NFL Network’s Keep Gym in School campaign named Dana Griffith the first ever “NFL Network PE Teacher of the Year.” Griffith will receive a $10,000 award as well as a $10,000 grant for the PE program at Berkmar Middle School. She was chosen out of over 2,000 nominations and close to 200 applications.

She was honored in a ceremony during the NFL Draft week in New York City. “Ms. Griffith epitomizes the dedicated teachers we want to recognize and applaud. Her hard work and commitment to educating children about health, nutrition and physical fitness both inside and outside the classroom sets an example for her fellow educators as well as parents about the importance of fighting childhood obesity by teaching healthy habits at a young age,” says Dena Kaplan, senior vice president for marketing, NFL Network.

Griffith wrote and implemented a middle school fitness plan that is now used by many schools throughout Georgia. She also helped develop the curriculum for a Center for Disease Control’s program targeting enhancing behaviors for kids and helped write the Georgia State Standards for Physical Education. At Berkmar Middle School she has tried to actively involve family members with events like a Mother Daughter aerobics class and also encourages physical activity outside the school, sponsoring a running club, a fitness club, soccer program and basketball program. More than 60% of students at her school participate in these activities outside of the school day.

“With adolescent obesity reaching epidemic proportions, it is more important than ever to foster home regimens so I design my programs to meet the needs of a new generation. I’m thrilled to be recognized by the NFL Network for my passion of educating students about healthy behaviors and am grateful for the grant for Berkmar Middle School,” says Griffith. “As a physical educator, I am proud to share the belief with the NFL Network that we cannot afford to trip at the finish line by putting the health of our nations’ kids at risk.”
GAHPERD Membership Form

Please print clearly and provide all information requested. This will help us serve you better. Make check payable to GAHPERD and send this form with payment to: Kim Thompson, GAHPERD Executive Director, 9360 Highway 166, Winston, GA 30187. You may also join or renew and pay online at www.gahperd.org.

New: _____ Renewal: _____ Female: _____ Male: _____

Title: ___________ Last Name: ___________________________ First Name: __________________________________________ (please circle)

Classification and Membership Dues (check one) 1-year 2-year 3-year

_____ Professional (includes full time grad student) $25 $45 $65

_____ Retired $12 n/a n/a

_____ Future Professional (undergraduate student) $8 n/a n/a

Preferred Mailing Address: (Street, Apt. #) ________________________________________________________________

(City) ____________________________________________________________________________________________

(State, Zip) _______________________________________________________________________________________

County of Residence: ________________________________

County of Employment: ______________________________

School/Organization/Employer: ________________________________________________________________

Home Phone: ___________________________ Work Phone: ___________________________

FAX Number: ___________________________ Email Address: ___________________________

Employment Classification:

_____ Elementary

_____ Middle School

_____ Secondary

_____ Two-Year College

_____ College/University

_____ City/County Administrator

_____ Other ___________________________

Other Memberships:

AAHPERD _____ Yes _____ No  GAE _____ Yes _____ No

Membership #: ___________________________ Membership #: ___________________________

Areas of Interest:

Division (check one) Sections (check two)

_____ Dance  _____ College/University

_____ General  _____ NAGWS/Men’s Athletics

_____ Health  _____ Recreation

_____ Physical Education  _____ Future Professional (Student)

_____ Elementary  _____ Secondary

_____ Middle School  _____ Exercise Science
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<td>President-Elect</td>
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<td>Brian Devore*</td>
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<td>Brenda Segall*</td>
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<td>M. Cerie Godfrey*</td>
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<td>Ronnie Akers</td>
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**GAHPERD Vision Statement**

The Georgia Association for Health, Physical Education, Recreation and Dance envisions a society in which an active, healthy lifestyle is valued and practiced by all Georgians. GAHPERD takes a leadership role in promoting the professions it represents by broadening public perceptions and values, through dynamic services, creative products, innovative programs and on-going research. As a leader in the state, GAHPERD seeks to unite with professional and community organizations to achieve the vision of a healthy Georgia.

**GAHPERD Mission Statement**

GAHPERD is a nonprofit organization for professionals and students in related fields of health, physical education, recreation and dance. GAHPERD is dedicated to improving the quality of life for all Georgians by supporting and promoting effective educational practices, quality curriculum, instruction and assessment in the areas of health, physical education, recreation, dance and related fields.
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The GAHPERD Journal is published three times per year (Winter, Spring/Summer, and Fall) by the Georgia Association for Health, Physical Education, Recreation and Dance, a non-profit organization. Membership in the Association entitles one to receive all journals and newsletters for that year. Subscriptions of $30 per year are available to libraries and institutions. Single issues are $12 each. Requests for missed issues will be honored for eight weeks following the publication date. The GAHPERD Journal is listed in the Physical Education Index.

Views and opinions expressed herein are those of the authors and not necessarily those of GAHPERD. GAHPERD assumes no responsibility for and will not be held liable for any claims made in advertisements. Guidelines and prices for advertising are available from the Editor.

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Jacque Harbison and Jenny Dearden - KY Past President
AAHPERD Convention Highlights

Rene Bibaud - Jump Rope Queen and Stephanye Peek - Lady-in-Waiting

AAHPERD President-Elect Irene Cucina and GA delegate Stephanye Peek
Nominations are now being accepted for the GAHPERD Awards. Please take this opportunity to acknowledge colleagues for their outstanding work. Multiple nominations are encouraged. A letter will be sent to each nominee notifying them of their nomination along with instructions on how to apply.

**Awards will be made in the following categories:**

**HONOR AWARD**

**DIVISION AWARDS**

**Health**
- K-12 Health Professional of the Year
- College/University Health Professional

**Physical Education**
- Elementary PE Teacher of the Year
- Middle School PE Teacher of the Year
- Secondary PE Teacher of the Year
- Adapted Physical Education Teacher of the Year (P-12)

**Recreation**
- Recreation Specialist of the Year

**Dance**
- K-12 Dance Educator of the Year
- College/University Dance Educator

**GAHPERD AWARDS**
- Advocate of the Year
- Award of Excellence in PE
- Robert W. Moore Professional Recognition
- Clyde Partin Distinguished Service Award

**GENERAL AWARDS**
- Athletic Director of the Year
- College/University PE Teacher of the Year
- Intramural Director of the Year
- Pathfinder
- Outstanding Student Major’s Club
- Undergraduate Student Scholarship
- Young Scholar Award

Submit nominations to: GAHPERD Awards Chair at gahperd1@hotmail.com

Multiple Nominations are encouraged

Please provide the following nominee information:

Name: ____________________________

Phone: __________________________ Email Address: ___________________________

Award Category: ____________________________

DEADLINE FOR RECEIPT OF NOMINATIONS June 17th, 2011

DEADLINE FOR RECEIPT OF APPLICATIONS IS July 29th, 2011
Hey 4th, 5th, & 6th graders!

Are you **healthy?**

A healthy lifestyle can be fun!

Learn to balance fitness, nutrition, and healthy decision making.

Registration includes a meal, t-shirt, & all activities.

- Registration begins April 25
- $25 fee
- 10 am - 4 pm
- Teen Leader apps due April 8

Call your local Extension Office or 1-800-ASK-UGA-1 for more information
GAHPERD Publication Information

General Information
When submitting information for publication in the GAHPERD Journal or GAME Newsletter:

- Send information to Mike Tenoschok, mtenoschok@mtparanschool.com
- Submit electronically as an attachment to e-mail
- Information should be word-processed (Microsoft Word, size 12 Times font preferred)
- Any photographs submitted should be an actual photograph, not a photo cut from another publication. Electronic transmissions are encouraged.

Due Dates for Materials and Publication Dates:

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Can you hear the fun?

*Whirr, whirr, whirr* as jump ropes cut the air. *Click, click, click* as they slap the ground. *Thump, thump, thump* — kids’ feet pounding.

Your kids, in your school, laughing with excitement, doing Jump Rope For Heart. Raising money for research and programs. Helping save lives in your community by stopping heart disease and stroke.

*Support life, health and physical activity with Jump Rope For Heart!*

*Did you know?*
- Obesity and physical inactivity are major risk factors for cardiovascular disease.
- Children and adolescents should get at least one hour of physical activity every day.

To learn more, call 1-800-AHA-USA1 or visit americanheart.org/jump.

©2005, American Heart Association. Also known as the heart fund.
Event: radKIDS Instructor Certification Training

What: radKIDS Personal Empowerment and Safety Education Program. This insightful 4 day (32 hour 8:00 a.m. to 5:00 p.m. each day mandatory attendance is required for certification). The course is taught in a relaxed environment, which is conducive to learning tested instructional technique, proven tactics, and unique insight about the problem of violence against children. From awareness and risk reduction to simulation training drills, this program covers it all.

When: Monday, June 20th – Thursday, June 23rd, 2011

Where: Greater Atlanta Christian School
1575 Indian Trail Road
Norcross, GA 30093
770-243-2000

Cost: Registration includes all program materials, an instructor curriculum, and a certificate. Tuition for this program is normally $450.00 per participant. However, if you are selected and you agree to teach a minimum of one radKIDS course in 2011, Keep Georgia Safe will cover your entire tuition.

Who: We want to train instructors who are willing to take the information learned in this seminar back to their communities. If chosen, you promise that this will not just be a certificate you hang on your wall, but that you have the drive and determination to take this information to help us protect our kids and our communities-to help us protect our kids and our communities-to help keep Georgia Safe.

For more information regarding this very special training, please contact Mary Ellen Fulkus with Keep Georgia Safe at (770) 934-8000 ext. 710.

How: Keep Georgia Safe will be selecting 20 people to participate in this training program. To apply for consideration, please complete the application form and send it in as soon possible. Applications must be RECEIVED by us on or before June 6th, 2011, using any of these three methods:

FAX: (770) 934-1631- Attention: Keep Georgia Safe
Email: maryellen@keepgeorgiasafe.org
Mail: Keep Georgia Safe, P.O. Box 956669, Duluth, GA 30095
PRESS RELEASE

For more information, contact:
Paula Keyes Kun (703) 476-3461/pkun@aahperd.org

NATIONAL ASSOCIATION FOR SPORT AND PHYSICAL EDUCATION
HONORS THOMAS UNIVERSITY’S DR. SUSAN LYNN

RESTON, VA, April 11, 2011 – Dr. Susan Lynn, professor and director of the Division of Education at Thomas University received the Outstanding Mentor of the Year Award for her accomplishments as a leader in teacher education from the National Association for Sport and Physical Education (NASPE) during the national convention of the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) March 29-April 2 in San Diego, CA. Dr. Lynn was recognized at the Hall of Fame Banquet on April 1.

A national recognition, the Outstanding Mentor of the Year Award is designed to recognize one higher education faculty member for his/her specific efforts to mentor undergraduate and/or graduate students pursuing a degree in physical education, sport, kinesiology or exercise science. Specific criteria for the award includes: 1) serves as an outstanding role model of professionalism by modeling appropriate professional behavior and positive professional standards, 2) encourages student involvement in professional opportunities, such as including students in service projects or research activities, supporting student membership in professional organizations, nurturing student contributions to professional organizations/meetings or enabling student attendance at professional meetings and 3) provides exemplary academic and professional preparation advisement, is available to students for discussion and meetings and may serve as faculty advisor/supporter to student major club or honorary projects.

Prior to accepting the position at Thomas University, Dr Lynn was a professor and program coordinator of the Department of Physical Education at Florida State University from 1989 – 2010. Dr. Lynn coordinated all aspects of the program including teaching undergraduate and graduate courses in physical education, advising Masters’ and Doctoral students, supervising the programs, and overseeing the development of the MS with Initial Certification and the MS online degree programs.

Dr. Lynn has shown leadership as a professional in the field by being and advocate for physical fitness, professional development, and teacher effectiveness. Through her determination to develop, promote, and implement the master’s on-line program in the department, she was instrumental in increasing the number of master’s students in the program from four to almost 40 students. This program has enabled many K-12 teachers working full time jobs in school systems across the country to be able to pursue a master’s degree.

Dr. Lynn encourages student involvement in professional opportunities, meeting with students each year to present sessions at state conferences and coordinating efforts for students to lobby the Florida Legislature for initiatives related to physical education. She has encouraged student membership in state and national organizations and helped students submit articles to national journals including Strategies, Journal of Physical Education, Recreation (JOPER), and Research Works.

Dr. Lynn is recognized as a leader both in the field and within her local community, donating countless hours to community project such as the Leon County Schools “Bridging the Fitness Gap” grant, the Capitol Health plan “Champions” program, and is herself a legislative advocate for physical education in the state. Dr. Lynn was also part of a research team which brought $2,000,000.00 to the Tallahassee community to look at the impact of school based BMI notification on child health outcomes and parent behavior. This grant has allowed for ground breaking research in the profession of physical education.
Dr. Lynn is also a scholar, with publications including Seminar in physical education: *From student teaching to teaching students, Annual editions education*, and *Race/gender/media: considering diversity across audiences, content and producers* as well as articles in the following: *Journal of Physical Education, Recreation, and Dance, Journal of Magazine and New Media Research, Journal of Teaching Physical Education, Strategies*, among others.

Dr. Lynn has received numerous recognitions within her field such as AAHPERD’s Southern District Scholar and Research Consortium Fellow, and a two-time Teaching Incentive Award winner from FSU. Her professional memberships include AAHPERD, NASPE, American Education Research Association, and Florida Association for Health, Physical Education, Recreation, Dance and Drivers Education. She has also chaired 16 doctoral dissertations and served as a member on more than 25 doctoral supervisory committees.

Dr. Lynn holds a Doctor of Philosophy from the University of South Carolina, a Master of Science from the University of Tennessee, and a Bachelor of Science from Coker College.

**NASPE**

The preeminent national authority on physical education and a recognized leader in sport and physical activity, the National Association for Sport and Physical Education (NASPE) is a non-profit professional membership association that sets the standard for practice in physical education and sport. NASPE’s 15,000 members include: K-12 physical education teachers, coaches, athletic directors, athletic trainers, sport management professionals, researchers, and college/university faculty who prepare physical activity professionals. NASPE seeks to enhance knowledge, improve professional practice, and increase support for high-quality physical education, sport and physical activity programs. It is the largest of the five national associations that make up the American Alliance for Health, Physical Education, Recreation & Dance (AAHPERD). For more information, visit www.naspeinfo.org.

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**Goal Oriented?**

Step up and take on America’s No. 1 and No. 3 killers, heart disease and stroke. Hear the cheers as your students go all out for fun, physical activity and community service. Fund research and educational programs — and help stop heart disease and stroke and save lives right in your community.

**Support life, health and physical activity with Hoops For Heart!**

Did you know?

- Obesity and physical inactivity are major risk factors for cardiovascular disease.
- Children and adolescents should get at least one hour of physical activity every day.

To learn more, call 1-800-AHA-USA1 or visit americanheart.org/hoops.
FOR IMMEDIATE RELEASE

Monday, March 14, 2011

Justine Sessions, Sen. Tom Harkin HELP Committee, 202-224-3254
Kanika Lewis, American Heart Association, 202-785-7935


Members Join Organizations to Highlight Importance of Including P.E. in Education Reform Efforts

WASHINGTON, DC – U.S. Rep. Ron Kind (D-WI) and U.S. Senator Tom Harkin (D-IA) today reintroduced the Fitness Integrated with Teaching Kids Act (FIT Kids Act), a bill to combat childhood obesity by strengthening physical education programs in schools throughout the country.

The FIT Kids Act, H.R. 1057, renews the emphasis on physical education in schools. The Act would work to ensure kids are active during the school day and are given opportunities that promote overall health and wellness. The legislation would engage parents and the public by requiring all school districts and states to report on students’ physical activity, including the amount of time spent in required physical education in relation to the recommended national standard. The Act would further ensure appropriate professional development for health and physical education teachers, fund research to examine the link between children’s health and their academic achievement, and recommend effective ways to combat childhood obesity and improve healthy living and physical activity.

“This bill gets to the simple truth: in order to develop a healthy mind, you need a health body,” said U.S. Rep. Ron Kind (D-WI), co-chair of the Congressional Fitness Caucus. “Providing increased physical education in public schools will give every child an opportunity – regardless of their background – to learn healthy habits and get moving. We will see the benefits in their math and reading test scores, get to the root of the obesity epidemic, and get kids on a healthy path early in life. I hope that Congress can consider the importance of physical education in our schools when they take a closer look at education reform later this year.”

“To ensure that our kids will lead healthy and active lives, we need to help them develop good habits early on,” said Senator Tom Harkin, Chairman of the Senate Committee on Health, Education, Labor and Pensions. “This bill would combat rising rates of childhood obesity, which have become a pressing public health crisis that we must address. Kids who get more exercise throughout the day are more fit, more focused in the classroom, and get better sleep – also a welcome benefit for their parents! This bill empowers schools, teachers and parents to help improve our kids’ health.”

“With childhood obesity rates that have tripled over the last few decades, we must make every effort to help children reduce their risk for heart disease, stroke and other life-threatening illnesses,” said Nancy Brown, CEO of American Heart Association. “More than 80 percent of adults support daily physical education yet such programs have been on the decline in many school districts. The FIT Kids Act would help educate parents about the quality and quantity of physical education in their child’s school.”

“America’s children receive too little opportunity to be physically active, and that is a major contributor to the nation’s obesity epidemic, said Penny Lee, Executive Director of the Campaign to End Obesity Action Fund. “Lack of
physical activity for children has a negative effect on our military preparedness, their ability to learn and their overall wellness. Now is the time to drill down on solutions which is what this legislation provides. It allows for more information to parents, educators and communities so they recognize the gaps in activity and have the opportunity to address them -- a major step in the right direction.”

“The National Association for Sport and Physical Education commends Senator Harkin and Congressman Kind on introducing the FIT Kids Act which will strongly support our common goal of increasing the quality and quantity of physical education opportunities in the U.S.,” says NASPE President, Lynn Couturier of State University of New York at Cortland. “Physical education, an essential component of a quality, well-rounded education, not only teaches students how to achieve and maintain lifelong healthy habits but contributes to their academic success.”

“We are proud to support Senator Harkin and Congressman Kind on their reintroduction of the Fit Kids Act,” said NFL Commissioner, Roger Goodell. “This legislation furthers our shared goal of eliminating childhood obesity and encouraging children to lead healthy lifestyles.”

The FIT Kids Act has been endorsed by the following organizations: The American Diabetes Association, The American Heart Association, National Association for Sport and Physical Education, Grocery Manufacturers Association, National Football League, Sporting Goods Manufacturers Association, YMCA.

**Childhood Obesity in America**

Childhood obesity in the United States has reached epidemic proportions. Recent studies indicate that 17 percent of 6 to 11 year olds and 17.6 percent of 12 to 19 year olds are considered obese. Furthermore, 33 percent of 6 to 11 year olds and 34 percent of 12 to 19 year olds are overweight; these rates have roughly doubled since 1980.

Children and teens who are overweight are much more likely to develop cardiovascular disease, type II diabetes, asthma, sleep apnea, and various forms of cancer. This is a costly expense to our health care system; obesity related medical costs totaled $147 billion in 2008.

Researchers suggest that the childhood obesity epidemic is largely due to a decline in regular physical activity and a diet high in unhealthy foods. A lack of regular physical activity not only hurts a child’s health, it can also affect his/her academic development, as research also shows that healthy children learn more effectively and are higher academic achievers.

Increasing physical activity is a critical component of any initiative to combat childhood obesity and promote the health of students. Unfortunately, many schools are being forced to cut back on PE programs because of lack of resources and competing academic demands and testing. Between 1991 and 2003, enrollment of high school students in daily PE classes fell from 41.6% to 28.4%.

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**Have you moved?**

*Have you changed schools? Has your e-mail address changed? Help us stay in touch!*

Please fill out the form below with the information that has changed.

Name ____________________________________________________________

Mailing Address __________________________________________________

Phone (home) __________________________ (work) __________________________

Email Address __________________________________________________

Fax Number ______________________________________________________

*Return this form to: Kim Thompson, 9360 Highway 166, Winston, GA 30187; Phone: 770-651-6076*
An Exploratory Study of Yoga Practice, Eating Problems, Depression, Anxiety and Desired Body Size Among Undergraduate Men and Women

By Brittany Birnbaum and Sharon H. Thompson

Coastal Carolina University, Conway, SC

Abstract

In a limited number of studies, yoga practice has been found to counteract self-objectification and the negative psychological outcomes such as depression and eating disorders; therefore, this study examined yoga practice and eating problems, depression, anxiety, and desired body size among undergraduate students. Undergraduate students (n = 382) completed a paper-pencil survey with demographic information, height, current and desired weight, yoga practice reports, and scales for eating problems (Eating Attitudes Test -26), depression (Major Depression Inventory), and anxiety (Generalized Anxiety Disorder -7 Scale). Using gender and yoga participation (yes/no) as independent variables and current BMI as a covariate in a General Linear Model Analysis of Variance, females had higher scores (i.e.: greater perceived problems) than males for eating problems (p<.0001), depression (p<.0001), anxiety (p < .0001), and desired BMI (p < .0001). Correlation coefficients revealed anxiety (p < .0001), depression (p < .0001) and yoga practice (p < .05) were positively correlated for all respondents with eating problems (i.e. EAT-26 scores). Results from this study did not find reductions in eating problems scores for those who practiced yoga. Young people drawn to yoga may be struggling with body image issues, anxiety, and depression as a method of coping. Future researchers might examine how eating attitudes might change over time with continued yoga practice.

Introduction

There are more than 10 million women and 1 million men battling eating disorders in the United States alone. Eating disorders are characterized by severe disturbances of eating behavior such as restrictive eating, extreme overeating, and binging and purging and are almost always accompanied by distress about body weight and shape, low self esteem, depression, and anxiety (National Eating Disorders Association [NEDA], 2006).

Body image is defined as the way one views himself or herself when looking in the mirror and the way one feels about his or her body, height, weight, and shape (NEDA, 2006). A negative body image is a distorted perception of body shape, which in turn leads to feelings of shame, self-consciousness, and anxiety about appearance. In America, body dissatisfaction is quite widespread with 25% of men and 45% of woman dieting on any given day. Unfortunately, the media often pushes messages that make it difficult for women to accept their natural beauty. The average woman today is 5’4” and 140 pounds while the average television model is 5’11” and weighs 117 pounds. Fashion models represent only about 1% of the population and are thinner than 98% of American woman (NEDA, 2006).

A poor body image can lead to emotional distress, eating disorders, low self-esteem, dieting, depression, and anxiety (United States Department of Health and Human Services [USDHHS], 2008). Anxiety and depression are two of the most common mental illnesses affecting more than 35 million Americans each year. While anxiety is more prevalent in women than in men, studies are finding that the major gender difference for depression is that women are at higher risk than men to experience a first episode of depression. After that, there is no consistent gender difference in the severity or course of depression (Suicide and Mental Health Association International, 2006).

Anxiety disorders are illnesses marked by persistent, irrational and uncontrollable unease (Anxiety Disorders Association of America [ADAA], 2010). These disorders include generalized anxiety disorder, obsessive-compulsive disorder, and posttraumatic stress disorder. Depression is a condition in which a person feels discouraged, sad, hopeless, unmotivated, or disinterested in life (ADAA, 2010). Anxiety and depression, as well as suffering from a distorted body image can be directly correlated to the onset of eating disorders. Interestingly enough, just as these mental illnesses may increase the predisposition for the development of eating disorders, they can also be a result of a pre-existing problem with food, weight, and unhealthy dieting (NEDA, 2006).

There are many different ways to treat eating disorders and the accompanying side effects. The most successful thus far have been group and family therapy, nutritional counseling, medication, and in severe cases, medical care and monitoring (National Institute of Mental Health [NIMH], 2008). Recently, yoga has received much attention as a means of treatment because of its ability to help in overcoming body image issues and relieving symptoms of anxiety and depression (Haynie, 2007). Yoga is based on creating a mind-body-spirit balance through exercise, breathing, and meditation to help heal, cleanse, and strengthen the body (National Woman’s Health Resource Center, 2008). Yoga has been known to improve energy levels, muscle relaxation, and...
body composition, as well as reduce stress, heart rate, blood pressure, and improve overall physical fitness and strength (NIMH, 2008).

Eating disorder treatment centers such as the Renew Center in Florida and the New York Presbyterian Hospital in New York have yoga courses integrated into the treatment process for patients (Haynie, 2007). Yoga studios around the country are even offering workshops customized for those battling eating problems and low self-esteem. Coston, a recovering anorexic, runs three West Coast eating disorder clinics that use yoga as part of the healing process because she believes it plays an important role in helping patients recover (Haynie, 2007).

Recently, yoga has been incorporated into some physical education classes around the country. At the 2009 Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) National Convention there were several presentations on yoga, including “Yoga for High School Physical Education”, “Power Yoga to Empower You!”, and “Yoga in schools: Ethical Concerns about its Religious Connection” (2009). Due to paucity of research on yoga practice and how it may reduce stress and eating disorders (Douglas, 2009), the purpose of this study was to determine if yoga practice affected eating problems, depression, anxiety, and desired body size among young adults.

**Methods**

Data were collected through a paper and pencil survey distributed to a convenience sample of 386 college-aged students at a Southeastern coastal university. Fifty-seven (n = 57) students were enrolled in an introductory yoga course (n=57) while others (n=329) were enrolled in either introductory health, strength training or group fitness undergraduate courses. Prior to survey administration, this research was approved by the university’s Institutional Review Board.

**Demographic information.** Demographic information obtained from the students consisted of gender, age, height, weight, desired weight, and race.

**Current Body Mass Index (BMI) and desired BMI.** Height and current and desired weight were self-reported. Height was converted to meters and the two values for weight were converted into kilograms and then used to calculate each participant’s current BMI and desired BMI.

BMI is a function of weight adjusted for height and is one of the most commonly used methods of weight categorization (United States Department of Health and Human Services, 1988). BMI has previously been shown to be related to problem eating and body dissatisfaction. After each participant’s current BMI value was calculated, they were then placed into BMI categories of underweight, average weight, overweight and obese. For the purpose of gender comparison in Fisher’s Exact test data analysis, these were collapsed into 2 groups: underweight/average weight and overweight/obese.

**Yoga practice.** Partakers were asked to respond to the survey item, “How many times a week do you practice yoga”? Answers ranged from 0 times per week to > 5 times per week. Those who responded with “0” times per week were noted as not practicing yoga.

**Eating problems.** In order to determine if participants had eating problems, the survey included the Eating Attitudes Test (EAT-26) (Garner, Olmsted, Garfinkel, & Bohr, 1982). This 26 question survey screens for behaviors and beliefs that are similar to those with clinical eating disorders. The EAT-26 has an accuracy of at least 90% when used to diagnose those with and without eating disorders (O’Halloran & Mintz, 2000). The test includes statements such as, “I feel that food controls my life?”, “I avoid eating when I’m hungry,” and “I’m terrified about being overweight.” For all responses, there were 6 answers to choose from: always, usually, often, some, rarely, and never.

**Depression.** To evaluate whether the participants suffered from depression, the Major Depression Inventory (World Health Organization, 2006) was used. The Major Depression Inventory (MDI) is a 12 question self-administered survey, asking participants how often they have felt a certain way. For example, “How much of the time have you felt low in spirits or sad?”, “How much of the time have you lost interest in your daily activities?” and “How much of the time have you felt that life wasn’t worth living?”. There were six answers to choose from, including: all the time, most of the time, slightly less than half the time, and at no time. The MDI received a reliability score of a satisfactory 0.89 as indicated with Crohnbach’s alpha (Smits, Peen, Noteboom, Dekker, & Cuijpers, 2007).

**Anxiety.** Students were also given the Generalized Anxiety Disorder - 7 Scale to measure for characteristics of anxiety problems (Williams, Spitzer, Lowe, & Kroenke, 2006). Participants were asked how many times over the last two weeks they have acted a certain way, for example, “Worrying too much about certain things,” “Feeling nervous, anxious, or on the edge,” and “Feeling afraid something awful might happen.” There were four answers to choose from: not at all, several days, more than half the days, and at no time. The GAD-7 received a reliability score of 0.92 using Cronbach’s alpha. Test reliability was also excellent with an intraclass correlation of .83 (Williams et al., 2006).

**Data Analysis**

Means, frequencies, t-tests, Fisher’s Exact tests, correlation coefficients and analysis of variance were used to analyze the data. To assess interactions between the independent variables of gender (male/female), yoga participation (yes/no) and test for equal current BMI slopes, the GLM Analysis of Variance was used for the dependent variables of eating problems, depression, anxiety, depression, and desired BMI. The model was first run with interaction terms for...
the independent variables and if these were not significant, they were removed and reanalyzed. Least square means were calculated to adjust each dependent for independent variables. Statistical significance was established at p < .05.

Results

Demographic. The final sample consisted of 382 college-aged students since 4 surveys were incomplete. There were 149 men (39%) and 233 women (61%). Race results revealed respondents were 76% Caucasian, 18.1% African American, and 6% of other ethnicity. Overall, t-tests revealed mean age was not statistically significant by gender (see Table 1 for demographic information).

Table 1. Means and percentages for demographic information for undergraduate students (n = 382).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (y)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>20.68</td>
<td>20.41</td>
</tr>
<tr>
<td>SD</td>
<td>4.13</td>
<td>2.77</td>
</tr>
<tr>
<td>Current BMI*</td>
<td>26.09</td>
<td>22.57</td>
</tr>
<tr>
<td>Desired BMI*</td>
<td>26.06</td>
<td>21.06</td>
</tr>
<tr>
<td>Practice Yoga*</td>
<td>8.16%</td>
<td>33.48%</td>
</tr>
<tr>
<td>Male %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .0001

Current Body Mass Index (BMI) and desired BMI. Using a t-test, current and desired BMI scores were found to be significant by gender (p < .0001) with females having lower values than males. Current BMI values were collapsed into two categories (Underweight/Average Weight & Overweight/Obese) to examine differences using a Fisher Exact test. Significant differences were found (p<.05) meaning the categories were different by gender (see Table 2).

Table 2. Current Body Mass Index (BMI): Categories of weight by gender (n=382).*

<table>
<thead>
<tr>
<th>Underweight/Average Weight</th>
<th>Overweight/Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Weight BMI &lt; 25</td>
<td>Weight BMI ≥ 25</td>
</tr>
<tr>
<td>55.70% (n=83)</td>
<td>44.30% (n=66)</td>
</tr>
<tr>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>79.83% (n=186)</td>
<td>20.17% (n=47)</td>
</tr>
</tbody>
</table>

* χ² (1, n = 382), p < .0001.
Note: BMI = Body Mass Index (kg/m²)

Yoga practice. Based on self-reports, 76.3% (n=293) of participants did not report yoga practice. Of the remaining participants, 21.6% (n=83) practiced yoga 1-3 times a week, 1.8% (n=7) practiced yoga 4-6 times a week, and 0.3% (n=1) practiced 7-10 times a week. Chi Square tests were performed here but not valid because 50% of cells had counts less than 5. One-third of women (33.48%) and 8.16% of men reported yoga practice.

A t-test procedure revealed significant differences in current BMI (p = 0.0140) and desired BMI mean scores (p=0.0003) by yoga practice. Those who reported practicing yoga had lower means for both current and desired BMI scores (see Table 3).

Table 3. Current and desired BMI by reports of yoga practice (n=374).

<table>
<thead>
<tr>
<th>Practice yoga</th>
<th>Do not practice yoga</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Current BMI*</td>
<td>22.88</td>
<td>3.09</td>
</tr>
<tr>
<td>Desired BMI*</td>
<td>21.64</td>
<td>2.84</td>
</tr>
</tbody>
</table>

*p < .05

Depression. For depression scores, General Linear Model analysis of variance revealed significant differences only by gender (p<.0001). Females had a significantly higher mean for depression scores of 12.30 (SD= 10.99) compared to males (m=6.99, SD=11.84). This indicates that females scored higher on the MDI than males, showing more incidence of depressive behavior. This does not necessarily mean the women had high rates of clinical depression because the cutoff score for mild depression, moderate depression, severe depression, and major depression are 14, 20, 27 and 33, respectively. No significant differences were found by yoga practice (yes/no) or current BMI for depression scores.

Anxiety. When using the GLM Analysis of Variance to examine gender, yoga participation, current BMI and anxiety, there were significant differences in the GAD-7 scores by gender. Females had a significantly higher mean of 5.50 (SD= 4.9) than males’ score of 3.38 (SD=5.2, p<0.0001). This indicates that females scored higher on the GAD-7 than males, meaning possible increased anxiety problems. A significant interaction was also found for current BMI by gender (p = .0158). For each unit increase in females’ current BMI scores, anxiety scores increased by 27.5%.

Eating problems. Using the GLM Analysis of Variance, there were significant differences in means for eating problems (EAT-26 scores) only by gender. The females had a significantly higher mean of 3.42 on the EAT-26 (SD = 3.35) than males at 1.62 (SD= 3.62, p < .0001). This indicates these women may have increased concern about eating and weight compared to the men.
Desired BMI. Again using the GLM Analysis of Variance, there were significant differences found for both gender and BMI. Females desired a lower BMI (m = 21.83, SD = 1.63) than males (m=24.80, SD=1.74, p < .0001). For all participants, for every unit increase in current BMI score, values for desired BMI increased by 58.5%, p < .0001).

Depression, anxiety, and eating problems. Pearson correlation coefficients were next calculated to determine if eating problems (EAT-26 scores) were significantly correlated with yoga practice, anxiety (GAD-7 scores), depression (MDI scores), and desired BMI. Anxiety and depression were positively correlated with EAT=26 scores having coefficients of .29 (p<.0001) and .36 (p<.0001), respectively. Desired BMI was negatively correlated with eating problems with a coefficient of -.11 (p<.05), meaning as eating problems increased, desired BMI decreased. Yoga practice was positively correlated with a coefficient of .10 (p<.05). This indicates as eating problems increased, respondents reported increased yoga practice (see Table 4).

Table 4. Pearson correlations coefficients for eating problems (EAT-26 scores) as compared to anxiety (GAD-7 scores), depression (MDI scores), desired BMI, and reports of yoga practice.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Correlations with eating problems (EAT-26 scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety (GAD-7 scores)</td>
<td>4.3</td>
<td>4.5</td>
<td>0.29*</td>
</tr>
<tr>
<td>Depression (MDI scores)</td>
<td>10.1</td>
<td>10.2</td>
<td>0.36*</td>
</tr>
<tr>
<td>Desired BMI</td>
<td>23</td>
<td>3.9</td>
<td>-0.11**</td>
</tr>
<tr>
<td>Days per week of yoga practice</td>
<td>.23</td>
<td>4.9</td>
<td>0.10**</td>
</tr>
</tbody>
</table>

*p<0.0001  **p<0.005

Discussion

The purpose of this study was to examine the effect of yoga practice on eating problems, depression, anxiety, and desired body size among undergraduate students. Although no significant results were found in direct correlation with yoga reducing eating problems, depression, anxiety or desired body size, noteworthy results relating to gender differences in these areas are worth reporting.

According to the data collected in this study, it was found that current BMI and desired BMI were statistically significant by gender. The men in the study had higher BMI scores than women and desired a BMI in the overweight category; furthermore, for all participants, as BMI increased, so did desired BMI. Previously researchers have found these same gender and weight differences related to body size satisfaction (Anderson, Lundgren, Shapiro, & Paulosky, 2003; Halliwell & Harvey, 2006; Peterson, Paulson, & Williams, 2007). Anderson et al. (2003) found that women had lower BMI goals than men, and nonoverweight participants had lower BMI goals than overweight participants. Nonoverweight woman chose “dream weights” that would require them to lose almost 10% of their current body weight. Nonoverweight men chose “dream weights” that would mean an increase in BMI. These gender differences are likely due to women’s desire to be thinner and men’s desire to be more muscular. When one has rigid standards for beauty and body size, this often leads to body image dissatisfaction and mental health issues.

Eating problems were statistically significant by gender as well. Females scored higher on the EAT-26 than males did, indicating more risk of eating problems. These women expressed more dissatisfaction with their bodies than men and more women than men expressed a desire to weigh less. These findings were in concurrence with previous studies showing women were more likely than men to demonstrate eating problems and symptoms of eating disorders (Mintz, McCaulay, & Glen, 1988; Striegel-Moore et al., 2009).

The results of this study indicated that, in association with eating problems, for this population there were no significant differences among those who reported yoga practice versus those who did not. This finding is similar to a previous study where researchers found yoga practice had no effect on eating disorders (Mitchell, Mazzero, Rausch, & Cooke, 2007). Mitchell and colleagues recruited body dissatisfied college-age females and randomly assigned them to one of three groups: yoga, cognitive dissonance, and control groups. Post-intervention, the dissonance group was the only group of the three with lower scores on measures of body dissatisfaction, anxiety, desire to be thin and disordered eating [i.e.: less distress in these areas] (2007).

A few researchers have reported that yoga practice increases body satisfaction. One such study found that those who practiced yoga reported greater satisfaction with their appearance and fewer disordered eating attitudes compared to those who did not practice yoga; however, it was also found that for yoga practitioners, more yoga experience, in terms of number of hours practiced per week and level of expertise, was linked with less self-objectification and greater body satisfaction, respectively (Daubmier, 2005). This is one weakness that may have limited the results of this study; this sample of college-aged men and women may not have had much experience in yoga, with few practicing yoga more than twice a week. Fifty-seven of the 91 participants who reported yoga practice were enrolled in an introductory, one-credit class; therefore, additional research is needed to determine if continued yoga practice might impact emotional health and eating problems.

Depression and anxiety scores were higher in these college-aged women than in men. Joiner and Blalock (1995) also...
found co-morbid depression and anxiety were approximately 6.6 times more common among women than men. They also reported that mixed anxiety-depression was more prevalent in women than men. According to Nolen-Hoeksema (1987), biological hypotheses suggest that the greater susceptibility among women is due to genetically transmitted causes due to reproductive cycle mood changes (as cited by Joiner & Blalock, 1995).

In this study, depression and eating problems, as well as anxiety and eating problems were significantly correlated. Some of these disorders may have increased the development of an eating disorder and some could be consequences of the disorder. Many times, eating disorders, depression, and anxiety emphasize each other creating a viscous circle that is difficult to escape.

In conclusion, those working with young adults should be aware of the emotional health needs of females and determine ways to help them cope with possible anxiety, depression, and food/body image issues. Because yoga practice among this college population was significantly correlated with eating problems, this might indicate that young people who enroll in yoga classes may be drawn to take this class as a way to seek body acceptance and to meditate stress. With this in mind, those who teach yoga classes as a part of the physical education curriculum might take care to use body approving statements and educational messages about nurturing your body through proper nutrition and self-care.

There are a few changes to this study that may have improved the results. Techniques used to gain information could be altered for improvement. Using a self-reported, paper and pencil survey to collect data may lead to the risk of over or under reporting. Also, including subjects with greater experience in yoga practice would have been a better predictor of yoga’s role in the treatment of eating problems and the relationship it has on depression, anxiety, and body image.

References


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**Georgia Association for Health, Physical Education, Recreation, & Dance**

**Calendar of Events**

**IMPORTANT DATES**

- **June 14-16, 2011**
  - *GAHPERD* “Bob Moore” Summer Teachers’ Institute, Twin Rivers Middle School, Gwinnett County, GA

- **October 22-25, 2011**
  - *GAHPERD Convention, Marietta Hilton (Cobb)*

- **February 8-11, 2012**
  - SDAAHPERD Convention, Orlando, FL

- **March 13-17, 2012**
  - AAHPERD Convention, Boston, MA

- **November 10-13, 2012**
  - *GAHPERD Convention, Desoto Hilton Savannah*

- **April 23-27, 2013**
  - AAHPERD/SDAAHPERD, Charlotte, NC

- **October 26-29, 2013**
  - *GAHPERD Convention, Marietta Hilton*

- **March 18-22, 2014**
  - AAHPERD Convention, St. Louis, MO

- **November 1-4, 2014**
  - *GAHPERD Convention, Savannah Hilton*

- **March 17-21, 2015**
  - AAHPERD Convention, Seattle, WA

- **October 23-26, 2015**
  - *GAHPERD Convention, Marietta Hilton*
Activity Levels Using Dance, Dance, Revolution in Elementary Physical Education
By Tony Pritchard, Stacey King, Gavin Colquitt and Starla McCollum
Georgia Southern University

Abstract
The use of technology in the school system is at a steady rise, making physical activity fun and challenging for both high- and low-skilled children (Trout & Christie, 2007). Physical educators are moving to utilize technology in physical education. One type of technology that has become very popular is the Dance, Dance, Revolution (DDR). The purpose of this study was to investigate the physical activity levels of elementary students when they were placed on the DDR pads that give feedback versus when they were not on the DDR pads but still participated along with the DDR video. Twenty-one participants wore accelerometers and placed in two groups. On day one, group one played the DDR pads for 15 minutes while group two participated on taped squares behind the DDR pads (i.e., non-DDR pads). On day two, the group two participated on the DDR pads and group one participated on the taped squares. Results revealed no significant difference in activity levels between DDR pads and non-DDR pads ($t(20) = -.146$, $p > .05$). Researchers concluded physical education teachers would not need to purchase DDR pads for every student to ensure maximum participation when using DDR.

Activity levels using Dance, Dance, Revolution in elementary physical education
It is the goal of many organizations to increase awareness of the prevalence of obesity and for individuals to make positive health changes. Obesity has sharply increased since the 1970s, but recent evidence suggests that obesity has not increased over the past ten years (Flegal, Carroll, Ogden, & Curtin, 2010). Despite these optimistic findings, nearly two-thirds of adults (Flegal et al., 2010) and nearly one-third of the children (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010) in the United States are obese or overweight. The logical place to implement an intervention for the obesity epidemic is the public school system, as it is an efficient means of providing opportunities for physical activity and instruction because they reach most adolescents and children (DeGraw, Kanner, & McGinnis, 1991; Kolbe, 1993; Collins, Kann, Kolbe, Pateman, Ross, & Small, 1995). However, few schools provide physical education for students on a daily basis for the length of the school year (Lee, Burgeson, Fulton, & Spain, 2007). Because few students consistently spend time in physical education, health and physical education teachers must expose students to engaging activities that provide students with examples of engaging methods of physical activity outside of the school setting.

Children ages 8 to 18 spend approximately seven hours per day engaged in electronic media totaling more than 53 hours per week (Rideout, Vanderwater, & Wartella, 2010). However, this is not a phenomenon limited to children but rather at typical characteristic of the American home, as 50 percent of children ages 8-18 reported that the television is on a majority of the time in their home (Rideout et al., 2010). The family environment and the time parents spend watching television and using the computer may increase the amount of time children spend watching television and decrease the physical activity levels of their children (Salmon, Timperio, Telford, Carver, & Crawford, 2005). Barradas, Fulton, Blanck, and Huhman (2007) found that parental television viewing and rules limiting television viewing were strong predictors of television viewing among 10-12 year-old and 16-18 year-old boys and girls. The negative effects of television viewing are not limited to preadolescents and adolescents. Television watching among preschool-aged children is associated with elevated levels of body fatness (Jackson, Djafarian, Stewart, & Speakman, 2009). Due to the potential negative effects of media, engagement on physical activity and health status of young people the American Academy of Pediatrics’ Committee on Public Education (2001) urges parents to limit their children to less than 2 hours per day. It has also been recommended by the United States Surgeon General that parent’s limit children’s television consumption as well as keeping televisions out of their children’s bedroom (U.S. Department of Health and Human Services, 2010).

Marshal, Biddle, Gorely, Cameron, and Murdey (2004) found that video game usage was not associated with the activity levels of youth between the ages of 3 and 18. However, the research on the effects of video game usage and physical activity is extremely limited (Sell, Lille, & Taylor, 2008). Due to the limited evidence to explain this relationship Straker, Abbott, Pick, Pollock, Davies, and Smith (2009) are currently employing an experimental design to explain the effect of video game usage on physical activity levels among children ages 10 to 12. The interactive nature of video games...
may separate itself from television as it relates to decreases in physical activity and increases in body fatness, as the relation of television to body fatness may be due to increases in calorie intake when watching television (Jackson et al., 2009). Because of young peoples’ propensity towards electronic media, physically interactive video games may be a vehicle to increase physical activity outside of the physical education setting.

The use of technology in the school system is at a steady rise, making physical activity fun and challenging for both high- and low- skilled children (Trout & Christie, 2007). It is becoming more effective for the development of student learning in general and physical education classrooms. Different types of technology in the physical education classroom are the Wii, the playstation, Dance Dance Revolution, computers, radios, and television including DVD. The advancement in technology has recently become an asset to the motivation of physical activity involvement for children and adolescents (Trout & Christie, 2007). These technology tools serve as extrinsic motivation that can be carried on outside of the education environment.

One of the first and most popular physically interactive games is Dance Dance Revolution (DDR; Sony Computer Entertainment of America, Foster City, CA). The DDR uses state of the art technology to promote physical activity in physical education programs by requiring students to perform certain movements while led by a coordinating pattern on a television. Interactive games such as the DDR may enhance skills such as coordination, reaction time, endurance, speed, and agility (Trout & Christie, 2007). Lee (2008) implemented the DDR as part of a successful weight loss program which produced significant decreases in body composition in an elementary setting. The amount of active movement that is required for this game implies that DDR can be used to promote moderate to vigorous physical activity. Although the DDR does not have the capability to measure the quantity of calories expended, many versions now have a function to estimate calories burned if given the participants weight. The DDR also contains a feature in the workout mode, which allows a player to track fluctuations in total body weight, and as well, calories burned over a specified period. Despite the many benefits of the DDR, it is often impractical for schools to purchase DDR equipment for an entire class. However, the video portion of the DDR provides students with the necessary information to being a dance sequence. Therefore, it may be possible for students to experience the benefits of the DDR without performing the required movements on the dance platform.

The purpose of this study was to investigate the physical activity levels of elementary students when they were placed on the DDR pads that give feedback versus when they were not on the DDR pads but still participated along with the DDR video. It was hypothesized that students who received feedback and are actively participating with the game will be more physically active.

Method

Participants and Setting

Participants consisted of 21 fourth and fifth grade coed students from a local elementary school in southeast United States, with a mean age of 10.38 (sd = .92). Data collection occurred during regular physical education class. Students participated in physical education twice a week for 35 minutes each class. The Institutional Review Board for the Protection of Human Subjects approved the investigation before data collection began. Participants provided informed consent prior to data collection.

Instrumentation

Actigraph (Manufacturing Technologies Inc. Health Systems, Model 7164, Shalimar, FL) accelerometers were worn on the right waist of each participant to measure physical activity levels. Accelerometers were numbered and given to specific participants on testing days. Activity counts were stored in 5-s epoch time intervals. Five seconds epoch time intervals were chosen based on the conclusions by McClain, Abraham, Brusseau, and Tudor-Locke (2008). They stated the 5-s epoch interval yields the lowest root mean squared error when measuring activity levels in fifth grade students (McClain et al., 2008).

Procedures

On testing day one, participants were placed into two groups with group one being placed on the DDR pads and group two being placed behind the DDR pads. Researchers placed tape on the floor that was the same measurements as the squares of the DDR pads. Participants had previous experience using the DDR in a regular physical education setting. Researchers handed participants their numbered accelerometers then started the DDR video game. To ensure consistency, the DDR video games had the same intensity and kept repeating during testing. Participants played the DDR video game for 15 minutes then researchers took up accelerometers and downloaded the data.

On testing day two, the same procedures were followed except group two was placed on the DDR pads and group one was placed on the taped squares behind the DDR pads. Researchers handed participants their numbered accelerometers and played the DDR video for 15 minutes. After the 15 minutes of playing, researchers took up accelerometers and downloaded the data.
Data Analysis
SPSS 16.0 statistical program conducted paired sample t-test to measure any significant difference between the activity levels of participants on the DDR pads and non-DDR pads with a priori alpha set at .05.

Results
A paired-samples t-test compared the mean activity levels of participants on the DDR pads to the activity level of participants when they played the video game not on the DDR pads. The mean activity level on the DDR pads was 151.04 counts.5s⁻¹ (sd = 66.51) and the mean activity level non-DDR pads was 155.46 counts.5s⁻¹ (sd = 114.45). Results revealed no significant difference of participants activity levels when on the DDR pads compared to non-DDR pads (t (20) = -.146, p > .05).

Discussion
In the United States, approximately two-thirds of adults (Flegal et al., 2010) and one-third of children (Ogden et al., 2010) are overweight or obese. Although increasing the time spent in physical education is a recommended intervention to prevent childhood obesity (U.S. Department of Health and Human Services, 2010), most of the nation’s schools do not provide students with adequate opportunities to meet this recommendation (Lee et al., 2007). If students are to improve their current levels of fitness, it will have to occur outside of the physical education setting. Therefore, physical education classes must present students with enjoyable, positive activities that promote high levels of moderate to vigorous physical activity to produce positive affect, which may increase students' physical activity in other settings (Lox et al., 2003). The DDR is a program, which uses technology to promote enjoyment while engaging in physical activity. Given young people’s affinity to electronic media (Rideout et al., 2010), using the DDR in physical education classes can provide students with a positive experience(s) while in engaging in moderate to vigorous physical activity.

The results of the investigation found that there were no differences in physical activity levels between groups (i.e., DDR pads vs. non-DDR pads). The lack of difference between groups is likely attributed to the fact that all students were all able to see the cues on the screens during the performance and the scores for total performance was not a significant factor in students’ completion of the required activities. These findings have significant implications for physical education teachers. While the purchase of DDR pads for an entire class or physical education program may not be feasible, it is likely that many schools could provide some means to procure funds to purchase a single DDR set (i.e., pad and video included). Due to the potential benefits of physically interactive games on physical activity levels its associated benefits, members of the school leaders, parents, and members of the community may be more likely to provide fiscal support so that physical education programs may purchase a DDR.

The interactive nature and students’ affinity for fun, engaging activities suggest that the DDR may also be an effective means to provide students with opportunities for physical education outside the classroom setting. It has been suggested that schools provide students with opportunities for physical activity during after-school hours and seek joint-use agreements with community-based organizations that promote physical activity (U.S. Department of Health and Human Services, 2010). The DDR may provide a common medium for students to exercise in a social setting. Social support can play a vital role in exercise and physical activity settings (Lox et al., 2003). When individuals exercise in groups they are provided with companionship support which causes the group to focus on enjoyment rather than the negative aspects (i.e., exhaustion, discomfort, tediousness) which may prevent the continuance of positive exercise behavior (Wills & Shinar, 2000).

Conclusion
Teachers who decide to use DDR video game in their physical education classes do not need to have a pad for every student. This research found that students attempt to follow the game even when they are not on the DDR pads. Teachers can put tape on the floor with arrows or poly spots to encourage students to keep up with the video game and get the same benefits of physical activity compared to having the official DDR pads.

References


Flegal, K. M., Carroll, M. D., Ogden, C. L., & Curtin, L. R. (2010). Prevalence and trends in obesity among US adults,


2011 GAHPERD CONVENTION PRE-REGISTRATION FORM
Marietta Hilton Convention Center
October 22-25, 2011, SUNDAY-TUESDAY

Registration fees are reduced for members who pre-register for the 2011 GAHPERD Convention. If you work or teach in Georgia, you must be a member to attend the convention. Please complete this pre-registration form and send it to the address below. Your envelope containing your completed form and check must be postmarked on or before October 1, 2011. Housing information and this form will be available on the GAHPERD website soon: www.gahperd.org. You may renew membership online now or when you arrive at convention. Checks must be made payable to GAHPERD for the total amount indicated on this form, and submitted along with this form to:

Kimberly Thompson, GAHPERD Executive Director, 9360 Highway 166, Winston, GA 30187.

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<th>After October 1</th>
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*Includes Sunday evening banquet ticket

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Must be postmarked on or before October 1, 2011.
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Kim, Irene, Cam Kerst Davis and Bill
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Twin Rivers Middle School, Gwinnett County, GA
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Location of Summer Institute:
Twin Rivers Middle School
2300 Braselton Hwy.
Buford, GA 30519
Contacts: Susan Whitlock, suwhitlo@kennesaw.edu
Chuck Truett, chuck_truett@gwinnett.k12.ga.us

Pre-registration deadline: Postmarked on or before May 20, 2011 (after this date attendees must register on-site and pay on-site fees). School Systems: Please send a completed form for each attendee with a school system check. Two (2) staff development units (PLU’s) will be available to attendees. All attendees should check with their school system staff development coordinator for prior approval and needed documentation.

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Directions: From Atlanta travel north on I-85 and take exit 120, turn right onto Hamilton Mill, then take the first right onto GA-124S/Braselton Hwy. Twin Rivers Middle School is 2.8 miles on the right.