *Coach & Athletic Director*, 75(3), 45-46.

Briggs, S. (2006). An exploratory study of the factors influencing undergraduate student choice: The case of higher education in Scotland. Studies in Higher Education, 31, 705-722.

Brown, G. T. (2005, February 14). Implementation of penalty structure triggers new terminology, consequences, questions. *NCAA News*. Retrieved from http:www.ncaa.org/../Division+I/APR+101+-+2-14-05+NCAA+News? pageDesign=Printer+Friendly+NCAA+News+And+Updates

Brubaker, K. (2007). Coaching and teaching our athletes. *Coach and Athletic Director*, 77(3), 30-33.

Capraro, M. M., Capraro, R. M., & Wiggins, B. B. (2000, January). *An investigation of the effects of gender, socioeconomic status, race and grades on standardized test scores.* Paper presented at the Annual Meeting of the Southwest Educational Research Association, Dallas, TX.

Chee, K. H., Pino, N. W., & Smith, W. L. (2005). Gender differences in the academic ethic and academic achievement. *College Student Journal*, 39, 604-619.

Cooney, F. (2000). *General studies majors at Salt Lake Community College: A secondary analysis of the fall 1999 new student survey.* Salt Lake City, UT: Salt Lake Community College, Department of Administrative Services, Office of Planning and Research.

Cunningham, S. (1997). *Non-matriculant survey report, fall 1995.* Williamsport, PA: Pennsylvania College of Technology, Strategic Planning and Research.

Cunningham, S., & Fickes, P. (2000). *Non-matriculant survey report, 1998.* Williamsport, PA: Pennsylvania College of Technology, Strategic Planning and Research.

Demaine, C., & Short, S. E. (2007). Sources of sport confidence and their relationship with sport confidence in college basketball players. *Journal of Sport and Exercise Psychology*, 29(Suppl. 157), 3-4.

Fisher, S. (1989). *Homesickness, cognition, and health.* Hove, East Suxxex UK: Lawrence Erlbaum Associates.

Gagne, M., Ryan, R. M., & Bargmann, K. (2003). Autonomy support and need satisfaction in the motivation and well-being of gymnasts. *Journal of Applied Sport Psychology,* 15, 372-390.

Hamilton, K. (2005). Putting the 'student' back into the student-athlete: In an effort to improve retention and graduation rates, the NCAA rolls out new rules and regulations [Electronic version]. *Black Issues in Higher Education*, 22, 1-7.

Higher Education Research Institute. (2008). *CIRP freshman survey 2008.* Los Angeles, CA: Cooperative Institutional Research Program. Los Angeles: University of California at Los Angeles.

Institute for Diversity and Ethics in Sport. (2008). *Keeping score when it counts: Assessing the 2008-2009 Bowl-bound college football teams-academic performance improves but race still matters.* Retrieved from http://web.bus.ucf.edu/documents/sport/keeping_score _when _it_counts_assessing_the_200809_bowlbound_college_football_teams_rev2.pdf

Johnson, J. E., Wessel, R. D., & Pierce, D. (2010). Reexamining student-athlete GPA: Traditional vs. athletic variables. *Journal of Intercollegiate Sport*, 3, 234-255.

Johnson, J. E., Wessel, R. D., & Pierce, D. (in press). The impact of demographic, academic, and athletic variables on the retention of student-athletes. *Journal of Student Retention.* 15(2).

Jonas, P. M., & Popovics, A. J. (1990). *Students' perceptions of an independent college.* Cardinal Stritch, WI; Cardinal Stritch College. (ERIC Document Reproduction Service No. ED327104)

Kane, M. J., Leo, P., & Holleran, L. K. (2008). Issues related to academic support and performance of Division I student-athletes: A case study at the University of Minnesota. *Journal of Intercollegiate Sports*, 1, 98-130.

Kauss, D. (1978). An investigation of psychological states related to the psycho-emotional readying procedures of competitive athletes. *International Journal of Sport Psychology,* 9, 134-145.

Killeya, L. A. (2001). Idiosyncratic role-elaboration, academic performance, and adjustment among African American and European-American male college student-athletes. *College Student Journal*, 35, 87-96.

Knight, W. E. (1994, May). *Why the five-year (or longer) bachelors degree?: An exploratory study of time to degree attainment.* Paper presented at the annual forum of the Association for Institutional Research, New Orleans, LA.

Kroc, R., Howard, R., Hull, P., & Woodard, D. (1997, May). *Graduation rates: Do students' academic program choices make a difference?* Paper presented at the annual forum of the Association for Institutional Research, Orlando, FL.

Lam, Y. L. J. (1984). Predicting dropouts of university freshmen: A logit regression analysis. *The Journal of Educational Administration*, 22, 74-82.

Lattman, M. (2008). The role of junior college coaches: More than the sport. *Coach & Athletic Director,* 77(7), 110-112.

Lewis, D. K. (2004). *Personal and situational bases for coaches' causal attributions for the recovery outcome of injured athletes.* Unpublished doctoral dissertation, Michigan State University, East Lansing.

Looney, D. (1989, February 20). On the road again: Texas football recruiter Bobby Jack Wright knows that singing season can make or break a team. *Sports Illustrated*, 70, 52-56, 58.

Martin, C. (1996, May). *Institutional research and student recruitment or how do institutions of higher education know what attracts students to their doors? Market research can help.* Paper presented at the Annual Forum of the Association of Institutional Research, Albuquerque, NM.

Murphy, A. (1991, November 25). Put me in, coach: Playing time is the dream of the Division I walk-on. Bench time is the reality. *Sports Illustrated,* 75, 134-140, 144, 146.

NCAA. (n.d.). *Defining academic reform.* Retrieved from http://www.ncaa.org/wps /ncaa.org/wps/ncaa?ContentID=341

NCAA (2011). Academic scorecard keeps improving. NCAA News. Retrieve from http://www.ncaa.org/wps/wcm/connect/ncaa/ncaa/media+and+events/press+room/news+release+archive/2011/academic+reform/20110524+apr+rls?pageDesign=old+news+releases+template

Person, D. R., & LeNoir, K. M. (1997). Retention issues and models for African American male athletes. *New Directions for Student Services*, 80, 79-91.

Petlichkoff, L. M. (1993a). Group differences on achievement goal orientations, perceived ability, and level of satisfaction during an athletic season. *Pediatric Exercise Science*, 5, 12-24.

Petlichkoff, L. M. (1993b). Relationship of player status and time of season to achievement goals and perceived ability in interscholastic athletes. *Pediatric Exercise Science*, 5, 242-252.

Rainey, D. W., & Schweickert, G. J. (1991, March). Satisfaction with playing time and team cohesion. *Applied Research in Coaching and Athletics Annual,* 195-205.

Ridener, L. R. (1999). Effects of college major on ecological worldviews: A comparison of business, science, and other students [Electronic version]. *Journal of Education for Business*, 75, 15-21.

Roese, N. J., & Summerville, A. (2005). What we regret most . . . and why. *Personality and Social Psychology Bulletin*, 31, 1273-1285.

Schilling, E. (2007). A game plan for mom and dad. *Coach and Athletic Director,* 77(5), 48-52.

Sedlacek, W. E., & Adams-Gaston, J. (1992). Predicting the academic success of student-athletes using SAT and noncognitive variables. *Journal of Counseling & Development,* 70, 724-727.

Sellers, R. M. (1992). Racial differences in the predictors for academic achievement of student-athletes in Division I revenue producing sports. *Sociology of Sport Journal,* 9, 48-59.

Shapiro, B. J. (1984). Intercollegiate athletic participation and academic achievement: A case study of Michigan State University student-athletes, 1950-1980. Sociology of Sport Journal, 1, 46-51.

Siegel, D. (1994). Higher education and the plight of the black male athlete. *Journal of Sport & Social Issues,* 18, 207-223.

St. John, E. (2000). Majors. Black Issues in Higher Education, 17, 21-27.

St. John, E., Hu, S., Simmons, A., Carter, D. F., & Weber, J. (2004). What difference does a major make? The influence of college major field on persistence by African American and white students. *Research in Higher Education*, 45, 209-232.

Thelwell, R. C., Weston, N. J. V., Greenlees, I. A., & Hutchings, N. V. (2008). A qualitative exploration of psychological-skills use in coaches [Electronic version]. *Sport Psychologist,* 22, 38-54.

Tinto, V. (1993). *Leaving college* (2nd ed.). Chicago: University of Chicago Press.

Walter, T. L., Smith, D. E. P., Hoey, G., Wilhelm, R., & Miller, S. D. (1987). Predicting the academic success of college athletes. *Research Quarterly for Exercise and Sport*, 58, 273-279.

Waugh, G., Micceri, T., & Takalkar, P. (1994, June). *Using ethnicity, SAT/ACT scores, and high school GPA to predict retention and graduation rates.* Paper presented at the Florida Association for Institutional Research Conference, Orlando, FL.

Weiss, M. R., & Frazer, K. M. (1995). Initial, continued, and sustained motivation in adolescent female athletes: A season-long analysis. *Pediatric Exercise Science,* 7, 314-329.

Weiss, M. R., McAuley, E., Ebbeck, V., & Wiese, D. M. (1990). Self-esteem and causal attributions for children's physical and social competence in sport. *Journal of Sport and Exercise Psychology*, 12, 21-36.

Young, B. D., & Sowa, C. J. (1992). Predictors of academic success for black student-athletes. *Journal of College Student Development,* 33, 318-324.

Drug-Testing Policies of Professional Sports in America

Tyler Fields[1], Laura Simon[1], Kyle Napiontek[1], Lawrence W. Judge, Ph.D.[1], David Bellar[2], Erin Gilreath[3], and Emese Ivan[4]
[1]Ball State University, Muncie, IN 47304
[2]University of Louisiana- Lafayette, Lafayette, LA 70503
[3]Indiana State University, Terre Haute, IN 47809
[4]St. Johns University, New York, NY 11439
Direct Correspondence to:
Lawrence W. Judge
Associate Professor of Physical Education
Ball State University
HP 213
Muncie, IN 47306
(765) 285-4211
Email: LWJudge@bsu.edu

Abstract

In the world of contemporary athletics, increasingly unique trends continue to emerge including the record-breaking strength, speed, and endurance gains experienced by athletes despite seeming physical limitations. Additionally, due in part to these continued gains, professional athletes are earning more and more money. This phenomenon begs to question if these increasingly bigger, faster, and stronger athletes are gaining a competitive edge with the assistance of performance enhancing drugs. Considering the medical and biological information the sports industry has acquired in recent years, this question seems justifiable. The World Anti-Doping Agency (WADA) developed the World Anti-Doping Code, a list of all prohibited substances and methods, to which all Olympic Sports must comply but this has not been adopted by professional sports leagues in the United States. While each professional sport prohibits a similar list of PED's, such as anabolic steroids and stimulants, there is great variety in the scope and frequency of testing and associated sanctions. Because of the large influx of doping policies gaining recognition at the professional athletics level, the subject of doping has also begun to find its way into academia. Though at different paces, most all facets of sports education and performance have begun to address the reality of doping and have further begun to assign policies regarding and/or restricting doping varieties. Although some policies are dated to as much as twenty years, other policies and the institutions backing them remain at the forefront of innovation and testing for performance-enhancing drugs.

Introduction

The sports idol myth transcends race, class, and gender. Athletes are often viewed as moral heroes and this opinion has been broadly accepted and eagerly embraced by the public which has helped to spawn a multitude of professional sporting activities. Athletes aspiring to accomplish this level of recognition often resort to unethical means of enhancing performance (Judge, Gilreath & Bellar, 2010). The use of performance enhancing drugs (PED's) to enhance physical performance has been observed for thousands of years (Noakes, 2004). Consternations around ethics and controversy over the safety of doping among top athletes first appeared during the 1920's and 1930's at a time when sport became a part of popular culture (Hoberman, 2002). Today individuals continue to employ a wide variety of supplements and sometimes PED's in the hope of improving their athletic performance and physical appearance. The demand for PED's has been influenced by the fixation of society on spectacular performances (Yesalis & Bahrke, 2000). At the professional level, most sporting activities demand athletes perform at the maximum limit of their physical capacity and therefore necessitate risk-taking and pain tolerance. When looking at the world of professional sports today, unique athletic characteristics can be seen: athletes are typically bigger, faster, and stronger. Due to the fact that success in sport is typically coupled with fame and financial rewards, the use of banned performance enhancing drugs (PEDs) to gain a competitive edge is very tempting (Judge, Gilreath & Bellar, 2010). But the use of PED's diminishes the moral and ethical principles that underpin sports. The choice to use PED's is an issue that affects not only professional athletes, but also the neighborhood children who idolize them. And this issue is a challenge not just for professional sports, but also for our whole society. The World Anti-Doping Agency (WADA) developed the World Anti-Doping Code, a list of all prohibited substances and methods, to which all Olympic Sports must comply but this policy has not been uniformly adopted by professional sports leagues in the United

States. While each professional sport prohibits a similar list of PED's, such as anabolic steroids and stimulants, there is great variety in the scope and frequency of testing.

To gain a basic understanding of where doping and its complacent policies originate, research surrounding the field of performance enhancing drugs within the sports community must first be analyzed. By examining the policies of steroid and drug usage, several congruencies and disparities arise. For more tangible examples of the theories outlined, the policies of the National Basketball Association, the National Football League, Major League Baseball, the National Hockey League, and Major League Soccer will be heavily discussed. Additionally, an examination of the policies of the sports entertainment frontrunner, World Wrestling Entertainment, will be made and compared to those of the aforementioned "stick and ball" sports. Within the policies of these professional sports leagues not only will the penalties of each be discussed but also the penalties enacted in the actual instance of drug abuse by one of its athletes. Finally, and examination of the philosophy of fair play in sport and current standing of performance-enhancing drugs will be made.

As these discussions and examples are presented, a greater understanding of why performance-enhancing drugs have yielded such attention and controversy can be made. Indeed, members of other activities have utilized these substances for many years. Orchestral musicians take beta-blocker drugs to control stage fright (Tindall, 2004). Also, it is not uncommon for performance-enhancing drug use to exist at the personal level. A man can take a pill to help combat his erectile dysfunction (WebMD, 2011a). A student might take a drug to overcome attention deficit disorder (A.D.D.) in order to better concentrate (WebMD, 2011b). Why, then, do these examples of performance-enhancing drug use tend to be overlooked and those regarding sports and athletics do not? The purpose of this article is to examine and jumpstart a crucial conversation among academics concerning the drug testing policies of professional sports teams in the United States.

Doping Research

Today, the prevalence of doping is estimated at 3% to 5% in children and adolescents participating in sports and at 5% to 15% in adults (Laure, 2000). Doping has become a widespread problem in competitive and high-performance sports due to increasing professionalism and commercialization of sports (Striegel,Vollkommer, & Dickhuth, 2002). The current steroid calamity in baseball has received a lot of attention because it is a direct frontal attack to the esteemed mythic storyline of sport as a moral and character building endeavor (Hartman, 2008). Generally, PED's are used among athletes who participate in sports of high technique versus those concentrating on skill, strength, and power. Research suggests that athletes will continue to utilize the aid of these substances for as long as they believe that they are continuing to gain beneficial outcomes or until the threat of intervention arises (Dixon, 2008). Unfortunately, this suggests that health risks are not among the top concerns of these athletes seeking to gain a competitive edge. Detection-based deterrence, where the risk of a positive test is meant to deter use (secondary prevention), is difficult and costly due to the diversity of molecular structure testosterone-related drugs and is rapidly becoming obsolete with the danger of undetectable gene-doping (Mazanov, 2006; Miah, 2004).

According to Coakley, (1997), in order to control substance use in sports we must establish rules indicating that risks to health are undesirable and unnecessary. These rules are as follows: (1) We must establish rules stating that injured athletes must be independently certified as "well" before they may play again (Coakley, 1997). (2) Governing bodies must educate young athletes to define courage and discipline in ways that promote a healthy lifestyle (Coakley, 1997). (3) There must be a code of ethics for sport scientists and they must be rigorously monitored (Coakley, 1997). (4) We must make drug education a part of health education to accomplish the following: create norms regulating the use of technology in sport as well as critically examine values and norms in sports that redefine the meaning of achievement (Coakley, 1997).

Additionally, Coakley says that athletes must be taught to think critically when it comes to improving their performance and they must understand the consequences of their actions. Finally, accurate and current information must be provided to parents, coaches, and athletes in order to raise awareness of all the implications that result from the use of performance-enhancing drugs (Coakley, 1997).

A multitude of research and development have made performance-enhancing substances easily attainable by those with the financial means to purchase these drugs. Technology is being used to push the limitations of natural human performance.

We live in a culture of excellence where winning is often times the only aspect of athletic competition that is emphasized in sport. The pressures from society, family, and coaches in addition to the initial stresses of competition often become too much for an athlete to harbor. Many athletes seek the aid of performance-enhancing drugs in order to more easily combat the pressures of winning. An athlete's public image and identity as an effective competitor are often the very core of daily life. They will often push the boundaries of legality and safety in order to achieve higher statuses among the sports community. The circumstances which athletes must overcome (and therefore feel the need to utilize performance-enhancing drugs) include finishing out a contract, or masking a physical injury or limitation. Also, as the athlete's ability begins to wane due to the effects of age and general wear and tear, performance-enhancing substances are all too often a simple solution to alter or temporarily escape this natural progression.

As with any substance, performance-enhancing drugs and their effects have undergone their share of testing. And as more and more controversies surrounding steroid or other drug use arise, so, too, do those regarding the policies and procedures existing for drug testing. Several governing bodies have presented arguments in support of drug testing

for a variety of reasons. Some posit that testing is to protect the health of the athletes and to guarantee fairness within individual sports. Others hope to promote an upstanding image to the public who generally view athletes as a sort of role model. Still others hope that increased testing will reap more strict law enforcement procedures, which will justifiably punish any law-breakers. Finally, it is the hope of some of these bodies to anticipate and discourage the use of genetic engineering within individual sports.

Conversely, there are many who believe that drug testing has many flaws and that such a procedure cannot be reliably certified. One argument suggests that drug testing is not effective due to constraints on testers. Another posits that most procedures to test for drugs violate privacy rights (i.e. the current debate for testing for HGH through blood tests). Others still suggest that drug testing uses valuable sport resources that could be used in other aspects of the sport. Additionally, drug testing is based on norms that cannot be fairly applied to the bodies of all athletes. And finally, it is suggested that drug testing encourages the use of genetic engineering and untested technologies of athletic enhancement.

Review of Penalties

The issue of cheating is widely exposed through the mass media (Weaving, 2006), and in the most cases it is seen as an interesting topic for the audience (Lumpkin, 2003). Some argue that cheating or breaking the rules is part of the structure of the game. For this reason, it is essential to have sport governing bodies regulating such inappropriate occurrences (Leaman, 2001). Spectators might even think that cheating or getting away from the rules is sometimes a smart behavior (Leaman, 2001). The activities of gaining an advantage by cheating and using PED's are so pervasive, that athletes, coaches, and sports' enthusiasts naturally find a justification for abusive acts by stating that "everyone does it" (Lumpkin, 2003).

United States Anti-Doping Agency

The drug testing agency that oversees Olympic sports in the United States is USADA (United States Anti-Doping Agency). In order for the US Olympic sports teams to be able to participate in the Olympic Games, the IOC mandates strict adherence to the WADA (World Anti-Doping Agency) Code. The different national governing bodies (NGBs) for these sports have different protocols they use for athletes being added to USADA's out of competition testing pool. Like the NCAA, USADA/WADA do not test for stimulants in out of competition tests, and in competition they do not test for cannabis or narcotics. Out of competition, USADA/WADA tests athletes for anabolic agents, hormones, beta-2 agonists, hormone antagonists, diuretics and other masking agents, as well as some prohibited methods (blood doping, gene doping, etc) (USADA Wallet Card, 2009) . USADA sanctions under the WADA code range from 2 years to life, depending on the violation. Professional sports in the United States are not overseen by USADA.

In nearly all professional sports, the issue of limits on the use of PED's has become an integral aspect of collective bargaining agreement (CBA) negotiations (Beer, 2011). Yet drug policies are not uniform for all professional sports. Typically, each CBA explains the policy regarding drug testing, lists banned drugs, potential violations and corresponding penalties, privacy policies, and rights of appeal. For example, Human Growth Hormone (HGH) testing is 'critical' component of new the CBA in the National Football league (NFL). The policies of the Major League Baseball, National Basketball Association, the National Hockey League, the National Football League, World Wrestling Entertainment and Major League Soccer will be examined in the following section.

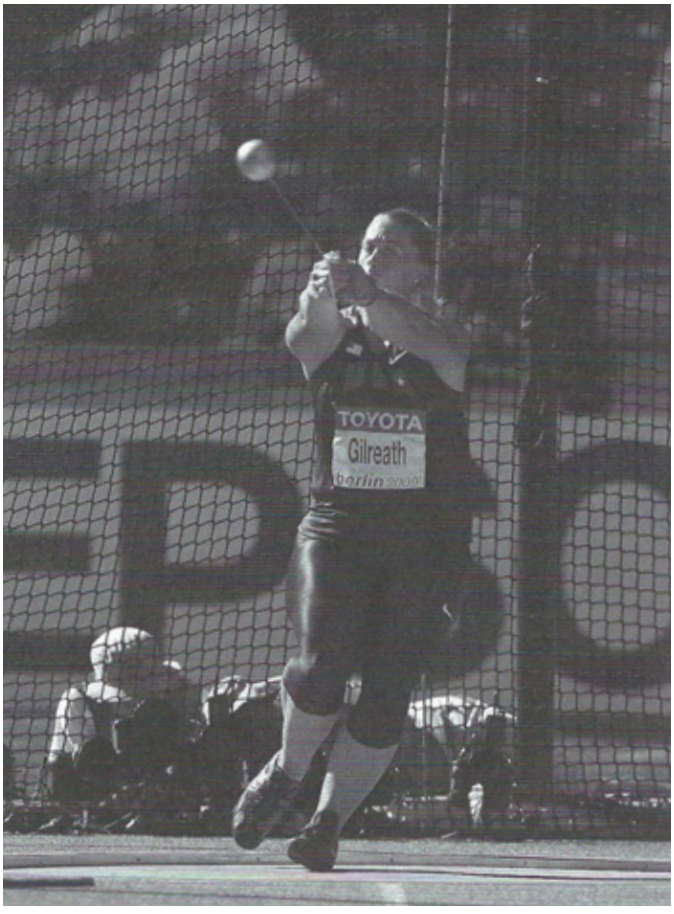


Figure 1: The drug testing agency that oversees Olympic sports like track and field in the United States is USADA (United States Anti-Doping Agency).

Major League Baseball

Currently in the United States, perhaps the most controversial of topics regarding the general world of sports is that of HGH and anabolic steroids. And gaining most attention as of late is Major League Baseball: MVP Milwaukee Brewer Ryan Braun tested positive for PED's in December 2011(CBS Local, 2011) and another big influencer is the release of the Mitchell Report (Mitchell, 2007). Several possibilities exist as to why Major League Baseball has attracted so much focus regarding PED's. One possibility is due to the fact that Major League Baseball is the most recent sport to mandate drug testing, which occurred primarily due to the aftermath of the summer of 2003 in which several of the most influential names in sports were linked to the BALCO steroid scandal (Ruibal,

2004). In fact, it took until the 2005 baseball season for Major League Baseball institute a steroid policy, which was generally viewed as a substantial attempt to thwart any foul play (Bloom & Molony, 2005). This policy stated that a first positive drug test resulted in a suspension of 10 games or up to a $10,000 fine whereas a second positive test resulted in a suspension of 30 games or up to a $25,000 fine. The third positive test resulted in a suspension of 60 games or up to a $50,000 fine. The fourth positive test resulted in a suspension of one full year or up to a $100,000 fine, and a fifth positive test resulted in a penalty at the commissioner's discretion (Bloom and Molony, 2005). Players are tested at least once per year, with the possibility of several players being tested many times per year. Due to criticisms from not only the sport's world but also the American public, Major League Baseball (MLB) adopted a stricter policy before the start of the 2006 season. In-season testing would be conducted for each player within five days of them reporting to spring training, and all players would be selected for an additional unannounced test on a randomly selected date. There would be additional random testing with an additional 1,200 tests conducted on randomly selected players at unannounced times. The penalties of this policy are as follows:

- A first positive drug test would result in a 50-game suspension
- A second positive test would result in a 100-game suspension
- A third positive test would result in a lifetime suspension from MLB (Bloom and Molony, 2005). (Players may apply after a minimum period of 2 years for reinstatement.)

Of course, with this program came many criticisms such as those addressing the inability to test for HGH and other advanced forms of performance-enhancing drugs. Many believe that the reluctance of Major League Baseball to adopt a strict program was because they did not necessarily want to divulge the names of those most likely engaged or are engaging in the usage of performance-enhancing drugs due to the fact that these athletes are more than likely attracting the most fans to the games, and in turn making more money for the owners of the clubs. Major League Baseball also adopted a new testing program for amphetamines. That program's penalties are as follows:

- First offense subject to additional testing
- Second offense – 25 games no pay
- Third offense – 80 games no pay
- Fourth offense – Commissioner's Discretion (Hohler, 2005a)

Several downfalls resulted from this reluctance to adopt a stricter plan for steroid testing. The most impactful of these downfalls could be said to be the decision of the International Olympic Committee to drop baseball from the Olympic games beginning in 2012 (Zinser, 2005).

It remains difficult to conclude or speculate whether or not these relatively new policies are having any impact of the sport of baseball due to their recent emergence. However, in 2007 the league tested 1,354 players (Yahoo Sports, 2007) and the amount of home runs hit in 2007 was 4,957, the fewest since 1997. This figure is down from the 5,386 home runs hit in 2006 (Baseball Almanac, 2008). Again, it is unfair to assume that this drastic drop in statistics is due solely to the new drug policies but the trend suggests that they could potentially be a factor.

The National Basketball Association

The drug testing policy of the National Basketball Association (NBA) takes a much weaker stance as opposed to that of Major League Baseball. The NBA's steroid policy has three stages. Those stages are as follows:

- First offense – 10 game suspension and entry into a treatment program
- Second offense – 25 game suspension and re-entry into the treatment program
- Third offense – 1 year suspension and re-entry into the treatment program
- Fourth offense – the player shall be immediately dismissed and disqualified from any association with the NBA

Additionally, if a player tests positive for Marijuana the consequences are:

- First offense – player must enter treatment program
- Second offense – $25,000 fine and player's re-entry into program
- Third offense – 5 game suspension and player's re-entry into program
- Any subsequent violation: the player shall be suspended for 5 games longer than his immediately preceding suspension

Players are required to undergo testing for Prohibited Substances upon request at any time, without prior notice to the player, no more than four times each season. Also, if the NBA receives information that creates reasonable suspicion of a player's use of a prohibited substance, the NBA can issue a hearing in which case an independent expert can issue a test. The player will then be tested four times

during the next six weeks. Prohibited substances include amphetamines, cocaine, LSD, opiates, PCP, marijuana as well as steroids (Bloom & Molony, 2005). Lawmakers have called the NBA drug testing policy "pathetic" and a "joke" (*The Seattle Times*, 2005). In fact, the NBA sent out a press release stating that nothing could be done following an interview in which Dallas Mavericks player, Josh Howard, admitted to the using of marijuana during the off-season. The interview which took place on April 25, 2008, quotes Howard as saying, "I think it is well known that most NBA players smoke marijuana in the off-season. I don't think it affects players, I partake in smoking weed and I don't think it affects me" (*Sports Center*, 2008).

The National Hockey League's (NHL) policy has changed in recent years resulting in positive reactions from the general public. Every team now conducts in-person orientation sessions regarding the program so that each player understands the policies and repercussions of breaking policy rules. Following the orientation, every player is subject to up to three no-notice tests from the beginning of training camp through the end of the regular season. The NHL's testing policies are as follows: 10 teams are subject to one no-notice test, 10 teams are subject to two no-notice tests, and 10 teams are subject to three no-notice tests. Their discipline policy is as follows:

- 1st offense: 20 game suspension without pay and referral to a substance abuse program
- 2nd offense: 60 game suspension without pay
- 3rd offense: permanent suspension (the player is eligible for reinstatement after 2 years)

World Wrestling Entertainment

Along with Major League Baseball, World Wrestling Entertainment (WWE) has been under siege in terms of performance-enhancing drug abuse as of late. On February 26, 2006, the WWE adopted what they call the "WWE Talent Wellness Program" in which wrestlers are tested at least four times a year. The talent may also be tested for reasonable suspicion. Additionally, if talent tests positive, they are subject to mandatory unannounced follow-up testing for a 12-month period. The policy tests for recreational drug use as well as abuse of prescription medication, including anabolic steroids. The program is focused on two main aspects: strict substance abuse and drug testing and also cardiovascular testing and monitoring for any and all heart disease (WWE, 2006).

The WWE has three stages of penalties for a violation of the Wellness Program. They are as follows:

- First offense – 30 day suspension no pay
- Second offense – 60 day suspension no pay
- Third offense – Termination (Talent Wellness Report)
- Positive marijuana drug and alcohol substance tests: $2,500 fine per positive test

The National Football League

To continue, the National Football League (NFL) harbors drastically different policies than that of its counterparts. Where Major League Baseball teams compete in 162 games per year, and the NBA and NHL compete in 82 games per year, the NFL teams compete in only sixteen games during regular season. Therefore, the drug testing policies of this organization must reflect this difference in game play frequency.

NFL players are tested for performance-enhancing drugs once during training camp (Lombardo, 2010). Additionally, each week during the preseason, regular season, and postseason, ten players on each team are randomly tested (Lombardo, 2010). The NFL (as well as at the college level) also has a "reasonable cause" testing policy, which states that any player that tests positive for a prohibited substance will be subject to ongoing "reasonable cause" testing. The NFL's testing policy consists of three stages and are as follows:

- First offense – Four game suspension no pay
- Second offense – Eight game suspension no pay
- Third offense – Twelve months suspension no pay (Lombardo, 2010). During this time the player may not participate in team activities, use the Club's facilities, or have contact with any club officials

Major League Soccer

Quite possibly the most stringent policy belongs to that of the far less powerful Major League Soccer (MLS). MLS's drug-testing policies and procedures are adopted from the World Anti Doping Association (WADA). Some of the characteristics of the MLS's doping policy are as follows:

- The adoption the WADA list of banned substances
- The subjection of players to random testing year round
- The subjection of players to random testing upon no notice
- The subjection of each player to testing at least once a year
- The lack of limitation on the number of times a player may be tested
- The provision of discipline up to and including termination for a first-time offense (American Soccer News, 2005)

Table 1: Drug Testing Policies of Professional Sports Leagues in America

Sports Leagues	Policies
NFL	Pre-employment: administered to free agent players Annual: all players will be tested at least once per league year. Such testing will occur at training camp Preseason/regular season: each week during the preseason and regular season, 10 players on each team will be tested. Postseason: 10 players on every club in the playoffs will be tested periodically as long as the club is in the postseason Off-season: players under contract who are not subject to reasonable cause may be tested during the off-season up to 6 times Reasonable cause testing: any player that tests positive for a prohibited substance including in college or at the combine will be subject to ongoing reasonable cause testing
NBA	Random testing: a player shall be required to undergo testing for Prohibited Substances at any time, without prior notice to the player, no more than 4 times each season.
MLB	In season testing: each player will be tested within five days of reporting to spring training, and all players will be selected for an additional unannounced test on a randomly selected date. Additional random testing: an additional 1200 tests shall be conducted of randomly selected players at unannounced times
NHL	Every team has an in-person orientation session on the program Following the orientation session, every player is subject to up to 3 no-notice tests from the start of training camp through the end of the regular season. NHL's testing for teams goes like this: 10 teams are subject to 1 no-notice test, 10 teams are subject to 2 no-notice tests, and 10 teams are subject to 3 no-notice tests.
MLS	They adopted the WADA list of banned substances in order to have a stricter policy. Also, many players compete internationally in which they would already have to adhere to the WADA standards. Players are subject to year round testing with no notice. There is no limit as to how many times a player can be tested. There is 1 test minimum.
WWE	Reasonable suspicion: WWE may require talent to submit to a test or tests including, without limitation, urine, blood, saliva, hair, and/or breath tests. Random testing: WWE talent will be subject to an unannounced testing at any time. This testing is designed to result in talent being tested a minimum of 4 times annually. Follow-up Testing: WWE talent who tests positive is subject to mandatory unannounced follow-up testing for a 12 month period

Table 2: Drug Testing Sanctions of Professional Sports Leagues in America

Sport Leagues	Sanctions
NFL	1st offense: 4 game suspension without pay (this includes post-season play, if there are not 4 games left in the Club's season, the penalty will carry to the next season) 2nd offense: 8 game suspension without pay (this includes post-season play, if there are not 8 games left in the Club's season, the penalty will carry to the next season) 3rd offense: 1 year suspension without pay, during this time the player may not participate in team activities, use the Club's facilities or have contact with any club officials (the player may petition the Commissioner for reinstatement after 12 months)
NBA	Testing positive for amphetamine and its analogs, cocaine, LSD, opiates or PCP, players are dismissed and disqualified from the NBA. If a player tests positive for steroids, 1st offense: the player will be suspended for 10 games and will be required to enter the program (treatment). 2nd offense: 25 game suspension and the player's re-entry into program 3rd offense: 1 year suspension and the player's re-entry into program 4th offense: the player shall be immediately dismissed and disqualified from any association with the NBA If a player tests positive for Marijuana: 1st offense: player must enter program 2nd offense: $25,000 fine and player's re-entry into program 3rd offense: 5 game suspension and player's re-entry into program Any subsequent violation: the player shall be suspended for 5 games longer than his immediately preceding suspension
MLB	If a player tests positive for PED's 1st offense: 50-game suspension 2nd offense: 100-game suspension 3rd offense: permanent suspension (player may apply after a minimum period of two years for reinstatement). All suspensions are without pay. There are other penalties for using other prohibited substances like cocaine, marijuana, etc.
NHL	1st offense: 20 game suspension without pay and referral to a substance abuse program (evaluation, education, and possible treatment) 2nd offense: 60 game suspension without pay 3rd offense: permanent suspension (the player is eligible for reinstatement after 2 years)
MLS	1st offense: minimum suspension of 2 years 2nd offense: permanent suspension The MLS has the right to impose discipline up to and including termination for a first time offense if they deem necessary.
WWE	For positive tests other than marijuana and alcohol 1st offense: suspended for 30 days, fined an amount equal to 30 days pay 2nd offense: suspended for 60 days, fined an amount equal to 60 days pay 3rd offense: talent will be terminated All of these violations will be publicly disclosed by the WWE For positive marijuana drug and alcohol substance tests: Talent will be fined $2,500 per positive test

Fair Play in Professional Sports

Both physical education and sport literature have shown that the concept of fair play has a broad definition because it embodies a combination of several social values and skills (Vidoni, Ivan & Judge, 2008). In sport, fair play embraces characteristics such as: (a) respecting the rules stipulated by the specific game and category of the sport, (b) preventing risk of injury, and aggressive behaviors, (c) respecting officials , and (d) being gracious with opponents and teammates (Butcher & Schneider, 2003; Morgan, Meier and Schneider, 2001). Similarly, the International Council for Sport and Physical Education defines fair play, first and foremost, as respect for the rules of the game (icspe.org, 2011). In other words, fair play is a strict adherence to all written rules of a particular sport by both teams participating in competition. PED's are viewed to threaten professional sports' veracity by removing any sense of fair play, while the recreational drugs (mainly performance diminishing) threaten sports' integrity by tarnishing its public image (Judge, Gilreath & Bellar, 2010). The potential damaging effects on the athlete's health and the depth of corruption of fair play strongly advocate a determined campaign against doping.

In this case, what is cheating? In his 1977 article titled, Cheating in Sport, Luschen claims that cheating in sport is the act through which the agreed upon conditions for winning such as a contest are changed in favor of one side (Luschen, 1977). As a result, the principle of equality of chance beyond differences of skill and strategy is violated. Peter McIntosh adds in his book, Fair Play: Ethics in Sport and Education, that cheating need be no more than breaking the rules with the intention of not being found out (McIntosh, 1979).

To show how the concept of fair play has evolved, Peter McIntosh continues as a thoughtful resource. He says that all play is fair play because only gentlemen play sports and no gentleman would ever dare cheat or break the rules (McIntosh, 1979). He went on to say that it was an insult to have lines on a soccer field that indicated the penalty area (McIntosh, 1979). He felt that having a rule that assumed that players (gentlemen) would cheat was preposterous (McIntosh, 1979). McIntosh wrote his book in the late nineteenth century in which sports competition was viewed much differently.

The opinions regarding fair play differ drastically based on a variety of factors. However, in order to more realistically address and enact performance-enhancing drug use policies, it is beneficial to understand at what points the concept of"fair play" has been violated. Currently, these policies contain certain trends, which lend themselves to become biased towards sports that they address. That is, the policies often forgive or do not address the usage of particular drugs, which are more commonly found in certain sports. This likely exists to make certain that the professional sport leagues in the United States punish as few athletes as possible which in turns ensures continued positive publicity and revenue.

Discussion

The current anti-doping policy has received much criticism for its elite focus, sanction-based approach and associated costs (Savulescu, Foddy, & Clayton, 2004). The alternative is to deter use by stopping it before it starts by primary prevention; referred to by Mazanov, (2006) as prevention-based deterrence. The World Anti-Doping Agency (WADA) has invested over $7 million in research to develop gene-doping screening tests (WADA, 2008), but also supports an extensive education and outreach program to warn athletes and their coaches about the risks of using fledgling genetic technologies without medical supervision. It is a telling point that the performance-enhancing drug use policies by of each the major professional sports leagues in the United States vary so drastically. There are several potential reasons for this diversity, though evidence suggests that one of the most influential reasons is the amount of money circulating within each league. The average salaries of the players within each league division differ vastly, and at the end of the 2006 year the average salaries of the four major sports leagues are as follows (Paciella, 2007):

- Major League Baseball - $2.7 Million
- National Football League - $1.4 Million
- National Basketball Association - $5.2 Million
- National Hockey League - $1.5 Million

In the MLS, there are just four players that make over one million dollars for the season, and there are several players who make under thirty thousand dollars a year (MLSPU, 2011). The MLS has the most stringent drug testing policies of all the professional sports in the United States. Two possible reasons for this are:

1. The players are going to need to supplement their income which is best accomplished by simply playing more soccer. Most of these players either play in Mexico or compete overseas in Europe. These leagues are under WADA's (World Anti Doping Agency) drug-testing policy banner therefore the MLS is attempting to make it easy for their players.
2. The MLS may be overcompensating in lieu of low profit return in comparison to the other four major sports leagues. The league simply cannot afford any steroid scandals, as they probably could not survive aa large public scandal regarding PED use in their athletes.

The drug-testing policies of the professional leagues in the United States show the outright double standards that the American media and fans have toward athletes. MLB players, especially those bringing in the highest revenue, are much more rigidly criticized for taking steroids. Baseball player, Rafael Palmeiro, for example, has never completely escaped the consequences of a steroid scandal. The Boston Globe says of Palmeiro, "… [he] dwells in a pantheon of shame, shoulder to shoulder with sport's most notorious cheaters" (Hohler, 2005b). Similarly, Shawne Merriman of the San Diego Chargers, a National Football League team, tested positive for steroids early in the 2006 season and was suspended for four games: one quarter of the regular season (ESPN, 2006). Most likely due to the negative societal connotations surrounding steroid use, Merriman denied

having ever known of consuming any steroids and claimed that he simply must have taken a tainted supplement. Merriman, who initially planned to appeal the suspension, decided instead to serve his suspension immediately. ESPN analysts and critics praised this decision after Merriman bore his punishment.

After comparing these two examples from two different major sports leagues, a dichotomy persists. Where a baseball player received exclusively negative feedback after his performance-enhancing drug use, a football player was given praise after his response to a similar situation. Why does this incongruence exist? There may be several reasons, but a widely accepted argument claims that the general desire for America's football players to become continuously larger and faster has the fans and government more willing to overlook such substance use in the league.

Rather unsurprisingly, the American media is a large contributor to the general perception that football players should be analyzed based upon their physical stature versus sheer talent or skill. Indeed, where baseball players might be compared against each other regarding batting statistics, football players are much more likely to be pitted based on their body size.

However, the fact remains that for every policy and drug test enacted to combat the use of performance-enhancing substances, just as many solutions exist for sports athletes to overcome them. This is primarily due to the resources and financial well being of most American major league sports athletes. Another reason is simply that medical technology is evolving at a potentially quicker rate than that of drug testing policies. Also, because professional sports teams do not require off-season drug testing, the potential for athletes to intermittently use PED's is all too real. Consideration should be given to having USADA oversee the professional sports in and out of season drug testing. But since most professional athletes do not compete in the Olympics it cannot be mandated, but can certainly be argued as necessary. Having USADA oversee the professional leagues drug testing, however, could provide uniform drug policies within all professional sports in the United States.

Conclusion

Sadly, the moral attributes embedded in professional sport have changed throughout the years (Butcher & Schneider, 2003). Professional sports in the United States have been transformed into an object of mass consumption (Messner, 2001), placing sport as means to obtain fame and fortune (Sheridan, 2003), and "winning at all costs" ruling athletes' attitudes (Volkwein, 1995). The prominence of "winning at all costs" has also been counterproductive when it generates more risks to athletes' well being in terms of injuries, potential long term health risks and equal opportunity (Lumpkin, 2003). Certainly, the values of excellence in performance and effort to ensure equality inherent in professional sport have been traded by breaking the rules, retaliating violently and doping (Vidoni, Ivan & Judge, 2008).

The question persists: how rigidly should PED use policies restrict and punish the innumerable instances of substance use in professional sports? According to Scarpino et al. (1990), 82% of Italian athletes emphasized stricter controls not only during competitions but also during training period. Increasing the frequency of doping controls and dispersing them though out the season and training periods would help to reduce and/or prevent doping and PED use by a sizable portion of the sport community. On one side of this argument, the institutions responsible for such decisions as policy change or enactment might be neglecting other more pressing matters. Keeping in mind the points regarding fair play, however, the other side of this argument asserts that many of these drugs are either illegal or unfairly benefit athletes. In other words, athletes who use these performance-enhancing drugs are either breaking the law or are cheating. Thus, it makes sense for regulations to exist in order to combat the issue of doping. Additionally, many opposing any use of performance enhancing substances will posit that steroids and other substances create lifelong side effects or even death, which can easily be avoided.

In the March 17, 2005 Government Reform Committee hearing on steroids in baseball, United States Representative Henry A. Waxman said,: "Steroids are a drug problem that affects not only elite athletes, but also the neighborhood kids who idolize them. And this issue is a challenge not just for baseball, but also for our whole society. More than 500,000 teenagers across the country have taken illegal steroids, risking serious and sometimes deadly consequences" (Committee on Oversight and Government Reform, 2005). In the end, there persists and ever-evolving sense of controversy surrounding performance-enhancing drug use and the consequential policies within major league sports due to such powerful factors as money, government, the public, and technology. Particular attention should be paid to the younger population, who may suffer the most from the health problems caused by PED use.

The literature reveals a few options: (1) increase testing so that the likelihood of getting caught is greater, (2) remove the substantial rewards associated with a high level of success, (3) decriminalize PED use in sport, and/or (4) remove dirty coaches/programs from the sport for life (Dixon, 2008). However, none of these positions alone would completely eliminate doping in sports as different elements motivate people, and the temptations to use PEDs come from many aspects of life. It is clear that consistent testing methods and programs must be developed for professional athletes to maintain confidence that the playing field is level. But, controlling doping only by tests is not sufficient. It is through education and research that we can mitigate the abuse of PEDs by professional athletes. This investigation hopes to act as a springboard for future analysis for a further more sophisticated dialogue on the notion of PED use in professional sports.

References

American Soccer News. (2005). MLS states positions on steroids. Retrieved from Americansoccernews.com.

Baseball Almanac. (2008). Retrieved from Baseball-almanac.com.

Bloom, B. M., & Molony, J. (2005, November 16). *MLB, union agree to stricter drug policy.* Retrieved from MLB website: http://mlb.mlb.com/

news/article.jsp?ymd=20051115&content_id=1268529&vkey=news_mlb&fext=.jsp&c_id=mlb

Breer, A. (2011 March 31). *League views HGH testing as 'critical' component of new CBA*. Retrieved from NFL website: http://www.nfl.com/news/story/09000d5d81f0aab7/printable/league-views-hgh-testing-as-critical-component-of-new-cba

Butcher R., & Schneider, A. (2003). Fair play as respect for the game. In J. Boxill (Ed.), *Sports ethics: an anthology* (pp. 153-171). Malden, MA: Blackwell Publishing.

CBS Sports.com. (2011). Brewers' Ryan Braun tests positive for PEDs, reports allege.

Retrieved from http://chicago.cbslocal.com/2011/12/10/breaking-brewers-ryan-braun-tests-positive-for-performance-enhancing-drug-report-says/

Coakley, J.J. (1997). *Sport in society: Issues and controversies* (6th ed.). London: McGray-Hill College.

Committee on Oversight and Government Reform. (2005). *Steroid use in sport*. Retrieved from http://oversight-archive.waxman.house.gov/investigations.asp?ID=244

Dixon, N. (2008). Performance enhancing drugs, paternalism, meritocracy and harm to sport. *Journal of Social Philosophy,* 39(2), 246-268.

ESPN. (2006, October 23). Sources: *Chargers' Merriman suspended for steroids*. Retrieved from http://sports.espn.go.com/nfl/news/story?id=2635475

Hohler, B. (2005a). Baseball gets tough about doping. *The Boston Globe*. Retrieved from http://www.boston.com/sports/baseball/articles/2005/11/16/16steroidsart/

Hohler, B. (2005b). Palmeiro remains on sideline. The Boston Globe. Retrieved from http://www.boston.com/sports/baseball/articles/2005/08/12/palmeiro_remains_on_sideline/

International Council for Sport and Physical Education (ICSPE). (2011). Retrieved from http://www.icsspe.org

Vidoni, C., Ivan, E., & Judge, L. W. (2008). Teaching fair play: Does it work beyond the gym? *Indiana AHPERD Journal,* 37(2), 4-7.

Judge, L. W., Gilreath, E., Bellar, D. (2010). Influential factors on athlete doping: Using what we know to stop the epidemic. *Indiana AHPERD Journal,* 39(1), 5-10.

Laure, P. (1997). Epidemiologic approach of doping in sport, *Journal of Sports Medicine and Physical Fitness,* 37, 218–224.

Leaman, O. (2001). Cheating and Fair Play in Sport. In, W.J. Morgan, K.V. Meier, K.V., & A.J. Schneider (Eds.), *Ethics in sport*. Champaign, IL: Human Kinetics.

Lombardo, J. A. (2010). *Policy on anabolic steroids and related substances 2010*. Retrieved from http://images.nflplayers.com/mediaResources/files/PDFs/PlayerDevelopment/ 2010%20Steroid%20Policy.pdf

Lumpkin, A. (2003). Violence in sport. In, A. Lumpkin, S.K. Stoll, & J. M, Beller (Eds.), *Sport ethics: Applications for fair play*. Boston,MA: McGraw-Hill.

Luschen, G. (1977). Cheating in sport. In Landers, D. (Ed.), *Social Problems in Athletics*. Urbana: University of Illinois Press.

Major League Soccer Players Union. (2011). *Player Salary Information*. Retrieved from http://www.mlsplayers.org/salary_info.html

Mazanov, J. (2006). Measuring athlete attitudes towards drugs in sport. *ACSPRI Social Science Methodology Conference*. University of Sydney: Sydney, Australia.

McIntosh, P. (1979). *Fair Play: Ethics if sport and education*. London: Heinemann.

Miah, A. (2004). Genetically modified athletes: *Biomedical Ethics, Gene Doping & Sport,* London and New York: Routledge.

Mitchell, G.J. (2007). *Report to the commissioner of baseball of an independent investigation into the illegal use of steroids and other performance enhancing substances by players in Major League Baseball.* Retrieved from http://files.mlb.com/mitchrpt.pdf

Messner, M.A. (2001). Sports and male domination: The female athlete as contested ideological terrain. In W.J. Morgan, K.V. Meier, K.V., & A.J. Schneider (Eds.), *Ethics in sport*. Champaign, IL: Human Kinetics.

Noakes, T. (2004). Tainted glory – doping and athletic performance. *New England Journal of Medicine*, 351(9), 847-849.

Paciella, J. (2007). *NFL Player salaries for 2007*. Retrieved from http://www.docsports.com/current/nfl-player-salaries.html

Ruibal, S. (2004). BALCO becoming household name. *USA Today*. Retrieved from http://www.usatoday.com/sports/2004-12-03-balco-overview-1c_x.htm

Seattle Times News Services. (2005). NBA's steroid policy called "a joke." *The Seattle Times*. Retrieved from http://seattletimes.nwsource.com/html/sports/2002281994_steroids20.html

Savulescu, J., Foddy, B., & Clayton, M. (2004). Why we should allow performance enhancing drugs in sport. *British Journal of Sports Medicine,* 38(6), 666-670.

Scarpino, V., Arrigo, A., Benzi, G., Garattini, S., La Vecchia, C., Bernardi, L.R., Silvestrini, G. and Tuccimei, G. (1990) Evaluation of prevalence of doping among Italian athletes. *Lancet* 8722, 1048-1050.

Stein, M. (2008 April). Cuban: Mavs will deal with Howard's admission of drug use internally. *ESPN.com*. Retrieved from http://sports.espn.go.com/nba/news/story?id=3368139

Striegel, H., Vollkommer, G. & Dickhuth, H.H. (2002) Combating drug use in competitive sports. An analysis from the athletes' perspective. *Journal of Sports Medicine and Physical Fitness* 42, 354-359.

Tindall, B. (2004). Better playing through chemistry. *The New York Times*. Retrieved from http://www.nytimes.com/2004/10/17/arts/music/17tind.html?pagewanted=all&position=USADA Wallet Card, 2009. Retrieved from https://www.usantidoping.org/files/active/athletes/2009_wallet_card.pdf

Volkwein, K.A.E. (1995). Ethics and top level sport: A paradox. *International Review for the Sociology of Sport,* 30, 311-321.

Weaving, C. (2006). 'Up the slope without a pole:' An examination of the relationship between fair play and gender norms at the 2006 Winter Olympics. In, N.B. Crowther, R.K. Barney, & M.K. Heine (Eds.), *Cultural imperialism in action: Critiques in the global Olympic trust. Eighth International Symposium for Olympic Research*. London, CA: The Universty of Westen Ontario.

World Anti Doping Agency (2005) *The 2005 Prohibited List of World Anti-Doping Agency*. Retrieved from http://www.wada-ama.org

World Anti Doping Agency (2009). *A Brief History of Anti-Doping*. Retrieved from http://www.wada-ama.org/en/About-WADA/History/A-Brief-History-of-Anti-Doping/

WebMD. (2011a). *Erectile dysfunction health center*. Retrieved from http://www.webmd.com/erectile-dysfunction/default.htm

WebMD. (2011b). *ADD & ADHD health center.* Retrieved from http://www.webmd.com/add-adhd/default.htm

WWE. (2006). *WWE talent wellness program*. Retrieved from http://corporate.wwe.com/documents/TalentWellnessProgramOutline2-27-06CORPweb.pdf

Yahoo Sports. (2007). *Use of ADD drugs soars in MLB as amphetamines are banned*. Retrieved from http://search.yahoo.com/404handler?src=sports&fr=404_sports&ref=http%3A%2F%2Fcontent5.clipmarks.com%2Fcontent%2FD155DA40-98C9-41C2-80DC-BDE886CE7F3C%2F&url=mlb+news+ap+congress+steroids+add

Yesalis, C.E. & Bahrke, I.S. (2000). Doping among adolescent athletes. *Baillière's Best Practice and Research in Clinical Endocrinology and Metabolism* 14, 25-35.

Zinser, L. (2005). IOC drops baseball and softball in 2012. *The New York Times*. Retrieved from http://www.nytimes.com/2005/07/09/sports/othersports/09olympic.html

Share your Journal with a student or a colleague.

Featured Game: Press Ball

Nick Henke, Junior and Evan Dodd, Freshman
Indiana State University
Physical Education-Teacher Education Majors
Send Correspondence to:
Evan Dodd
edodd@sycamores.indstate.edu

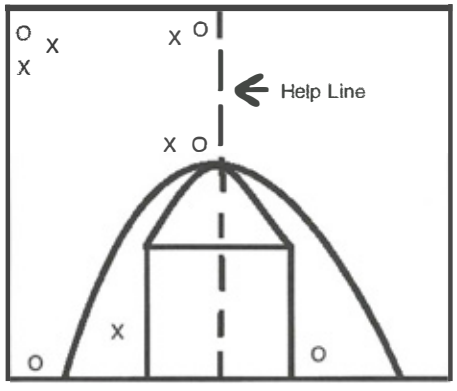
The purpose of press ball is to help students understand the defensive concept of territorial sports, maximum participation, and movement. Press ball teaches within the cognitive and psychomotor domains. Unique skills include spacing and court awareness. The idea of press ball was invented by watching a college basketball team play defense by pressuring the basketball in the full court. For a class with special needs students you can adapt to their needs by making the goal larger and giving them a ball that is easier to throw and catch. You are able to incorporate geometric angles into the defensive strategy in the game. For the safety of the game you must clear all equipment not needed for the sport so no student will injure themselves.

Defense is the name of the game! The shell drill is a good way to understand the fundamentals of defensive rotation and movement. The shell drill is set up with stationary offensive players lined up around the three point arc. The offensive players will have the ball and pass it around the arc slowly. Defensive players are guarding them and will move to different places on the floor according to where the ball is. If one offensive player has the ball then the defensive player guarding him would be up on the ball guarding him. If the ball is one pass away, the defender drops a step back. If the ball is two passes away he drops two steps back. The help line is part of the drill that will help students learn where to be when the ball is away from them or in the hands of the student they're defending. Defensive slides are the proper movement to defend the person with or without the ball. For the students to be successful with the game all they need to do is stay between their man and the basket. Communication is key when on defense and teammates should talk loud so the other teammates may know what is going on around them. The purpose of half court and full court defense is to get the offense to throw the ball away and for the defense to get the ball to score. A few defensive strategies teachers can teach are traps; A full court or a half court trap. Teachers may build upon these traps.

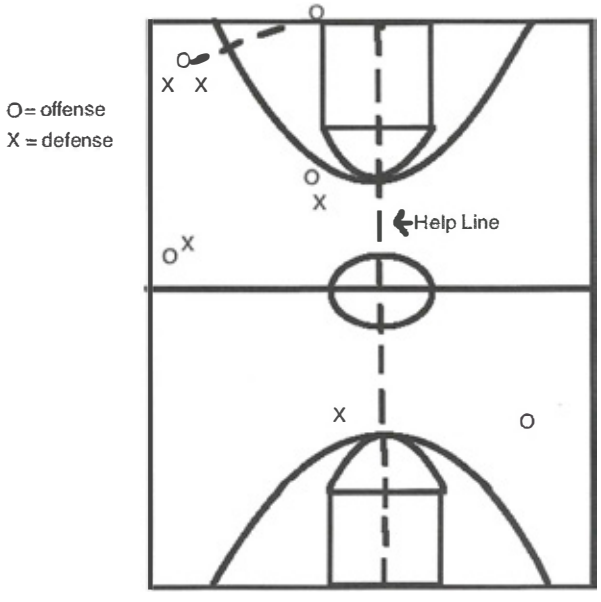
Press ball starts out with a jump ball like basketball. When a student receives the ball they have the option of taking two dribbles or two steps. A student can only hold onto the ball for five seconds before they need to get rid of it. Also like in basketball, the ball must be taken out and thrown into play after a score. The fouls in basketball apply in press ball. A defender can only intercept the ball off of a pass. The defender must also be an arms length away from the offensive player. Players should keep a pivot foot when they have possession of ball, if not then it will be considered a turnover. There will not be a goalie or kicking into the goal. The goal students will be shooting into will be a hockey sized goal. To keep students going with maximum participation, teachers should rotate every two to three scores or every five minutes. Press ball can be a co-ed environment. From a safety standpoint, the same rules are the same for basketball.

Press ball teaches the students "off the ball" skills. Rotation on defense and taking appropriate angles to cut off the defender is also taught. Press ball encourages spacing during the game for easier scoring. The defensive concept of press ball will call the need for communication and anticipation on defensive.

Half Court



Full Court



Negligent Supervision

Tonya L. Gimbert and Thomas H. Sawyer
Direct Correspondence to:
Tonya L. Gimbert, M.S.
Compliance Coordinator
Department of Intercollegiate Athletics
Indiana State University
Cherry Street, Terre Haute, IN 47809
1-309-264-0221; 1-812-237-4173
Tonya.gimbert@indstate.edu

Abstract

Physical education teachers Cathy Weston and Andrew Hill combined their eighth-grade classes to teach the skating course. Michael was a student in Weston's class. They had an average combined class size of between 20 and 30 students. Both Weston and Hill had taught the skating class previously using SkateTime's program and equipment. Weston estimated that she taught the class approximately 315 times over the course of a four-year period. Hill testified that he taught approximately 125 skating classes. Both teachers were present in the gymnasium while the students were skating and were available to assist students and correct those who were violating safety rules. They testified that skating technique demonstrations and safety instructions were provided to the students on a daily basis at the beginning of class. The rules and instructions provided to the students were based on the materials provided by SkateTime.

Court of Appeals of Ohio
Twelfth District, Warren County
SIMMONS v. YINGLING [2001]

Background

Student, through parents, brought negligence action against school board and physical education teachers regarding injuries suffered by student during an optional skating unit in a mandatory physical education class.

Complaint

Plaintiffs alleged that the school board, Bright, Weston, and Hill were negligent for: 1) failing to issue proper protective equipment, 2) failing to properly supervise the skaters, and 3) conducting the class on the gymnasium floor, which was "defective for the purpose of roller skating." Plaintiffs also alleged that Weston and Hill were reckless in designing the skating course and supervising the students.

Facts of the Case

In May 2007, Michael was an eighth-grade student at Mason Middle School. Michael and his classmates were participating in a week-long roller skating course as part of their physical education class. The course was conducted in one of the school's gymnasiums which had a hardwood floor coated with a polyurethane finish.

The skating equipment and materials utilized in the class were furnished by SkateTime School Programs. The record indicates that SkateTime has been in operation in the state of Ohio for approximately 13 years and used in approximately 300 to 400 schools each year. The program was adapted into the middle school's physical education curriculum in 2003 and was taught to both seventh-and-eighth-grade students.

Physical education teachers Cathy Weston and Andrew Hill combined their eighth-grade classes to teach the skating course. Michael was a student in Weston's class. They had an average combined class size of between 20 and 30 students. Both Weston and Hill had taught the skating class previously using SkateTime's program and equipment. Weston estimated that she taught the class approximately 315 times over the course of a four-year period. Hill testified that he taught approximately 125 skating classes. Both teachers were present in the gymnasium while the students were skating and were available to assist students and correct those who were violating safety rules. They testified that skating technique demonstrations and safety instructions were provided to the students on a daily basis at the beginning of class. The rules and instructions provided to the students were based on the materials provided by SkateTime.

The skating class was optional and in order to participate, permission slips were required to be completed by the students' parents. An alternative assignment was provided to those students who chose not to skate. The parties do not dispute that Michael provided a signed permission slip authorizing his participation in the skating class. He had also taken part in the class as a seventh-grade student.

As part of the program, SkateTime provided the school with inline and quad roller skates. The skates had soft urethane wheels which were not damaging to indoor floor surfaces. In addition to the skates, SkateTime also provided wrist guards. Optional safety equipment, including helmets, knee pads, and elbow pads were available upon request. The school required the students to wear the skates and wrist guards provided by SkateTime. The students were also permitted to bring additional safety equipment from home to wear during class.

SkateTime furnished an instructional video and manual to the school. These materials instructed students on general skating techniques, including how to skate forwards, backwards, turn corners, stop, and properly fall and stand in their skates. They also provided guidelines on skating safety, including the importance of keeping the students' hands to themselves while skating, and that all of the students skate in the same direction (either forwards or backwards) at the same time. The guidelines in the video and manual were to be implemented at the discretion of the school and the teachers.

The record indicates that on May 9, the third day of the class, Weston and Hill had sectioned the gymnasium into separate skating areas. The first area, characterized by the parties as a beginner or "safety zone", was designed for inexperienced skaters and ran the length of the gym floor. Those students who were not comfortable on skates were encouraged to stay in the safety zone in order to work on basic techniques. There was also a second general skating area which was composed of an outside circular skating lane and an inner obstacle course consisting of orange cones spaced several feet apart on the floor for more experienced skaters. Students were permitted to weave around the cones in a slalom-like fashion. In addition, what has been characterized by the parties as a "bridge" or "limbo pole" was set up at the end of the obstacle course area. The "pole" was a long foam noodle. It was positioned on top of gym mats which were stacked on two chairs spaced several feet apart. According to Hill, students were permitted to skate only in a forward direction under the limbo pole and were instructed to skate at a "slow, managed speed." The record also indicates that the teachers placed gym mats on the floor to separate the safety zone from the area where students were exiting the limbo pole and to keep those students skating in the outside lane of the general skating area from those in the inner obstacle course. Those skating in the obstacle course had the right-of-way. The obstacle course and limbo pole activities were suggested in the SkateTime materials for those with "advanced skills".

Michael was not an adept or confident skater and on the day of the accident he was skating in the safety zone. According to Michael, he did not want to be the only student left in the safety zone and after spending several minutes in that area, he was feeling more comfortable on his skates. At that point, Michael determined that he was "capable enough" to venture into the general skating area.

Michael was injured when another skater came into contact with him. It is unclear from the record how the accident actually occurred. Michael claimed that as he and a friend skated in the outside lane of the general skating area, a more advanced skater named Brennan was proceeding through the obstacle course. Michael testified that Brennan skated backwards under the limbo pole. As Brennan cleared the limbo pole, he attempted to turn to skate forward after merging into the outside lane of the general skating area. When Brennan turned, he lost his balance and fell on top of Michael. The heel of Brennan's skate struck the front of Michael's leg fracturing his tibia. Michael's skating partner stated that Brennan was "slipping and sliding" prior to the collision. Neither Weston nor Hill observed Brennan skating backwards under the pole and did not witness the accident. However, Hill testified that just prior to the collision, he observed Michael leaving the safety area near the limbo exit by skating between two of the floor mats and directly into Brennan's path, which was in violation of the safety rules.

Although Michael was wearing the required wrist guard, he was not wearing any additional safety equipment at the time of the accident. Michael's mother, Kelly, had worked at the school from 2001 to 2005 as a health aide. Kelly testified that during her employment, she treated at least one student who had suffered a broken hand or wrist as a result of the skating class.

Analysis of the Court

In their brief in opposition to summary judgment, appellants argued that the school board's failure to properly coat, clean, and finish the floor rendered it defective for roller skating. In support of this claim, they produced an expert report prepared by Steven Shumaker, a principle of Rink Planning and Consulting Services, Inc. Shumaker stated that he had worked in the roller skating business for 39 years and had provided consulting services to multiple roller skating center operators on issues relating to safety, rink construction, and skating procedures. Shumaker opined that the skating course design, the flow of traffic, and the way the class was conducted fell short of several industry standards and constituted "gross negligence and recklessness."

Shumaker further stated that the gymnasium floor lacked the necessary and appropriate traction for safe skating. According to Shumaker, the hardwood floor in the gymnasium was problematic because it was designed for use as a basketball court instead of a roller skating floor and that skating floor finishes contain special agents to create the proper traction between the skate wheels and the floor. He also stated that skating floors required special cleaning agents to be used and that "typical" floor cleaners would cause the floor to be slick. He opined that the floor surface would become dangerously slick if the janitorial staff at the school used a treated dust mop instead of an untreated mop prior to the skating sessions. According to Shumaker, the "skating surface and the gymnasium coating that was used amounts to a physical defect."

Notwithstanding the above-conclusion, based upon our independent review of the record, we also find that

Shumaker's report fails to create an issue of fact as to the "physical defect" element. Although Shumaker opined generally that the skating floor did not meet minimum industry standards, he failed to specify which standards were applicable or who had promulgated such standards.

Moreover, appellants' assertion that Brennan had "slipped" on the floor while skating does not, without additional evidence, demonstrate that the floor lacked the necessary traction for safe skating. Both Weston and Hill testified that they had never before noticed any students slipping on the gymnasium floor in the skates. According to Adam Higgason, Vice President of SkateTime, the urethane wheels on the skates appeared to work well on urethane-coated wooden floors. He further testified that he had viewed the gymnasium floor at the school and that there was nothing about the floor that would have made him hesitant to run a SkateTime program on that surface. Higgason stated that he had never received any complaints from the schools implementing the SkateTime program with regard to the performance of the skates on gymnasium floors with surfaces similar to the one here.

The record indicates that the teachers took precautions to avoid collisions by sectioning off the skating areas with mats and by instructing the students to skate in a controlled fashion in the same general direction. Students who elected to skate through the obstacle course and under the limbo pole were instructed to do so at a slow, managed speed. According to Hill, the limbo pole was positioned at such a height that the students going underneath it needed to make only a "very small movement" in order to clear the noodle. Both teachers testified to reprimanding those students who did not follow the safety rules. Although Weston and Hill did not witness the collision, the parties do not dispute that they were both present in the gymnasium at the time the accident occurred and attended to Michael immediately after he fell.

To the extent that appellants also appear to argue that Weston and Hill were reckless in failing to require the students to wear additional safety equipment, the record indicates that those students who had safety equipment at home were permitted to bring it to class. Michael testified that he had a helmet, elbow pads, and knee pads at home which he wore while skateboarding. He did not recall requesting additional equipment from his parents or teachers.

Holding of the Court of Appeals of Ohio

The Court of Appeals, Hendrickson, J., held that:

- student did not establish that gymnasium floor was physically defective, as would remove immunity from school board,
- teachers acted within scope of policy-making, planning and enforcement powers in implementation of skating curriculum and thus, school board immunity for discretionary acts of employees applied,
- student did not establish that physical education teachers acted recklessly in implementation of skating course, and
- teachers did not act recklessly in failing to require skating students to wear additional safety equipment beyond required wrist guards.

Risk Management Recommendations:

The following are recommendations to make the skating unit safer for the students and instructors:

- instructors should make sure the surface used for skating meets the minimum industry standards,
- instructors should act within scope of policy-making, planning, and enforcement powers in implementation of skating curriculum,
- instructors should always require waivers forms to be used in all optional physical activity units found within a mandatory physical education class,
- instructors should provide to students, attached to the waiver form, all warnings necessary for the specific optional physical activity, in this case skating
- instructors should provide all recommended safety equipment for the physical activity to be engaged in by the student,
- students should be allowed to bring additional safety equipment for the physical activity they are engaged in,
- instructors should follow all suggested maintenance procedures, such as cleaning the surface before using the surface,
- instructors should provide instruction in proper skating techniques, skill progress for each day of the class, and safety instructions, and
- instructor should provide and explain a diagram of the skating course.

Looking for a Chance to be Published?

THE Indiana AHPERD JOURNAL IS REFEREED.

Students

Graduate Students

Teachers At All Levels

Do you have friends who'd enjoy The Indiana AHPERD Journal? Send us their addresses, and we'll send them a free sample issue.

Name of Friend_____

Address _____

Your name (optional) _____

Indiana AHPERD Journal, Karen Hatch,

2007 Wilno Drive, Marion, IN 46952

The Effects of a Wellness Camp on Children's Health-Related Quality of Life

Lindsey C. Blom[1], David Pierce[1], Paul Nagelkirk[1], Allison Whitmore[1], and Leah Kaiser[2]
[1]Ball State University
[2]The Ohio State University Health Plan
Direct Correspondence to:
Lindsay C. Blom
Assistant Professor of Physical Education
Ball State University
Muncie, IN 47306
Email: LCBlom@bsu.edu

Abstract

This pilot study assessed three health-related quality of life outcomes resulting from participation in a one-week health and wellness summer camp for 3rd – 8th grade children as compared to children in a control camp. Participants who completed the health and wellness camp (N = 35) were in the treatment group while 3rd – 8th graders who attended a nearby general summer day camp (N = 6) comprised the control group. The treatment camp was designed by college students enrolled in an experiential learning course with the goal of promoting a healthy lifestyle by enhancing understanding of five dimensions of wellness (i.e., social, emotional, environmental, intellectual, and physical). The outcomes of interest for this project were 1) improved perception of physical activity and health; 2) improved perception of mood; and 3) enhanced perception of parental and peer involvement in the child's health and physical activity. Participants completed a questionnaire designed to measure health-related quality of life questionnaire (i.e. KIDSCREEN-27), at the beginning and end of camp. It was hypothesized that each dependent variable would improve over time for the treatment campers, but not for the control campers. The results indicated a significant interaction for the physical activity and health subscale, $F(2,33) = 3.58$, $p < .05$, but not for the other three subscales of general mood, family and free time, or friends. Implications for camp directors, wellness coordinators, and faculty members are discussed.

Key Words: Physical Activity, Experiential Learning, Dimensions of Wellness, Exercise

The Effects of Wellness Camp on Children's Health-Related Quality of Life

The concept of wellness is complex, multidimensional and typically involves ten dimensions, which are commonly divided into mental and physical categories (Robbins, Powers, & Burgess, 2011). Of specific interest to the current study are the areas of social, emotional, environmental, intellectual, and physical wellness. The social dimension of wellness involves effectively interacting with other people and the environment, which, for children, specifically relates to their interactions with family, friends and teachers. Emotional wellness includes effective expression of personal feelings and the ability to understand others' feelings. A third wellness dimension, environmental wellness, involves the awareness of one's natural environment and behaviors that promote a healthy environment. Children can gain environmental wellness through organizations that promote environmentally friendly behaviors, such as boy scouts or girl scouts. Intellectual wellness involves mental stimulation as well as creativity. Parents or guardians and teachers can address children's intellectual wellness by reading to/with their children and encouraging creative and challenging leisure activities, such as painting rather than television. Finally, physical wellness contains aspects of physical health including exercise, nutrition and avoiding unhealthy behaviors, such as tobacco or drug use. Children often receive guidance in this area in school health and physical education classes, as well as drug prevention programs (e.g., Drug Abuse Resistance Education). Parents or guardians also help determine the exercise and nutrition children receive outside of school.

When considering wellness in children, Dwyer, Baur, Higgs and Hardy (2009) stressed the importance of assessing habitual physical activity and sedentary behavior (e.g., television viewing) to determine positive wellness. Habitual physical activity and the minimization of sedentary behavior have obvious physical implications but also involve the social, emotional, intellectual and mental dimensions of wellness (Holder, Coleman, & Sehn, 2009; Parfitt & Eston, 2005). For example, Parfitt and Eston (2005) found that habitual physical activity improved mental wellness and correlated with lower levels of depression

and anxiety in 70 children between the ages of nine and twelve years. Furthermore, Holder et al. (2009) found that activity contributed to improved well-being while passive leisure (i.e. sedentary behaviors) hindered overall wellness in a sample of 375 children ages ranging from 8-12 years. Thus, not only do sedentary children miss out on all the benefits of activity but their sedentary behaviors are actually harmful.

When multiple dimensions of wellness are considered, wellness goes beyond physical health and is more accurately defined as health-related quality of life. Empirical research by Haraldstad, Christopherson, Eide, Natvig, and Helseth (2010) using the KIDSCREEN-52 instrument found that body image had a strong effect on health-related quality of life while body mass index, the standard for physical health measurement, did not significantly affect health-related quality of life. A significant impact of such a finding is that a child's mental, social and emotional wellness can negatively impact a child even when he or she is physically well. A cross-cultural study concerning the mental dimension of wellness by Ravens-Sieberer et al. (2008) found poor mental wellness to be detrimental to health-related quality of life and recommended preventative measures aimed at strengthening social support. The social component of wellness is also stressed in a study by Jago et al. (2011) that found children were more physically active when they participated with a best friend. Clearly, the varying dimensions of wellness are highly interrelated, and preventative or corrective programs should take this into account.

Wellness camps are effective in creating positive environments that improve the likelihood that a child will engage in positive behaviors that contribute to wellness outcomes (e.g., Seal & Seal, 2010; Turri et al., 2008). An experimental camp program, which consisted of a 10-day intervention, found that increasing 8-12 year old children's knowledge of nutrition, exercise and physical behavior led to increased self-competence and significant behavior changes towards better wellness by the end of camp (Seal & Seal, 2010). A recent study of a 12-week program aimed at increasing children's knowledge of nutrition reported increased knowledge regarding healthy nutrition and led to changed behaviors and increased self-competence in their fourth and fifth grade children's ability to make wellness decisions (Turri et al., 2008). Wellness camps may effectively utilize the intellectual dimension to elicit improvements in the emotional and physical dimensions; however, more research needs to be completed in this area.

The specific purpose of this pilot study was to assess three health-related quality of life outcomes of participation in the previously mentioned health and wellness summer camp. The outcomes of interest were perception of physical activity and health; perception of mood; and perception of parental and peer involvement. It was hypothesized that there would be an increase in each of the dependent variables over time for the treatment camp, but not for the control camp. The intent of the project was to reach children with the message of wellness by introducing these concepts to children through physical activity.

Methodology

Participants

The two east central Indiana counties that were selected for the camp were specifically chosen due to their poor ranking in the County Health Rankings (www.countyhealthrankings.org), their geographic proximity to Ball State University, and the relative lack of summer recreation programming available to the children in the communities. Children who attended the health and wellness camp were in the treatment group (n = 35), including 21 boys and 14 girls. Students who attended a nearby traditional summer day camp that included activities like: art, music, swimming, hiking and other games without a specific educational or wellness focus, comprised the control group (n = 6), including five boys and one girl. Additional demographic information about the participants is presented in Table 1. In order to be an eligible participant, children had to be 3rd through 8th grade for the 2011-2012 school year; plan to be present throughout the entire week of camp; and have permission from their parents, as indicated by a signed consent form, as well as have personally signed the assent form.

Procedures

All families of children who were registered for one of the health and wellness camps or the local summer day camp were emailed and/or mailed information about the study along with informed consent and assent forms. Parents could email, mail, fax, or bring to camp the necessary forms for participation in the study. Parents were also given information about the study on the first day of camp during registration. On the morning of the first day of camp, a meeting was held with the children whose parents signed the consent form for them to participate. The meeting involved an explanation of the study with signing of the assent form, a discussion of identification numbers, and an administration of the first data collection. Any child who was not participating in the study continued with warm-up activities during data collection time. Post-test data were collected at the end of camp by asking students to complete the same questionnaires.

Table 1: Demographic Information for Control and Treatment Camps

Camp	Number of Participants	Age in Years	Ethnicity	Grade in School in Fall	Attended H&W Camp 2010
Control	N – 6 (boys=5; girls=1)	M = 9.8 (*SD* = 1.7)	80% (n = 4) Whites/ Caucasian	Median = 5 (*Range* =2 - 7)	50% (n = 3)
Treatment Camp 1	N = 14 (boys=9; girls=5)	M = 10.5 (*SD* = 1.4)	86% (n = 12) Whites/Caucasian	Median = 5 (*Range* =2 - 8)	36% (n = 5)
Treatment Camp 2	N = 21 (boys=12; girls=9)	M = 9.2 (*SD* = 1.8)	90% (n = 19) Whites/Caucasian	Median = 4 (*Range* =2 - 8)	0% (n = 0)

Instruments

The questionnaires include a demographic form and the KIDSCREEN-27, which took about 15 minutes to complete. The KIDSCREEN-27 (Ravens-Sieberer et al., 2005) covers five health-related quality of life (HRQoL) dimensions: Physical Well-being, Psychological Well-being, Autonomy & Parent Relations, Social Support & Peers, and School Environment. For the purposes of this study, the participants did not complete the school environment section since it was summertime. This questionnaire was constructed and pilot-tested using the data of more than 10,000 European children and adolescents demonstrating strong psychometric properties (e.g., Herdman et al., 2002; Rajmil et al., 2004; Ravens-Sieberer et al., 2005).

Pedagogy

For the purpose of this study, a health and wellness camp for 3rd-8th grade children was developed and organized by thirteen undergraduate students enrolled in an immersive learning course. Rooted in experiential learning, which Kolb (1984) described as "knowledge created through the transformation of experience" (p. 41), students received academic credit, engaged in an active learning process that was student-driven but guided by faculty mentors, produced and implemented the camp curriculum, worked as a team of interdisciplinary students, partnered with organizations in the local community where the camp was being held, and made career and professional connections (Ball State University, n.d.). Researchers in the scholarship of teaching and learning have determined that experiential learning is a best practice in higher education (Duerden & Witt, 2010; Fish, 2008). Research has documented the impact of the learning experience on the student, but research on the community group or the success of the project is often times ignored.

The health and wellness camp was designed to engage children in a day camp that would enhance their understanding of wellness, provide them with framework for living a healthy active lifestyle, offer opportunities for physical activity during the summer, and create opportunities for making new friends. The camp was designed to instill in children a framework for living a lifelong healthy lifestyle by enhancing their understanding of wellness. Students chose to emphasize five dimensions of wellness (i.e., social, emotional, environmental, intellectual, and physical) in designing the structure of the camp, for which they planned a total of thirty hours of camp programming over five days.

The college students utilized the dimensions of wellness as a way to help communicate the message of wellness to the campers and also to help organize the camp. For example, a variety of teambuilding activities were used to teach the social dimension of wellness. Emotional wellness was demonstrated via a puppet show about bullying and asking the students reflective questions regarding their feelings toward bullying. Environmental wellness was communicated via a relay game where students had to separate recyclable items as quickly as possible. Intellectual wellness was communicated through activities about nutrition and heart rate calculations. Physical wellness was indirectly involved in most of the activities, but was also the specific focus of a strength training circuit emphasizing balance, flexibility, and speed. The common activity that occurred during each day of camp was geocaching, which required students to use Global Positioning Satellite (GPS) units to locate a cache that contained an educational activity focusing on one of the dimensions of wellness. For example, students reaching a cache would be asked to calculate the number of calories consumed in a meal contained inside the cache or choose the healthier meal option. College students would lead the activity at the cache site to ensure the learning objectives were met. A complete list of activities can be obtained by contacting the authors.

Results

Cronbach's coefficients were computed for the four KIDSCREEN subscales used in this study. For the physical well-being subscale, the initial coefficient for all five items was 0.157 and 0.319 for the pre and posttest, respectively. Upon further examination, with the removal of the first item about general health, the alphas improved to 0.605 and 0.711 for the pre and posttest, respectively. Thus, for statistical analysis of the hypothesis, the first item was removed, leaving a 4-item subscale. For the psychological well-being subscale, the alphas were less than 0.1, but the removal of items did not improve the alpha; therefore, this subscale was analyzed with caution because of the poor internal reliability. All seven items were retained for autonomy and parent relations because the alpha for the pretest was 0.736 and for the posttest it was 0.774. The social support and peer subscale of four items also met an acceptable level of reliability, with a pretest alpha of 0.804 and a posttest of 0.805.

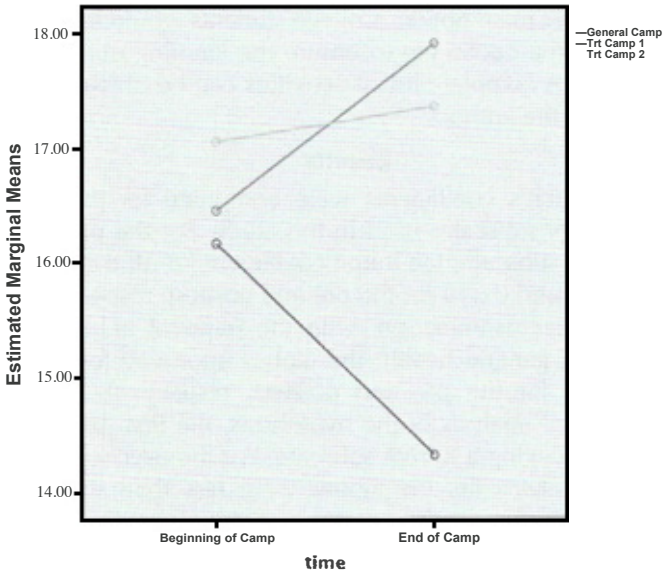
The means for each dependent variable by camp, both pre and posttest assessments are displayed in Table 2. To examine the interaction between the camps and time (i.e., pre-camp and post-camp) for each dependent variable, repeated measures ANOVAs were used, with alpha set at $p < 0.05$. For physical well-being, there was a significant interaction for time x camp, $F(2,33) = 3.58$, $p = 0.039$. Both treatment camps increased from pre to posttest while the control group actually decreased (see Figure 1). There were no main effects for groups or time.

Table 2: Pre and Post-Camp Means for Independent Variables by Camp

	Camp	Physical Well-being^[1]	Psychological Well-being[2]	Autonomy & Parents[3]	Social Support & Peers[4]
Control General	Pre-Test	16.2 (SD = 2.5)	22.6 (SD = 0.9)	27.6 (SD = 5.1)	16.5 (SD = 3.1)
	Post-Test	14.3 (SD = 2.1)	23.8 (SD = 2.6)	28.6 (SD = 4.0)	17.0 (SD = 2.6)
Trt* Camp 1	Pre-Test	16.5 (SD = 2.1)	23.3 (SD = 2.6)	28.4 (SD = 4.1)	16.3 (SD = 3.9)
	Post-Test	17.9 (SD = 2.2)	22.7 (SD = 2.4)	27.0 (SD = 5.4)	17.0 (SD = 3.2)
Trt* Camp 2	Pre-Test	17.0 (SD = 2.7)	24.2 (SD = 1.8)	27.0 (SD = 4.8)	17.7 (SD = 1.9)
	Post-Test	17.4 (SD = 2.4)	23.0 (SD = 2.1)	27.2 (SD = 5.0)	17.0 (SD = 2.3)

^ Significant interaction, F(2,33) = 3.58, p = 0.039
*Trt = treatment
1 = possible score ranged from 0-20
2 = possible score ranged from 0-35
3 = possible score ranged from 0-35
4 = possible score ranged from 0-20

Figure 1: Estimated Marginal Means for Children's' Perceptions of Physical Activity and Health



Note: Significant interaction for time by group; $F(2,33) = 3.58$, $p = .039$.

The other variables did not yield significant results. There was no significant interaction for psychological well-being, $F(2, 31) = 1.37$, $p > 0.05$, and no main effects. For social support and peers, there were no significant results for the interaction, $F(2, 33) = 0.86$, $p > 0.05$, or the main effects. No significant results for the autonomy and parent relations subscale either, $F(2, 32) = 2.99$, $p > 0.05$.

Discussion

Students enrolled in the summer health and wellness camp organized by college students reported significantly increased physical well-being compared to those enrolled in the control group. This wellness camp generated positive quality of life benefits for the participants in the camp, which supports other research on the effectiveness of summer wellness camps on health related behaviors in children (e.g., Seal & Seal, 2011). Furthermore, the results indicated that within a one-week period, changes could be made to children's perceptions of physical well-being. Enhanced perceptions of physical well-being have been linked to more frequent participation in exercise as well as better exercise adherence (Courneya & McAuley, 1994; Rudolph & McAuley, 1995).

The significant improvement in the physical well-being subscale for the intervention group can most likely be explained by a couple of factors. Firstly, a majority of the health and wellness camp activities were specifically focused on the physical and intellectual dimensions of wellness, thus allowing for significant involvement by the children in activities directly related to that particular subscale/variable. Additionally, body image has been found to be a strong predictor in health-related quality of life (Haraldstead et al., 2011), corresponding specifically to physical wellness. In other words, body image can be improved as adolescents learn and make behavioral changes related to nutrition and exercise and build self-esteem in these areas (Wille, Erhart, Peterson, & Ravens-Sieberer, 2008). In the health and wellness camp for this study, adolescents spent time in activities related to these two important topics. Meland, Haugland, and Breidablik (2007) reported that body image should be a focused component of interventions in order to improve subjective and physical wellness.

In regard to the non-significant findings, the researchers believe the one explanation for these results was that, despite time being allocated to each dimension of wellness, nearly every activity used physical activity to demonstrate the concept. It is possible that some campers focused primarily on the physical activity and not the teaching point regarding the particular dimension of wellness. This may also reflect a bias on the part of the individuals who created and executed the camp curriculum. The college students who designed the camp were given substantial amounts of latitude and independence in this endeavor, and they were not part of the team that conducted this study. They may have emphasized one particular dimension of wellness because of their personal preferences toward those activities, or their perception that campers would be most interested and engaged in those activities. Thus, their partiality toward physical wellness may have impacted the results of the study. A more balanced curriculum that equally emphasizes all areas of wellness may produce different results. Finally, we cannot exclude the possibility that the individual dimensions of wellness may not all adapt at the same rate, especially in elementary school-aged children. Though one week was sufficient to impact physical wellness in this study, it may not be enough time to establish a change on the other dimensions.

From a college pedagogy perspective, the unique aspect of this camp was the experiential learning setting that incubated the camp curriculum focusing on the dimensions of wellness. The fact that campers significantly

increased their physical well-being compared to those enrolled in the control group indicates that the experiential approach to developing the camp was successful. The statistical results not only indicate that wellness camps can generate positive quality of life benefits, but also that an interdisciplinary group of college students can develop, organize, and implement a health and wellness camp, under the mentorship of qualified faculty members. The role of the faculty mentors was to secure external grant funding, recruit students from a variety of academic majors, secure facility access, develop relationships with key stakeholder groups in the community, allocate financial resources, set deadlines for elementary tasks, and develop the general framework in the course syllabus from which the enrolled students could pursue developing the camp curriculum.

Limitations

As a pilot study, these results should be used to support the further exploration of similar research, but the results should be considered with the following limitations in mind. There were only six participants in the control group and the participants were not randomly assigned to treatment groups. However, by including a comparison group, a more advanced research design was used and could not only an increase in posttest scores but also group differences. Another limitation was that some of the participants in all three camps had attended last year's wellness camps, so their scores could have been biased from that previous exposure to wellness material and activities. Additionally, the result for the psychological well-being subscale should be interpreted with caution because of the poor internal consistency.

Future Research

One aspect of the current study that was not assessed was the impact of the experience on the college-students who were involved in developing and implementing the camp. This could be a specific area of focus for future researchers, and not only for student run projects, but the impact on camp counselors, in general. Additionally, future researchers could conduct a full program evaluation that includes participation satisfaction, knowledge gained, and psychological impact. For an increased effect, data could also be collected four to six weeks post-camp. Finally, future experimental studies related to the effects of wellness camps might want to also examine age differences as Haraldstead et al (2011) found age to be a significant predictor of health-related quality of life.

Conclusion

The findings from this study can be especially impactful for camp directors and wellness coordinators because there is evidence that within a one week time period, wellness focused activities can positively affect children's health related quality of life. More specifically, the significant results related to the physical dimension of wellness, which was targeted by many of the camp activities, indicates to camp developers the importance of incorporating specific wellness dimensions and directly matching activities to the targeted dimensions. As a recommended best practice, when designing camp curricula, one should first identify the wellness dimensions of interest, and then develop direct activities that match each dimension and ensure that each dimension is targeted each day.

References

Courneya, K.S., & McAuley, E. (1994). Are there different determinants of the frequency, intensity, and duration of physical activity? *Behavioral Medicine*, 20, 84-90.

Duerden, M., & Witt, P. (2010). The impact of direct and indirect experiences on the development of environmental knowledge, attitudes, and behavior. *Journal of Environmental Psychology,* 30, 379-392.

Dwyer, G., Baur, L., Higgs, J., & Hardy, L. (2009). Promoting Children's Health and Well-Being: Broadening the Therapy Perspective. *Physical & Occupational Therapy in Pediatrics*, 29, 27-43. doi:10.1080/01942630802574825.

Herdman, M., Rajmil, L., Ravens-Sieberer, U., Bullinger, M., Power, M., Alonso, J., & The European KIDSCREEN and DISAKIDS groups. (2002). Expert consensus in the development of a European health-related quality of life measure for children and adolescents: A Delphi study. *Acta Pediatrica*, 91, 1385-1390.

Fish, L. (2008). Graduate student project: Employer operations management analysis. *The Journal of Education for Business,* 84(1), 18-30.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, N.J.: Prentice-Hall.

Haraldstad, K., Christopherson, K., Eide, H., Natvig, G. K., & Helseth, S. (2011). Predictors of health-related quality of life in a sample of children and adolescents: A school survey. *Journal of Clinical Nursing*, 20, 3048-3056. doi: 10.1111/j.1365-2702.2010.03693.x

Holder, M. D., Coleman, B., & Sehn, Z. L. (2009). The contribution of active and passive leisure to children's well-being. *Journal of Health Psychology*, 14(3), 378-386. doi:10.1177/1359105308101676 10.1177/1359105308101676.

Jago, R., Macdonald-Wallis, K., Thompson, J. L., Page, A. S., Brockman, R., & Fox, K. R. (2011). Better with a Buddy: Influence of Best Friends on Children's Physical Activity. *Medicine & Science in Sports & Exercise*, 43(2), 259-265. doi:10.1249/MSS.0b013e3181edefaa

Meland, E., Haugland, S., & Breidablick, H. J. (2007). Body image and perceived health in adolescence. *Health Education Research*, 22, 342-350.

Parfitt, G., & Eston, R. G. (2005). The relationship between children's habitual activity level and psychological well-being. *Acta Paediatrica*, 94, 1791-1797. doi:10.1080/08035250500268266

Rajmil, L., Herdman, M., Fernandáz de Sanmamed, M. J., Detmar, S., Bruil, J., Ravens-Sieberer, U., Bulinger, M., Simeoni, M. C., Auquier, P., and the KIDSCREEN group. (2004). Generic health-related quality of life instruments in children and adolescents: A qualitative analysis of content. *Journal of Adolescent Health*, 34, 37-45.

Ravens-Sieberer, U., et al. (2005). KIDSCREEN-52 quality of life measure for children and adolescents. *Expert Review of Phamacoeconomics & Outcomes Research*, 5(3), 353-364.

Ravens-Sieberer, U., Erhart, M., Gosch, A., Wille, N., & the European KIDSCREEN group. (2008). Mental health of children and adolescents in 12 European countries – Results from the European KIDSCREEN study. *Clinical Psychology and Psychotherapy*, 15, 154-163. doi: 10.1002/cpp

Robbins, G., Powers, D., & Burgess, S. (2011). *A wellness way of life* (9th ed.). New York, NY: McGraw-Hill Companies, Inc.

Rudolph, D. E., & McAuley, E. (1995). Self-efficacy and salivary cortisol responses to acute exercise in physically active and less active adults. *Journal of Sport and Exercise Psychology*, 17, 206-213.

Seal, N., & Seal, J. (2011). Developing healthy childhood behaviour: Outcomes of a summer camp experience. *International Journal of Nursing Practice*, 17(4), 428-434. doi:10.1111/j.1440-172X.2011.01924.x

Tuuri, G., Zanovec, M., Silverman, L., Geaghan, J., Solmon, M., Holston, D., Guarino, A., Roy, H., & Murphy, E. (2009). "Smart bodies" school wellness program increased children's knowledge of healthy nutrition practices and self-efficacy to consume fruit and vegetables. *Appetite*, 52, 445-451.

Wille, N., Erhart, M, Peterson, C., & Ravens-Sieberer, U. (2008). The impact of overweight and obesity on health-related quality of life in childhood – results from an intervention study. *BMC Public Health*, 23, 421.

Guidelines for Authors

This journal is published in May, September, and February by the Indiana Association for Health, Physical Education, Recreation, and Dance. Articles that share opinions and ideas, as well as those based on serious scholarly inquiry are welcomed and encouraged. Each article scholarly article is reviewed by the editor and at least two reviewers who are selected on the basis of areas of interest and qualifications in relation to the content of the article.

Preparing Manuscript

Manuscripts are to conform to the Publication Manual of the American Psychological Association (APA; 6th ed.) style. To facilitate the review process, the author(s) should use double-spaced type and include line numbers as well as page numbers. Papers must not exceed a total of 28 pages including references, charts, tables, figures, and photographs. There should be an abstract not to exceed 500 words. Further, all charts, tables, figures, and photographs will be after the references. Papers deviating from the recommended format will not be considered until they are revised.

Electronic Submission

Electronic submission of manuscripts is required at thomas.sawyer@indstate.edu . The manuscript order is: (1) blind title page, (2) abstract, (3) key words, (4) text, (5) references, (6) author notes, (7) footnotes, (8) charts, (9) tables, (10) figure captions, and (11) figures. The cover letter will be a separate file. Including author(s) name and affiliation and contact information of corresonding author.

Send it in
...to the Editor

A new idea that you have penned,
Share it with a Indiana AHPERD friend.
On the Journal pages, let it end.
We sure do want it... send it in!
It may be an article you did write
In sheer frustraton one weary night.
But, someone else it may excite.
...Send it in.
Is it a cartoon that you have drawn?
Did you compose a unique song?
Could our whole profession sing along?
...Well, send it in.
Some folks are inspired by poetry
And works of art let others see
The inner thoughts of you and me.
Please, send it in.
Then, there are works that scholars do,
Great research... we need that, too.
But, you know we must depend on YOU
To send it in.
Won't you share with us your thought
That we all just may be taught?
My, what changes could be wrought
If you'd just send it in.

Tom Sawyer
Indiana AHPERD Journal Editor

Cover Letter

The cover letter must include all contact information for the corresponding author, and employers of the remaining authors. The following statements must be included in the cover letter:

· "This manuscript represents results of original work that have not been published elsewhere (except as an abstract in conference proceedings)."

· "This manuscript has not and will not be submitted for publication elsewhere until a decision is made regarding its acceptability for publication in the Indiana AHPERD Journal."

· "This scholarly inquiry is not part of a larger study."

· "This manuscript has not been previously published or submitted for publication elsewhere, either in identical or modified form."

Authors

List multiple authors in the order of proportionate work completed. Also indicate research reports supported by grants and contracts. Include biographical information on all authors (title, department, institution or company, and full address).

Authors's Statement

❑ The author must provide a signed statement certifying that the article has not previously been published or submitted for publication elsewhere either in identical or modified form.

Deadlines Journal

❑ Spring Issue – March 1
❑ Fall Issue – July 1
❑ Winter Issue – December 1

Newsletter

❑ Spring Issue – Feb. 15
❑ Fall Issue – Sept. 15

Leadership Opportunities on Councils

FUNCTION. The duties and responsibilities of the Program and Regional Councils are to:

1. Work closely with the Program Director or Regional Coordinator to promote the special program area.
2. Attend annual IAHPERD Leadership Conference. (Hotel and meals paid for by the Association.)
3. Solicit programming for the State Conference or Regional Workshops.
4. Serve as host to greet and direct presenters during the conference.
5. Serve as presider for the various programs in your special area. Support includes introducing presenter, assisting during the presentation (distribute handouts), and providing presenter with the special gift from the Association.
6. Make nominations to the Awards Committee chair for Teacher of the Year and Association awards.

PROGRAM AREAS. The various program areas include:

1. Adapted Physical Education
2. Aquatics
3. Council for Future Professionals
4. Dance
5. Fitness
6. Health
7. Higher Education/ Research
8. Jump Rope and Hoops for Heart
9. Physical Education: Elementary
10. Physical Education: Middle School
11. Physical Education: Secondary
12. Recreation
13. Sport
14. Sport Management
15. Technology

INTERESTED? To apply for a leadership position on a council, send an email of interest to Dr. Mark Urtel, Nominating Committee Chair, at murtel1@iupui.edu. For additional information, go to the IAHPERD website at www.Indiana-ahperd.org, click on About, Constitution, Operating Codes, and scroll down to the leadership position of interest.

INDIANA AHPERD
APPLICATION FOR MEMBERSHIP

(Please Print/Type)

Last Name _____ First _____ M.I. _____

Address _____
Street

_____
City *State* *Zip*

_____
County

Telephone: Area Code (_____)_____ E-mail _____

Member Class: ☐ Professional $40.00 ☐ Student $20.00
(Undergraduate or Full-Time Graduate Student)

☐ New ☐ Renewal

Make check payable to: Indiana AHPERD.
Send to: Karen Hatch, 2007 Wilno Drive, Marion, IN 46952

MEMBERSHIP EXPIRES 1 YEAR FROM DATE DUES PAYMENT IS RECEIVED.

Your JOURNAL cannot be forwarded.
If a change of address occurs, please notify:

Karen Hatch
2007 Wilno Drive
Marion, IN 46952

OPPORTUNITY FOR INVOLVEMENT

Involvement is the key word to making a contribution to your professional association. The IAHPERD provides an opportunity for involvement through the choices below and we encourage each of you to become active participants by serving on a committee or by holding an office. Please, check any position listed below that interests you.

HELP NEEDED:

_____ Would you be willing to become involved?
_____ District level
_____ State Level
_____ Committee Involvement
_____ State Office
_____ Regional Leadership

Karen Hatch
Executive Director, IAHPERD
2007 Wilno Drive
Marion, IN 46952
Phone: 765-664-8319
email: hatch@comteck.com

IAHPERD

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

www.inahperd.org