<u>In this issue</u>			
	ISSUE 47	VOLUME 1	2
Georgia AHPERD Highlights3-4			
<b>SHAPE America Southern District</b>			
Convention6-7			
SPARK8			
Advocacy Column9-10			
Journal Submission11			

# GAHPERD Journal

015

**Peer-Reviewed Articles** 

Health Teaching Tips......12
Physical Education Tips......13
Dance Tips......14

Increasing Student Engagement in Physical Education.....15

NCAA Division I Head Coaches' Experiences with Eating Disorders and Disordered Eating in Female Athletes: A Qualitative Analysis......21

Jump Rope for Heart.....33
Updates and Reports.....34

The Georgia Association for Health, Physical Education, Recreation and Dance, Inc. is affiliated with the American Alliance for Health, Physical



### **Mission Statement**

GAHPERD, Inc. is a non-profit organization for professionals and students in related fields of health, physical education, recreation and dance. GAHPERD, Inc. 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.



Message from the Editor:

As our profession continues to grow, change, and adapt to the many needs facing educators, I trust you will continue engaging in professional development opportunities in some way. One significant way is to read current literature related to our field(s) of study.

In this issue of the GAHPERD Journal, you will find two peer-reviewed manuscripts, each from a different area of expertise and research. These articles are from the University of Alberta, and a combined article from the University of Wisconsin– Madison, Georgia Southern, and Georgia State University.

In addition to the peer-reviewed research articles in this current issue, you may have also had the opportunity to participate in our recent SHAPE America Southern District Convention in Atlanta, GA (highlights on p. 3-4).

Special thanks to Doris Morris, Karen Clevenger, and Babs Green for submitting the teaching tips that accompany this issue.

If you have any questions or comments, please feel free to contact me at bheidorn@westga.edu for more information.

#### **GAHPERD Editorial Board**

#### Reviewers

Dr. Graeme Connolly: Georgia Regents University
Dr. Rachel Gurvitch: Georgia State University
Dr. Jeff Johnson: University of West Georgia
Dr. Jackie Lund: Georgia State University
Dr. Ellen Martin: Columbus State University
Dr. Bridget Melton: Georgia Southern University

Dr. Brian Mosier: University of West Georgia
Ms. Lynn Roberts: Armstrong Atlantic University
Ms. Laura Russ: Georgia Regents University

Dr. Emily Vall: Georgia Perimeter College
Dr. Shannon Williams: Georgia State University

**Editor** 

Dr. Brent Heidorn: University of West Georgia

# Age is no barrier. It's a limitation you put on your mind.



Jackie Joyner-Kersee

#### **GAHPERD Executive Board:**

President

Brent Heidorn bheidorn@westga.edu

**President-Elect** 

Bridgette Stewart bstewart@westga.edu

**Past-President** 

Brian Devore briangahperd@comcast.net

**Executive Director** 

Kim Thompson kthompson.gahperd@att.net

Parliamentarian

Jeff Johnson jeffj@westga.edu

**Advocacy Coordinator Co-Chair** 

Mark Anderson mark.anderson@cobbk12.org
Brenda Segall bzsegall@gmail.com

**VP-Dance** 

Karen Clevenger kclevenger@westga.edu

VP-General and VP-Elect

Peter St. Pierre pstpierr@kennesaw.edu Cindy Slayton cincslay@hotmail.com

**VP-Health and VP-Elect** 

Doris Morris dorism@westga.edu

VP-Physical Education and VP-Elect

Babs Greene bgreene4@gsu.edu

Chair, Adapted PE

Cathy L. Smith cathy.smith@cobbk12.org

Chair and Chair-Elect, Elementary PE

Stephanie Lawson stephanie.lawson@cobbk12.org Christy Crowley christycrowley@hotmail.com

Chair and Chair-Elect, Middle School PE

Tasha Guadalupe guadalupet@fultonschools.com

Chair and Chair-Elect, High School PE

Myss Johnson-Jelks mtjelks@atlanta.k12.ga.us Louise Lawler lawler2dance@yahoo.com

Chair and Chair-Elect, College/ University

Trey Burdette gburdette@georgiasouthern.edu Sonya Sanderson slsanderson@valdosta.edu Chair, Exercise Science

Jeffrey T. Johnson jeffj@westga.edu

**Chair, Sport Management** 

Jennifer Beck Willett jbeck@kennesaw.edu

**Chair, Future Professionals** 

Kaci Nalley knalley2@student.gsu.edu

**District Reps** 

**SE:** Lynn Roberts robertly@armstrong.edu

Jane Lynes jane.lynes@armstrong.edu

Metro: Susan Whitlock suwhitlo@kennesaw.edu

West: Jana Forrester

jana.forrester@carrollcountyschools.com

East: Vacant

SW: LaTonya Conner

latonya.conner@asurams.edu

NE: Vacant

**NW:** Anita Dodd anita.dodd@cherokee.k12.ga.us

Journal Editor

Brent Heidorn bheidorn@westga.edu

Webmaster

Stephanye Peek sdpeek@att.net

JRFH and HFR Coordinator

Emily Adams em.adams@mindspring.com

Chair, Awards Committee

Vacant

**State Fitness Coordinator** 

Brian Mosier bmosier@westga.edu

**Future Professionals Advisor** 

Shannon Williams swilliams62@gsu.edu

Chair, Past President's Council

Jacque Harbison jacque.harbison@comcast.net

Co-Liaison, GA DOE

Therese McGuire tmcguire@doe.k12.ga.us Mike Tenoschok Tenoschok@aol.com



# Highlights from Georgia AHPERD as Presented at the SHAPE America Southern District Convention

#### 1-Convention Highlights

Georgia did not host a state convention in the fall of 2014, as we have been preparing for the combined state and regional convention scheduled in Atlanta in February, 2015. We look forward to our annual state convention in the fall of 2015, scheduled October 25-27 in Marietta, GA.

In addition, we enjoyed two productive professional development workshops this past year. They included the annual Robert W. Moore Summer Institute in Douglasville, GA (June, 2014) and a district workshop at the University of West Georgia in Carrollton, GA (September, 2104). Both workshops boasted more than 100 participants, earning professional learning units, engaging in multiple meaningful sessions.

Most recently, the annual Share the Wealth Conference on Jekyll Island took place in January (2015). The conference welcomed more than 550 participants from all over the southeast and different parts of the United States and Canada.

#### 2-Membership

At the time of this report, Georgia AHPERD has more than 700 current members.

Promotional Initiatives – We have worked diligently to promote our organization through multiple social media outlets, an active website with scholarly publications and newsletters, and significant plans for continued district workshops and other professional development opportunities.

#### 3-Let's Move Active Schools

State Coordinator – Brian Devore

Promotional Initiatives – Georgia has 526 LMAS registered schools (6<sup>th</sup> overall); at the recent Share the Wealth Conference an exhibit booth was specifically dedicated for LMAS, a presentation was given on LMAS, and multiple advertisements, publications, and email blasts have been distributed in Georgia.

#### **4-Joint Projects**

Promotional Initiatives – Georgia has worked diligently on a legislative handbook.

In addition, multiple joint projects have been taking place in Georgia (district workshop at the University of West Georgia, recognition and meetings at our state convention for district coordinators, and demonstrations at Share the Wealth and SHAPE Southern District. We continue to invest time and energy to raise involvement in the state.

#### 5-Advocacy

State Coordinator - Georgia has two co-chairs for advocacy (Mark Anderson and Brenda Segall)

Promotional Initiative – Georgia has four individuals participating in SHAPE America Speak Out! Day in the nation's capital. Specific plans are ready for engaging in multiple conversations with legislators and other key stakeholders. Regular updates are maintained in the Georgia legislative handbook. Collaborative meetings are regularly held with school partners, local agencies, and community advocates for health and physical activity; partnerships continue to expand as we explore options for additional levels of success among constituents.

Also in 2014, we included a special "advocacy" day in which we invited Carly Braxton, Sandra Sims, and various key stakeholders from Georgia for a one-day workshop, targeting specific needs in our local health and physical education programs. At the SHAPE SD Convention, special sessions have been arranged for many Georgia stakeholders, including meetings with Dr. Brenda Fitzgerald.

#### 6-Other

J. D. Hughes has been named the Southern District Elementary Teacher of the Year award and Dave Senecal is the Southern District Middle School Teacher of the Year. Georgia AHPERD has several members with committee representation and professional responsibilities with both Southern District and SHAPE America, including editorial boards, leadership committees, book authors, and more. We continue in our corporate partnership with SPARK and works are in progress for additional corporate sponsors.

## Welcome to Georgia! (A reprint from the SHAPE America Southern District Convention Program)

It is an honor and a privilege to participate in the SHAPE America Southern District Convention in Atlanta, February 18-21, 2015. We welcome you to Georgia and trust that your time in our state's capital is safe, enjoyable, professionally rewarding, and perhaps even relaxing.

Georgia AHPERD is pleased to partner with the Southern District and host such a large, well-attended convention. On behalf of the many members of Georgia AHPERD, I want to thank the Southern District board members and Donna Dunaway, for the far-reaching efforts to plan, organize, and manage such a great event consisting of all 13 states in the Southern District. In addition, I would like to also thank the members of the Southern District Convention planning committee, and numerous other individuals who helped make this convention possible. Special thanks to Georgia resident Jacque Harbison and her convention staff for their strong contributions on our behalf. I also recognize the many presenters from within and from outside of Georgia for your research efforts and practical experiences, helping to move us forward in relation to our vast array of professional endeavors.

For those of you who may be new to our professional organizations, I am glad you decided to attend and participate in this year's combined state and regional convention in Atlanta, Georgia. We trust the many sessions focused on physical education, health, recreation, dance, physical activity, advocacy, coaching, and more, will inspire you for greatness as you help others engage in a physically active and healthy lifestyle. I hope you quickly implement the outstanding information learned from the various parts of the program in your local area(s) of expertise. This annual convention truly is one of the best professional developmental opportunities within our field(s) of work and study.

In case you are not familiar with the Georgia AHPERD, please see the following highlights pertaining to who we are and what we do. Perhaps you might even consider becoming more closely connected with our organization, serving the profession in various ways. I highly value the opportunity I have to serve the association as President through the fall of 2015. If there is anything I can do to assist you in your professional development needs, please let me know (bheidorn@westga.edu).

#### Georgia AHPERD Highlights:

More than 700 members on an annual basis; our membership is steady and growing;

Three annual professional development opportunities each year, including the Share the Wealth Physical Education Conference in Jekyll Island each January, the Robert W. Moore Summer Institute each June, and the state convention each October/November;

Individuals within our membership regularly receive state, regional, and national recognition as a result of peer-reviewed presentations and publications;

The *GAHPERD Journal* and the newsletter (GAME) are published on a regular basis and uploaded to our website (www.gahperd.org);

A corporate partnership agreement with SPARK/Sportime, a nationally recognized leader in physical education curriculum and resources:

Regularly maintained media efforts, using Facebook, Twitter, and more;

Consistent partnership with the American Heart Association through the Jump and Hoops for Heart programs;

Various district workshops and professional development opportunities facilitated in different parts of the state each year; and Advocacy efforts and collaboration with many stakeholders, including efforts related to governmental leaders and legislation.

Please consider joining us for the fall 2015 Georgia AHPERD convention in Marietta, GA. Finally, I trust you feel the Southern hospitality we know and love in the state of Georgia. Perhaps you can see one or more of the many tourist attractions while you visit Georgia for this year's convention, while dodging your way through the Atlanta traffic!

Best wishes to you and enjoy the SHAPE America Southern District Convention, Brent Heidorn, GAHPERD President





Southern District Convention





















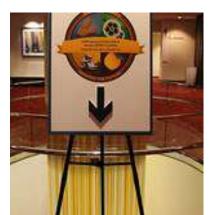
















Southern District Convention

# FANTASTIC 5 WORKSHOPS!

The SPARK Speakers Bureau makes it easy to bring a dynamic and inspirational trainer to your district or school. That's right! A select group of content experts who are superstar presenters (some former SHAPE TOYs) are ready to travel to your school and conduct one of these full-day workshops for you and your colleagues in 2015! Contact us and we'll talk about what you want your teachers to know and be able to do, then customize the training to meet THEIR needs. Here's our Fantastic 5 topics to choose from:



Physical Education Technology - R U Mad for iPad?







**Common Core and YOU: Making Connections** 

Maybe it's OK to Eat & Run?





I'd Rather Chew Aluminum Foil than Teach Dance!

Can't bring SPARK to you? Come to SPARK!

Visit www.sparkpe.org/institutes to learn about our 2 day

"Institutes" for each program in beautiful San Diego!

www.sparkpe.org

1 800 SPARK PE

spark@sparkpe.org

#### **Advocacy Column**

#### March 2015

GAHPERD sent 6 members to the **2015 SHAPE America Speak Out Day** in Washington, D.C. The delegation met with staffers representing the following: Sen. David Purdue, Sen. Johnny Isakson, Rep. Barry Loudermilk, Rep. Jody Hice, and Rep. David Scott. Rep. John Lewis was recognized as a co-sponsor of the Physical Act.

#### Meetings supported:

The passage of SB 392 and HB 2150 (Physical Act)-Reauthorization of ESEA including health and physical education as a core subject.

PEP Grant funding as a stand-alone program to continue funding levels of \$74.6 million.

The GAHPERD Advocacy Co-Chairs planned and met with **Community-Based Advocacy Partners** on 2/20/15 in conjunction with the SHAPE Southern District Convention. Strategic Partners listed the following as areas of support for future collaboration.

- Align organizational priorities to have a "common voice"
- Impact consistent data collection among agencies
- Increase communication through PTA's with school administrators on systems/environment/policy as they impact the health, wellness, and academic achievement of students
- Expand collaboration with public health, education, and transportation, law enforcement, <u>Georgia Assn. of</u> Educational Leaders, Charter Schools, 4H, teacher organizations, Georgia Organics
- Develop info graphic to exemplify how we work together and are able to meet student/teacher/principal needs
- Showcase best practices of disparate populations and how they have shown success in nutrition, PA, and wellness
- Address the lack of health and physical education in Georgia Middle Schools. Encourage Bill Sponsor (AHA) related to Middle School Health and Physical Education
- Support the reauthorization of the GA Shape Act
- Support the <u>GA SHAPE Initiative</u>
- Support possible recess bill that has been supported by the GADOE Superintendent Richard Woods.
- Endorse the Legislative Certificate Program (Ga. State Health Policy Center) to educate/fund on healthrelated efforts

Brenda Segall represented GAHPERD at the 2015 Children's Day on the Capital.



Special thanks to Mark Anderson and Brenda Segall for submitting the content on this page





Special thanks to **Brenda Segall** for volunteering her time and efforts at the Capitol on Saturday, March 7, 2015. Because of Brenda (Georgia AHPERD Advocacy Co-Chair), we were able to support Healthy Kids Day in Georgia (pictures below).





#### Journal Submission: How do I submit an article to the GAHPERD Journal?

#### **Publication Guidelines**

The GAHPERD Journal is a peer-reviewed professional journal intended to meet the needs of health, physical education, recreation, and dance professionals in Georgia. It is also intended to be a forum for the discussion of new ideas and pertinent issues facing the profession. Before submitting a manuscript to *The GAHPERD Journal*, please be mindful of the following:

- Manuscripts submitted to The GAHPERD Journal must not be submitted to other publications simultaneously.
- Manuscripts with practical implications for educators at all levels are given priority.
- Acceptance is based on originality of material, significance to the profession, validity, and adherence to the prescribed submission requirements.

#### **Manuscript Preparation**

Manuscripts should be double-spaced, including all references and quotations, formatted for 8-1/2" x 11" pages, using Times New Roman 12-point font. Manuscripts should be word processed in accordance with the following guidelines:

- Prepare the manuscript in Microsoft Word and submit it as an e-mail attachment.
- Number all pages and lines throughout.
- Submit all tables, photographs and figures as separate documents, not within the body of the manuscript.
- Limit the manuscript to approximately 8 to 12 pages.
- Include a cover page with the title of the manuscript, full name(s) of the author(s), academic degrees, positions, and institutional affiliations. List the corresponding author's address, telephone number, and email address.
- The writing should be simple, straightforward with clear, concise, and logically presented concepts. Use examples, capture the readers' interest, and stimulate the audience's thinking.
- Keep paragraphs short.
- Have a colleague review the manuscript prior to submission.
- Review all references as the authors are responsible for accuracy. For reference style, follow the Publication Manual of the American Psychological Association (APA-6<sup>th</sup> edition).
- Submit graphs, charts, and tables separately. Clearly label and title all illustrations according to APA guidelines.
- Photographs are encouraged. When submitting photographs, be sure they are digital and at least 300 DPI in a jpg format.

#### **Manuscript Submission**

Send all manuscripts to Dr. Brent Heidorn at <u>bheidorn@westga.edu</u>. Manuscripts will be acknowledged by email when received.

#### The Review Process

The Publications Editor will distribute all manuscripts to three members of the Editorial Board for peer-review.

#### **Publication**

Copyright: Accepted manuscripts become the property of the Georgia Association for Health, Physical Education, Recreation and Dance. Upon request, authors receive permission to reprint their own articles. The GAHPERD Journal is listed in the Physical Education Index.

#### **Manuscript Tracking Policy**

Manuscripts undergo a blind review using criteria of accuracy and applicability to the practical concerns of the target audience. Authors will receive manuscript acceptance, revision or rejection letters via email in about six weeks. Authors asked to revise their manuscripts will be informed how much time they have for resubmission, always given at least two weeks. Upon acceptance, the Publications Editor will send a formal acceptance email to all corresponding authors whose manuscripts have been accepted for publication. The Publications Editor will select publication dates for all manuscripts based on an established editorial calendar. Authors will be notified in advance, and edited manuscripts will be submitted to authors for comments prior to publication.

# Tips from the Health Division

School nutrition has been a major focus for some time now, and it should be. As many of you know, Congress passed the Healthy, Hunger-Free Kids Act back in 2010. According the American Heart Association, "Our kids are now eating 16 percent more vegetables and 23 percent more fruit. Children who participate in the National School Lunch Program eat greater amounts of healthy foods, get more essential vitamins and minerals, drink fewer sugar-sweetened beverages and have an overall better-quality diet".

The American Heart Association has an interactive page "Nutrition Across the Nation". Below is a summary of where Georgia currently stands in regards to school nutrition.

### Georgia

- The current obesity rate of 10-17 year olds is 16.5%
- · 84% of school districts are successfully serving healthy meals that meet strong nutrition standards
- · 92% of school districts need at least one piece of equipment to better serve nutritious foods
- · 65% of districts need kitchen infrastructure changes in at least one school
- · 1,236,304 students participated in a school lunch program in 2014
- · 626,650 students participated in a school breakfast program in 2014

Check out the website: <u>Nutrition Across The Nation</u> (http://www.heart.org/ HEARTORG/Advocate/Nutrition-Across-the-Nation-Map\_UCM\_472067\_SubHomePage.jsp)

Special thanks to Doris Morris, VP-Health, for submitting the content on this page



### Measuring the Quality of Physical Education in Georgia

In a recent Atlanta Journal-Constitution article (November 12, 2014), *Rating Georgia Teachers a Tricky Proposition*, the authors discuss how the core academic areas are evaluated using standardized student test scores, but the other subject areas – art, music and "gym" – have no high-stakes tests.

As Georgia physical educators, we should be very concerned that we have no valid way(s) to determine whether students are meeting performance learning outcomes. Without valid performance-based assessments to document student achievement, we will continue to be viewed as "gym" teachers who do not have significant contributions to the education of children.

At the February GAHPERD Executive Board meeting, a decision was made to establish an ad-hoc committee to discuss revising the Georgia Performance Standards for physical education. The committee would also examine the process of creating performance-based assessments that effectively measure student learning. This progress is an exciting step that will hopefully result in significantly improving the quality of physical education in Georgia.

The National Association for Sport and Physical Education (NASPE) defines a highly qualified physical education teacher in the 2007 Position Statement: *What Constitutes a Highly Qualified Physical Education Teacher?* In this statement NASPE acknowledges that "highly qualified physical education teachers will be certified to teach by virtue of having completed an accredited physical education teacher education (PETE) program." Data obtained from the GAPSC indicates that 82% of the physical education teachers currently teaching in Georgia public schools completed an accredited PETE program.

If we truly want to provide quality physical education for Georgia's children, we must *improve* performance standards and *establish* assessments aligned with these standards. We must also focus on eliminating the test-in option for HPE certification.

Special thanks to Babs Green, VP-Physical Education, for submitting the content on this page



## Kaleidoscope Kudos

**By Karen Clevenger** 

Many years ago beneath an island sun, breezy palm trees, and rushing ocean waves, a large group of physical education teachers and recreation leaders were gathered at the Holiday Inn at Jekyll Island for their annual state conference. Within this group of members seated in the banquet hall, were two very excited (and revered) women who awaited a special part of the program; the announcement that the membership had voted to add the division of "DANCE" to their organizational name...GAHPER"D". The two women, **Jane Doss** and **Jacque Harbison**, spearheaded not only that strong addition of a new interest area for our members, but encouraged the beginning of a special showing of dance talent from around our state: to be known as KALEIDOSCOPE Dance Concert.

Thirty-plus years later these ladies must have been so proud to see the enthusiasm and variety of dance styles displayed at the SHAPE-America Southern District KALEIDOSCOPE, held at our own Atlanta Hyatt Regency hotel in February 2015. The concert included a mixture of modern, jazz, swing, hip-hop, Mediterranean, lyrical, and show dance, with performances by large groups, small groups, duet, and solo, representing each gender, and every generation! And, most exciting at this year's concert, was the inclusion of the very young performers who already LOVE TO DANCE.

Kudos to **Stephanie Lawson**, **Cathy Smith**, and **Stephanie Hopkins** who spent extra hours every week with their young students to prepare a dance number that would give these students an opportunity to show their movement skills before an appreciative audience. Also, **Kristen Senecal**, who brought her dance company from her studio to display the creative symmetry of "storytelling" through dance movements and expressions. Of major note was the 11 yr. old **Madison Mosier** (solo) who so gracefully and courageously encouraged us to witness her beautiful interpretative choreography. The **UWG WOLFPRINTS** went above and beyond expectations, and, **Jenee' Marquis** captivated the audience with her precise dance moves while also balancing a sword....WOW!

But, this kudos list of fine teachers and performers would not be complete without a special recognition of **Dr. Bob Reeves** and his 1940's Swing style! If ever there was a blend of sport and dance, he is it!!! At 76, he is the consummate physical education teacher: football, swimming, tennis, self-defense, strength training, jogging, baseball, soccer......and BALLROOM DANCE. BOB....YOU ROCK!!!



### **Increasing Student Engagement in Physical Education** David Chorney & Robert Stecyk University of Alberta, Edmonton, Alberta, Canada

#### Introduction

Participation in regular physical activity is important for the prevention of childhood obesity, cardiovascular disease, type II diabetes and is associated with improved physical, mental, and emotional well being (Anderson, 2002; Lyu & Gill, 2011; Springer & Hoelsher, 2009; Thorp, 2013). Given the declining levels of physical activity concerning the present generation of youth, and the importance of school physical education (PE) in combating this inactivity, it becomes imperative to understand factors that can contribute to increasing student engagement in the physical education setting. Increasing physical activity through structured PE classes in school is a great starting point, but only if those classes deliver a quality program (Silverman, 2011). Physical education programs that provide opportunities for a wide variety of physical activity and promote the development of physical activity knowledge, skills, and attitudes are essential components of such a program (Liukkonen, Barkoukis, Watt, & Jaakkola, 2010; Thorp, 2013).

Student engagement has long been accepted in educational research as a primary facilitator of school success and student learning (Bevans, Fitzpatrick, Sanchez & Forrest, 2010). Student engagement is composed of behavioral, affective, and cognitive indicators of students' investment in and connections to their academic environments (Bevans et al., 2010). Engaged learners experience a sense of connectedness with, and as a result make important contributions to, the meaning and value of what is studied (Anderson, 2002). Engagement occurs when students feel that they can interact with the content and realize that their lives are in some way "touched" by the content (Chen, Chen, & Zhu, 2012). Students need to be invited to work with their own reasoning and perspective dynamically to promote the quality of engagement (Bevans et al.,

as well as develop and contribute personal insights that further enrich the understanding they, their fellow learners, and teachers derive from class instruction and the learning experience (Bibik, Goodwin, & Orsega-Smith, 2007). Accordingly, students are recognized as active participants in the learning process rather than simply receptacles for knowledge created by others (Anderson, 2002).

Since teacher depictions of the learning process differ from students' interpretations, which are based in a reality that has a different context and culture (Bibik et al., 2007), teachers must learn to probe, observe, and listen to cues that go beyond pedagogical mechanics and curricular outcomes. Attention to the phenomenological aspects of learning requires an attitude of awareness to the things that matter to our students, to that which brings teachers in touch with the experiences of students, and ultimately to the "good" contained within such experience (Anderson, 2002). If the goal of instruction is to trigger engagement, then the teacher must be in touch with the learner's reasoning and feelings about his or her performance. Both the teacher and student must create a relationship that recognizes and fully appreciates the value of subjective knowledge gained through experience, reflection, dialogue, and experimentation (Anderson, 2002).

In physical education environments, engaged students persist in active and effortful attempts in order to master the knowledge and skills that they encounter, with the hope that they will exhibit a preference for and enjoyment of physical activity both during and after formal schooling has concluded. For school reform efforts to enhance student engagement, it is necessary to identify amenable student, school, and classroom characteristics that operate 2010). As such, a logical step toward developing effective physical education programs in schools is to identify student and classroom factors that increase engagement in physical education. Research has identified that perceived physical competence, skill practice with active instruction, and positive interrelationships alongside social motivation are key components that positively affect student engagement in physical education.

#### **Perceived Physical Competence**

Students' perception of their own competence in physical activity, or the degree to which they feel competent in physical movement, exercise, and sport plays a critical role in predicting engagement regarding both in-class and out-of-class activity (Furlong & Christenson, 2008). This relationship has been shown to be reciprocal such that prior feelings of competence in physical education affects subsequent physical activity behavior, and prior behavior affects subsequent perceived competence (Bevans et al., 2010). In addition, body image, a related but conceptually distinct domain of self-concept, is also a positive correlate of physical education engagement and physical activity levels (Silverman, 2011). Defined as confidence in one's own physique and personal appearance, body image is commonly considered a positive outcome of physical activity. PE programs that incorporate physical activities and promote attitudes that foster an environment of mutual respect for each individual can further develop a positive climate for student engagement.

To gain a better understanding of factors affecting student engagement in PE, it is essential to distinguish between student-and system-level facilitators of physical education engagement (Furlong & Christenson, 2008). At the student level, understanding how individual characteristics influence student engagement should guide identification of students in need of engagement-promoting interventions. Garn, Ware, and Solomon (2011) suggested that per-

ceived competence in physical education was found to positively predict physical activity levels, both directly and through its relation with PE engagement. They also stated that enhanced body image positively influenced physical activity levels by increasing students' engagement in physical education classes (Garn et al., 2011). Therefore, interventions should target students with poor perceived competence and body image beliefs and PE teachers should focus on eliminating these negative attitudes. Research also indicated that students' self-concept and competence beliefs in physical education are enhanced through the praise and encouragement of teachers and classmates as well as when students are provided with opportunities to participate in physical activities without evaluative judgment or summative assessment (Bibik et al., 2007). As such, it is recommended that teachers create a learning environment in which students are encouraged to define success in terms of effort and personal gain, rather than performance relative to that of other students or pre-determined standards (Furlong & Christenson, 2008).

At the system level, understanding how contextual factors influence student engagement guides the selection of efficacious instructional strategies for PE teachers (Bevans et al., 2010). Contrary to the core assumptions of sport/game-based curricula, Furlong and Christenson (2008) and Garn et al. (2011) indicated that an overreliance on game play could have negative effects on student engagement in physical education settings. Game play environments typically create a performance-oriented learning environment where students focus on interpersonal competition and view success in terms of winning/losing rather than on improving one's personal best (Garn et al., 2011). Performance climates reinforce normative comparisons, center on interpersonal competition, and generate disengaging consequences for making mistakes or errors (Bevans et al., 2010). Further, literature revealed that an emphasis on game play had detrimental effects on PE engagement regardless

Chen et al., 2012; Silverman, 2011). As such, physical education teachers should take these research findings surrounding students' perceived physical competence into consideration when developing and structuring their school physical education programs.

#### **Skill Development**

In physical education, teachers should encourage students to think about what they can do to increase their knowledge and understanding of game play and tactics as well as their individual skill development (Anderson, 2002; Furlong & Christenson, 2008; Solmon, 2006). Mastery climates in physical education focus on skill practice and support hard work, active instruction and learning, cooperation and task mastery, while considering the student as an integral part of the learning process (Springer & Hoelscher, 2009). Within physical education, student engagement can be increased by creating climates that encourage students to define success as a measurement of personal gain (Dyson & Coviello, 2008). It can also be achieved through hard work and a desire to learn. Students feel satisfied when they develop new skills and view mistakes as part of the natural learning process (Springer & Hoelsher, 2009). Thus, activities focused on skill development can enhance student engagement in physical education, whereas an overreliance on competitive activities that involve peer comparisons may actually decrease engagement among students; particularly those with initially lower perceived competence (Chen et al., 2012; Thorp, 2013).

Consistent with recommendations for promoting a mastery -oriented learning environment, the proportion of class time devoted to skill practice is positively associated with engagement among students with low perceived competence (Garn et al., 2011; Solmon, 2006). However, research also indicated that it is unrelated to engagement among students with high competence beliefs (Garn PE teachers who are able to find ways to consistently reinforce the

of students' perceived competence or body image (Anderson, 2002; et al., 2011; Thorp, 2013). Students developed competence through engagement in mastery tasks, such as skill practice, which facilitated perceived competence and individual motivation to participate in PE class (Solmon, 2006). Physical education teachers that allocated a much larger proportion of time and resources to skill practice and development as a means of creating a mastery climate enhanced student engagement and activity levels (Bevans et al., 2010).

> Despite its prevalence in the current physical education class setting, the amount of time devoted to game play was negatively related to perceived competence and student engagement in physical education (Springer & Hoelsher, 2009). Although significantly less time was devoted to skill practice in PE settings that emphasized gameplay, the proportion of class time spent on developing physical skills is still positively associated with student engagement (Bevans et al., 2010). With respect to the effects of skill practice on student engagement in PE, the amount of class time devoted to inactive instruction was also associated with lower levels of engagement (Garn et al., 2011). Therefore, teachers should reflect on the amount of class time spent describing activities, explaining rules, and demonstrating skills as these instructional practices decrease student activity levels. However, including students in class demonstrations, creating relevant lessons, and incorporating peer-teaching opportunities where appropriate can lead to an increase in student engagement (Silverman, 2011; Thorp, 2013).

#### **Relationship-Building**

Positive interrelationships among social motivation orientations and achievement goal orientations highlight the complex set of personal strivings students have in a physical education setting (Solmon, 2006; Thorp, 2013). The relationship between competence and peer recognition emphasizes the need for physical educators to carefully plan how they structure group or team activities.

importance of personal competence, stress improvement over ability, and educate students about accepting skill level diversity help to change students' negative attitudes towards physical education (Solomon, 2006). However, the fact that trying to attain high levels of personal competence was not associated with seeking to enhance one's peer group standing could be explained by the high level of social comparison involved in PE classes (Dyson & Coviello, 2008). Therefore, reducing social costs for less skilled students through a combination of competence and social support could help students understand and accept skill/performance diversity in physical education (Solomon, 2006).

Implementing cooperative and smaller-sided games is another strategy to promote social competence for PE students. Since students can gain fulfillment when they feel socially successful and accepted in physical education, teachers must understand the social structures of their classes and plan for learning activities that promote positive interactions. While physical educators may not be able to directly impact a students' social status among peers, providing a social climate of acceptance would likely allow more students to thrive in PE contexts (Garn et al., 2011).

Student motivation can also be seen as an important factor underlying participation in physical activity (Liukkonen et al., 2010). Research has demonstrated that motivation and self-determination are related to persistence and engagement in physical activity (Garn et al., 2011; Springer & Hoelscher, 2009). The importance of motivation is its function in facilitating and enhancing learning achievement (Chen et al., 2012). Liukkonen et al. (2010) suggested that the physical education environment affects students' motivational regulations, which influence student intentions to participate in physical activities. Physical education classes that are appealing to both male and female students and emphasize a focus on learning and improvement foster positive attitudes, intrinsic mo-

tivation, and student engagement (Solmon, 2006). As such, physical education teachers should provide a range of activity, a variety of student groupings and sport-related choices within their classes in order to promote a sense of autonomy and increase levels of self-determination (Bevans et al., 2010).

Research has also demonstrated that enjoyment represents a key factor underlying the motivation for students to maintain positive engagement in physical education (Yli-Piipari, Watt, Jaakkola, Liukkonen, & Nurmi, 2009). Enjoyment represents a direct and tangible influence on students' participatory behavior, providing immediate results for being physically active (Thorp, 2013). Enjoyment positively encourages students' behavior and motivates them to participate in physical activity. Through interaction with students and instruction, teachers possess the influence to create and enhance student enjoyment (Smith & St. Pierre, 2009). Educators can also increase enjoyment, and therefore student engagement, by utilizing enthusiasm, sense of humor, and exhibiting outgoing personality traits (Thorp, 2013). Intrinsic motivational strategies, which include giving students a choice in the activities in which they want to participate, modifying activities, and properly challenging all students also increases student engagement (Smith & St. Pierre, 2009). Physical educators can further increase student engagement by providing continued encouragement, acknowledging student involvement in structuring groupings, and incorporating student input regarding lesson planning and assessment methods (Thorp, 2013).

#### **Implications**

Schools may be one of the most powerful systems for the establishment of a physically active lifestyle among youth and the physical education setting may the best environment to effect such change (Dyson & Christenson, 2008). Further, student engagement is essential to the success of any educational program including

physical education. Perceived physical competence, skill development, and positive relationship building are key components to positively engage students in physical education. Physical education teachers need to consider these factors by incorporating a variety of instructional strategies and creating an environment where students feel safe and comfortable.

Research indicates that engagement in physical education enhances the frequency and intensity of student physical activity (Furlong & Christenson, 2008). Given this association, activitypromoting physical education programs should be developed with consideration to the student, school, and classroom characteristics that strengthen student engagement over time. Undoubtedly, adequate exposure to high-intensity physical activity is a key contributor to a healthy lifestyle among our youth. Students' engagement in physical edcaution is an important target for those physical activitypromoting interventions. Specific physical education instructional strategies such as focusing on enhancing student perceived competence, reducing game play while increasing skill practice in a mastery-oriented climate, and emphasizing the positive social interaction and relationship building within the physical education setting all effectively lead to an increase in student engagement in physical education.

Note: See Table 1 Increasing Student Engagement in Physical Education on the following page.

#### References

- Anderson, A. (2002). Engaging student learning in physical education. *Journal of Physical Education, Recreation & Dance, 73* (7), 35-39.
- Bevans, K., Fitzpatrick, L., Sanchez, B., & Forrest, C. (2010). Individual and instructional determinants of student engagement in physical education. *Journal of Teaching in Physical Education* 29, 399-416.
- Bibik, J. M., Goodwin, S. C., & Orsega-Smith, E. M. (2007). High school students' attitudes toward physical education in Delaware. *Physical Educator*, 64(4), 192-204.
- Chen, S., Chen, A., & Zhu, X. (2012). Are K-12 learners motivated

- in physical education? A meta-analysis. *Research Quarterly* for Exercise and Sport, 83(1), 36-48.
- Dyson, B., & Coviello, N. (2008). Students' perspectives of urban middle school physical education programs. *Middle Grades Research Journal*, *4*(4), 31-52.
- Furlong, M. J., & Christenson, S. L. (2008). Engaging students at school and with learning: A relevant construct for all students. *Psychology in the Schools*, *45*, 365-378.
- Garn, A., Ware, D., & Solmon, M. (2011). Student Engagement in high school physical education: Do social motivation orientations matter? *Journal of Teaching in Physical Education*, *30*, 84-98.
- Liukkonen, J., Barkoukis, V., Watt, A., & Jaakkola, T. (2010). Motivational climate and students' emotional experiences and effort in physical education. *The Journal of Educational Research*, 103, 295-308.
- Lyu, M., & Gill, D. L. (2011). Perceived physical competence, enjoyment and effort in same-sex and coeducational physical education classes. *Educational Psychology*, *31*(2), 247-260.
- Silverman, S. (2011). Teaching for student learning in physical education. *Journal of Physical Education, Recreation & Dance*, 82(6), 29-34.
- Smith, M. A., & St. Pierre, P. E. (2009). Secondary students' perceptions of enjoyment in physical education: An American and English perspective. *Physical Educator*, 66(4), 209-221.
- Solmon, M. (2006). Creating a motivational climate to foster engagement in physical education. *Journal of Physical Education Research and Development*, 77(8), 21-25.
- Springer, T. A. & Hoelscher, D.M. (2009). Prevalence of physical activity and sedentary behaviors by metropolitan status in 4<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grade students. *Preventing Chronic Disease* 6, 247-252.
- Thorp, J. L. (2013). Engaging students in physical education: Recommendations for secondary programs. *Strategies*, 26(1), 8-13.
- Yli-Piipari, S., Watt, A., Jaakkola, T., Liukkonen, J., & Nurmi, J. (2009). Relationships between physical education students' motivational profiles, enjoyment, state anxiety, and selfreported physical activity. *Journal of Sports Science and Medicine*, 8(1), 327-336.

David Chorney is an associate professor and Robert Stecyk is a graduate student in the Department of Secondary Education at the University of Alberta, in Edmonton, Alberta, Canada.

For additional information pertaining to this article, please contact David Chorney at dchorney@ualberta.ca

Table 1. Increasing Student Engagement in Physical Education

Factors that Increase Student Engagement	What Teachers Can Do?
I. Perceived Physical Competence	Incorporate physical activities and promote attitudes that foster an environment of mutual respect for each individual.  Create a learning environment where students are encouraged to define success in terms of effort and personal gain, rather than performance relative to others.  Limit the amount of gameplay in PE classes as this performance-oriented learning environment defines success in terms of winning/losing rather than on improving one's person-
	al best.
II. Skill Development	Dedicate more class time to skill practice. This is positively associated with engagement among students with low perceived competence.  Minimize the amount of time describing activities, explaining rules, and demonstrating skills as these practices decrease student activity and student practice time.
III. Relationship Building	PE teachers must be cognizant and thoughtful about how teams are chosen or groups are selected in their learning environments.  Implement cooperative games or smaller-sided games help promote student engagement and social competence.  PE environments should provide a variety of activities and a variety of student groupings, which can foster or promote a sense of autonomy and increase levels of self-determination.  All teachers of physical education can increase student engagement by utilizing enthusiasm, exhibiting outgoing personality traits and instilling humor where possible and appropriate.

# From SHAPE America: National Convention and Exposition News, Seattle, 2015

Between Monday, Feb 9 (week of Speak Out Day) and yesterday we have had **6,000** letters send to members of Congress in support of school health and PE!

Also – recognizing our members is a very important part of the SHAPE America National Convention & Expo. We have been very busy writing press releases about your state members who will be recognized in Seattle.

At the Hall of Fame Banquet, for the first time ever, attendees will have the opportunity to win over \$16,000 in prizes that night!

Dr. Kenneth Cooper, Dick Fosbury, Mike Metzler, Jenifer Reeves and Bob Pangrazi will be the honorees with the Teachers of the Year for all disciplines. If you haven't purchased your ticket yet, contact Customer Service to add a ticket to your existing convention registration at <a href="mailto:shapeamerica@experient-inc.com">shapeamerica@experient-inc.com</a> or call 800-424-5249 between the hours of 9:00 a.m. and 6:00 p.m. EST (international residents, please call 847-996-5829).

#### Check out these prizes:

- Products from Human Kinetics (Value: \$500)
- Complete Gopher FIT Step Pro Pedometer System (Value: \$4,200)
- Complete IHT Spirit Heart Rate System (Value: \$11,200)
- Three (3) adidas Fit Smart heart rate monitors (Value: \$150 each)
- Plus ALL Attendees:

will receive a goody bag and be able to receive a free copy of the award winning documentary "Health Needs a Hero" written and directed by Jen Ohlson. The film that showcases the need and value of physical education features Kenneth H. Cooper, M.D., founder of The Cooper Institute and Dr. Robert P. Pangrazi, both being honored at the Award banquet.

Can't wait to see you all in Seattle!

NCAA Division I Head Coaches' Experiences with Eating Disorders and Disordered Eating in Female Athletes: A Qualitative Analysis

Caitlyn Pecinovsky<sup>1</sup>, Daniel R. Czech<sup>2</sup>, Brandonn S. Harris<sup>2</sup>, Trey Burdette<sup>2</sup>, & David D. Biber<sup>3</sup>

University of Wisconsin-Milwalkee<sup>1</sup>, Georgia Southern University<sup>2</sup>, Georgia State University<sup>3</sup>

#### **Abstract**

Perceptions that coaches hold about eating disorders and disordered eating present a set of risk factors that may increase the likelihood of female athletes developing maladaptive eating patterns (Scoffier, Maiano, & d'Arripe-Longueville, 2010). Thus, the purpose of the present study was to use a qualitative approach to assess the experiences, knowledge, and education that coaches at the NCAA Division I level possess about eating disorders and disordered eating in female athletes. The major themes from the interview portion of the study included: the use of secondary sources for intervention, prevalence of eating disorders/disordered eating in Division I female athletes, lack of knowledge, lack of education, eating disorders/disordered eating beyond the athletic realm, coach to athlete communication, inverse relationship theory, and approaches for prevention and need for future precautions. Creating alternative and better intervention techniques for disordered eating and eating disorders in female athletes is addressed.

The rise of female participation in collegiate athletics over the past few decades has resulted with a myriad of benefits such as promoting a healthy lifestyle, creating positive outlooks on self-image, and instilling motivational attitudes and a strong sense of work ethic in individuals (Reinking & Alexander, 2005). However, such participation can also present a set of additional risk factors that may increase the likelihood of female athletes developing disordered eating patterns (Bratland-Sanda & Sundgot-Borgen, 2013).



It is not common for female athletes to be diagnosed with the *Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5)* criteria for an eating disorder, but it is becoming more common for female athletes to meet the criteria for exhibiting disordered eating patterns and behaviors (Petrie & Sherman, 2007). Female athletes are subject to "pressure from coaches, social comparison with teammates, team weigh-ins, performance demands, physique-revealing uniforms, and judging criteria" (Greenleaf, Petrie, Carter, & Reel, 2009, p. 489). These factors could relate to the development and maintenance of an eating disorder or disordered eating.

In the *DSM-5*, the American Psychiatric Association (APA) has classified an eating disorder as a severe disturbance in eating behavior as well as body image (American Psychiatric Association, 2013). Examples of *DSM-5* eating disorders are anorexia nervosa, which is characterized by an obsession with weight, diet, appearance, a feeling of *fatness*, and bulimia nervosa, which can be characterized by the bingeing and purging of meals and irregular weight loss and gain (American Psychiatric Association, 2000). Disordered eating refers to a "wide spectrum of maladaptive eating and weight control behaviors and attitudes...includes concerns about body weight and shape; poor nutrition or inadequate caloric intake, or both; binge eating; use of laxatives, diuretics, and diet pills; and extreme weight control methods, such as fasting, vomiting, and excessive exercise" (Bonci, Bonci, Granger, Johnson,

Malina, Milne et al., 2008, p. 80). Disordered eating is found to be more of a "bad habit" that is likely to remit over time without therapy, whereas an eating disorder is considered an illness and requires the use of professional medical attention for successful treatment. Disordered eating also does not typically lead to health, social, school, and work related problems, while eating disorders significantly impact these areas of an individual's life (American Psychiatric Association, 2013).

In 1999, the National Collegiate Athletic Association (NCAA) conducted a study revealing that 13% of female athletes had "clinically significant" pathogenic weight-control behaviors (Johnson, Powers, & Dick, 1999). Within certain sport contexts, coaches praise athletes who have aesthetically pleasing, thin bodies, resulting in peer pressure to use pathogenic weight control behaviors (Petrie & Sherman, 2007). These individuals have a tendency to exercise and train excessively, deny pain and injury, and commit themselves to obtaining an unhealthy and sometimes unattainable body image goal (Buchholz, Mack, McVey, Feder, & Barrowman, 2008).

Coaches' expectations in practice and the competition environment, and the type of weight management and training they require for each specific athlete, can negatively influence athletes' health and behavior (Scoffier, Maiano & d'Arripe-Longueville, 2010). Athletes seem to be practicing weight control behaviors because they want to meet the demands of their specific sport (Torstveit, Rosenvinge, & Sundgot-Borgen, 2008). Coaches sometimes emphasize this "thin is going to win" philosophy that has influenced athletes to believe that they need to restrict their food intake and control their weight if they want to be successful (de Bruin, Oudejans, Bakker, & Woertman, 2011). Female athletes are often asked by coaches to meet unrealistic weight goals and partake in mandatory weigh-ins at practice, resulting in external pressure to

lose weight (Bonci et al., 2008; Ryan, Lopiano, Tharinger, & Starke, 1994). Ultimately, when the demands and stress involved with a coaching position combine with inadequate knowledge and education about eating disorders, coaches may become more likely to disperse careless comments about weight to their athletes, misinformation about weight control, and inappropriate actions that may endanger the health and well-being of their athletes (Bonci et al., 2008).

Many of the contributing factors to eating disorders and disordered eating are resultant of a lack of knowledge regarding the topic. In an intervention study, Beals (2003) found that only 26% of athletic trainers and team physicians perceived that their eating disorder screening process, which evaluated how well coaches could identify athletes with eating disorders, was successful in their program. An earlier study completed by Turk, Prentice, Chappell, and Shields (1999) found that 38.4% of coaches were not aware of any literature on eating disorders available to them from the athletic department. However, one study reported that one-third of NCAA Division I coaches believed they had a keen awareness of eating disorder symptoms, and were thus identifying and treating female athletes with eating disorders, as well as engaging in weight monitoring or weight management with their athletes (Heffner, Ogles, Gold, Marsden, & Johnson, 2003). In a study that surveyed collegiate coaches and their knowledge base of eating disorders, less than half of the coaches reported ever taking an actual educational course about eating disorders and only 38.3% had their teams attend a program about eating disorders (Turk, Prentice, Chappell, & Shields, 1999).

Using the research of Turk, Prentice, Chappell and Shields (1999) as a framework, it leads one to question what role a coach should play in the identification, treatment, and prevention of disordered eating and eating disorders in athletes. With previous

research indicating coaches' lack of education regarding eating disorders and disordered eating, it is important to determine how to educate and promote such a knowledge in coaches so as to preserve the health and mental state of the athletes.

The purpose of the present study was to describe the experiences, knowledge, and education NCAA Division I head coaches possess about eating disorders and disordered eating as pertaining to their female athletes. A secondary purpose was to examine the types of intervention and prevention techniques NCAA Division I head coaches used for female athletes with eating disorders or disordered eating.

#### Material and Methods

#### **Participants**

Three male and three female (N = 6) NCAA Division I head coaches of female sport teams were asked to share their experiences dealing with Division I level female athletes and disturbed eating behaviors in their sporting area. At the time of the study, the participants were all head coaches for females at the NCAA Division I level with at least two years of experience coaching at this level. Participants coached tennis, basketball, softball, volleyball, swimming, and diving. Coaches were recruited via email. At the time of the study, all coaches were still coaching at the NCAA Division I level, and had previously been coaching for two or more years at this level.

#### Instrumentation

Interview Protocol. This qualitative study used a semistructured interview design to collect data, so the primary researcher was the most important data collection instrument. The primary researcher was responsible for conducting the interviews, interpreting the data that was collected, and deducing themes from that data. A semi-structured interview took place between the coach and the head researcher. A semi-structured interview is one in which the

interviewer pre-determines a broad set of questions and themes to address (Nicholls, 2009). The researcher asked probing questions using the participants' wording in order to extract more detail. The set of questions created were open-ended so that coaches could respond by speaking through experiences and feelings about the issue at hand.

#### **Procedure**

through email and asked to participate in the interview. Participants completed informed consent and were educated about the content of the study prior to interviewing. Each coach was given an alias so that their name would not appear on any document. The coaches were then interviewed in-person and independently from each other. Two separate tape recorders were used to record the interview responses. The coaches were informed prior to the start of the interview that the session was being recorded for accuracy purposes, transcription, and thematizing. If uncomfortable at any point of the interview; he or she was able to discontinue the interview without any repercussions.

#### **Bias Exploration and Bracketing**

When using qualitative methodology, it is important to identify the primary researcher as a part of the instrumentation and understand how her life experiences may relate to the chosen topic of study (Gearing, 2004). For this study, bracketing was completed to control for the researcher's internal suppositions pertaining to personal knowledge, experiences, beliefs, and assumptions about the subject matter. Prior to the start of the interview process, the primary researcher was interviewed by an experienced qualitative researcher in order to obtain the researcher's knowledge and experiences in regards to female athletes with eating disorders or disordered eating, and her beliefs about how coaches respond to these athletes. The following themes emerged from the bracketing inter-

themes emerged from the bracketing interview: prevalence of eating disorders, knowledge of eating disorders, education regarding eating disorders, and prevention.

#### **Data Analysis**

the most complete and thorough understanding of an environment themes experiences it as accurate and revealing (Polkinghorne, or population as possible. By interviewing a variety of coaches and 1989). Validity was further increased by the use of triangulation. recording their unique accounts and experiences and interpreting Patton (2002) describes triangulation as a process which uses a more holistic view of this issue so as to interpret it in its entirety. are brought together in order to focus on the same experience. Tri-The present study was completed under the premise of using the angulation within this study included the use of a bracketing interqualitative research strategy known as a phenomenology. This strat-view, a research team that assisted in the development of themes, egy uses a deductive method, meaning the phenomenon is deter- the primary researcher, a personal journal of experiences, and an mined "through identifying key concepts (concepts, strata, and advisory committee that assisted the head researcher throughout the problems) of that phenomenon and then classifying the relationship entire study. After the interviews had been transcribed, the docuamong these elements within that process" (Toloie-Eshlaghy, ments were also given back to the participants so that they could Chitsaz, Karimian, & Charkhchi, 2001, p. 10).

The interviews were analyzed using the four-step qualitative approach adapted by Czech et al. (2004) and Patton (2002). The first step, approaching the interview, included both transcription of the semi-structured interviews and obtaining a thorough grasp of the interview. The second step was focusing the data. The transcripts were grouped into meaningful units and unnecessary utterances were removed. Repetitive or irrelevant words were removed from the transcripts through reduction. Each participant, to ensure the original meaning of the responses was not lost, verified the data. The fourth step included gathering a research team to summarize and placing the phrases into meaningful clusters. Once the text was placed into categories, the research team read and re-read the summaries until concise themes developed. Rich, clear, and descriptive themes displayed the experiences of the participants.

#### Reliability and Validity

Reliability refers to the consistency of the responses as they relate to the interpretation of responses. If something is repeatable, it is considered reliable (Goodrich, 1988). Validity of a quali-Qualitative research operates around the idea of gaining tative analysis is determinant on whether a person reading the the findings with a focus group, the researcher attempted to create a combination and application of various research methodologies that verify their statements and clarify and indiscretions that they found.

#### Results

The purpose of this study was to use a qualitative approach to assess the experiences, knowledge, education, attitude, and beliefs head coaches at the Division I level had about female athletes suffering from eating disorders or disordered eating. The study aimed to explain the how these coaches handle such situations, and whether their approach was appropriate. This section contains the interview questions used, the themes and subthemes deduced from each interview question, and quotes from the participants that serve to exemplify the significance of each theme and subtheme (See Table 1).

Table 1: Interview questions and revealed themes

Questions	Themes
From a coaching perspective, describe your experiences with female athletes and eating disorders and disordered eating	Use of Secondary Sources for Intervention  Prevalence of Eating Disorders/Disordered Eating in DI Female Athletes
What kind of knowledge do you have about eating disorders and disordered eating?	Lack of Knowledge
What kind of education specifically have you received in the past about eating disorders and disordered eating?	Lack of Education
When thinking about your attitudes and beliefs towards female athletes with eating disorders and disordered eating, what comes to mind?	Eating Disorders/Disordered Eating Beyond the Athletic Realm
Considering the discussion we just had, tell me about any other additional information or thoughts that you have about this topic	Coach to Athlete Communication about Eating Behaviors <u>Subtheme</u> : Topics to Avoid with Female Athletes  Eating and Performance Inverse Relationship  Approaches for Prevention and Need for Future Precautions

#### **Interview Questions and Responses**

Question 1: From a coaching perspective, describe your experiences with female athletes and eating disorders and disordered eating.

#### Theme 1: Use of Secondary Sources for Intervention.

All six participants alluded to the inclusion of a secondary source when they encountered an instance of an eating disorder or disordered eating on their team. Most participants confirmed that they would refer their athlete to an athletic trainer or a nutritionist if a problem arose, as it is out of their area of competence to handle to situation on their own.

...we notice it so we will be able to address it, and I go to the trainers and have them deal with it. It is not something I am going to counsel someone on. It is really out of my realm. None of my coaches, that is not our area, it is the trainer's area. And so any coach with any sense would not try to counsel their athletes on it if they understood it (Participant 2).

# Theme 2: Prevalence of Eating Disorders and Disordered Eating in Division I Female Athletes.

Research has indicated that 13% of female athletes had "clinically significant" pathogenic weight-control behaviors (Johnson et al., 1999). All six of the participants that were interviewed confirmed that they had witnessed an occurrence of an eating disorder in their time as a Division I head coach.

I've been coaching, this is my ninth season, and I have had players during these nine years that have suffered from disordered eating...Usually I'll have something every other year, like half of the years I've been coaching... (Participant 6).

Question 2: What kind of knowledge do you have about eating disorders and disordered eating?

Theme 1: Lack of Knowledge.

Five of the six participants revealed that their knowledge about eating disorders and disordered eating is very limited, most participants only knowing the basic symptoms of the disorders.

Not enough to be certified or to give proper advice, but enough to know when there's a problem and when to seek help...I have taken some classes that have given me some knowledge about the different types of disordered eating...but at the same time I feel like my knowledge is fairly limited... (Participant 6).

Question 3: What kind of education specifically have you received in the past about eating disorders and disordered eating?

Theme 1: Lack of Education.

Two of the six participants explicitly stated that they have received absolutely no formal education regarding this topic since they began coaching at the Division I level. Four of the six participants divulged that this is a touchy subject that is avoided at all costs until it presents itself as a prominent issue on the team.

It's not something that we as coaches receive a lot of training on...that sort of thing, it's just not brought up. It's not talked about. We as coaches don't receive any information on how to handle that other than just me being close with those

players and trying to help them the best way I know how...I really haven't received any guidance on that (Participant 6).

Question 4: When thinking about your attitudes and beliefs towards female athletes with eating disorders and disordered eating, what comes to mind?

Theme 1: Eating Disorders/Disordered Eating Beyond the Athletic Realm.

When answering this question, four of the six participants referred to the development of maladaptive eating behaviors as being a reaction to an event or an emotion that went beyond the scope of the athletic arena. These participants were able to identify that eating disorders and disordered eating stemmed from issues from the athlete's social, academic, or personal life and were typically not a direct result of something that happened on the field of competition. "I feel like the disorder in general is more of a life thing for them...I know there is negative ramifications that outweigh the sport." (Participant 3)

Question 5: Considering the discussion we just had, tell me about any other additional information or thoughts that you have about this topic.

Theme 1: Coach to Athlete Communication about Eating Behaviors.

One of the most popular themes was the idea of using selective terminology when discussing weight, body image, and eating patterns with their female athletes. Five of the six participants spoke in terms of using a more positive, non-accusatory approach when assessing a possible eating disorder incident.

We try to never focus on weight and we talk about fitness and we talk about taking care of our bodies...that includes your diet to an extent—hydration, sleep, and all of those things. We try

to never focus on weight and we talk about fitness and we talk about taking care of our bodies...that includes your diet to an extent—
hydration, sleep, and all of those things. We try to come at it from a well-rounded point of view as opposed to 'you're too heavy' or 'you need to not eat that...Anything we can do to divert attention from weight and just try to focus more on the overall goal of being fit (Participant 4).

Subtheme 1: Topics to Avoid with Female Athletes. All participants agreed that there were certain areas of conversation that should be avoided when talking with female athletes. Discussions in which the female athlete's self-esteem about body image and weight might be diminished should be approached in an appropriate manner by the coach.

Because I think off hand comments like joking around about something—even if you think a player wouldn't be affected by it—with females it affects them. We technically internalize everything. I just think that you don't mess around with joking, sarcasm, at all if it comes to body type stuff (Participant 1).

#### Theme 2: Eating and Performance Inverse Relationship.

Three of the six participants in this study shed light on the belief that lower body size and weight is positively related to performance.

It's not a sport like running or gymnastics where size as far as being too big will get you in trouble...In other sports I think you can get away with it, you know, like running, when you are lighter you can run faster (Participant 2).

# Theme 3: Approaches for Prevention and Need for Future Precautions.

Participants made it very clear that there was much room for improvement in regards to the precautions and preventive forces that could be set in place to deter maladaptive eating patterns. All participants had an opinion or suggestion as to what could be done to curb the issue with eating disorders and disordered eating in their athletes. While prevention seemed to be a key theme amongst the participants, none of the participants have been extremely proactive in preventing the issue from happening on their tea.

Our approach is more educational than 'you can't eat this, or you have to eat this.' It's very much giving them the information to hopefully make the decisions...we've got it done on the individual basis with the food log and that sort of thing...I think it starts with education and not just with basic nutrition, but body image as well. Education is the first and foremost thing that we try to get across to them (Participant 5).

#### Discussion

The major themes from the study included: the use of secondary sources for intervention, prevalence of eating disorders/ disordered eating in Division I female athletes, lack of knowledge, lack of education, eating disorders/disordered eating beyond the athletic realm, coach to athlete communication, inverse relationship theory, and approaches for prevention and need for future precautions.

# Use of Secondary Sources for Intervention and Primary Referral

All six of the participants mentioned using secondary sources, such as athletic trainers, nutritionists, and mental health professionals, for interventions when trying to help their female

athletes deal with eating disorders or maladaptive eating behaviors. Participants revealed a great discrepancy when asked who should be the first contact in this situation and who should determine the playing status of an athlete as she progressed through the stages of an eating disorder. Cogan (2005) states that once an athlete is approached by the coach regarding maladaptive eating patterns, it is more beneficial to give the athlete a referral to a professional that has experience with eating disorders—preferably a clinical psychologist or a counselor. In the present study, all six participants mentioned using the athletic trainer as the first line of defense when dealing with an eating disorder on their team.

Arthur-Cameselle and Baltzell (2012) studied collegiate athletes who had recovered from eating disorders revealed that they would have preferred their coaches referred them to a professional—either a physician, a psychologist, or a nutritionist. One participant believed, once the severity of the eating disorder is so noticeable by others, that it would be too difficult to recover from the eating disorder without the help of a professional (Arthur-Cameselle & Baltzell, 2012). Coaches did not seem to know the proper protocol when identifying and referring athletes with eating disorders. Turocy et al. (2011) states that "the health care team should be in place to help athletes and active clients address disordered eating behaviors and to assist in providing accurate and appropriate advice" (p. 332). Due to this contradiction of responses from the participants in the present study, it is important to address a need for an established "health care team" for athletes who are competing at the Division I level. Cogan (2011) suggests that a treatment team should consist of "a sport psychologist or therapist, a dietician or nutritionist, a trainer, and a physician" (p. 523). Consistent with the present study, Cogan (2011) does not suggest having the coach as part of the treatment team because diagnosing eating disorders is outside their expertise.

### Prevalence of Eating Disorders/Disordered Eating in Division I Female Athletes

All of the participants discussed the prevalence of eating disorders or disordered eating with one or more of their athletes in their experience as coach. Although the prevalence rate of eating disorders is considered low. Greenleaf and colleagues (2009) report that more female athletes are meeting subclinical levels of disordered eating symptoms, which are precursors for developing eating disorders. Because these symptoms are not considered clinically significant, they can be hidden by athletes and go unnoticed by coaches. Because the participants in the present study were from a variety of different sports, it is evident that eating disorders and disordered eating do not just occur in sports that are aesthetically focused. Contact sports, team sports, individual sports, and endurance sports alike all show prevalence rates of eating disorders and disordered eating. These results are consistent with previous research as it has been suggested that there is no relationship between sport type and eating disorders, and eating disorders occur consistently across all sports (Greenleaf et al., 2009). This heightens the need for awareness of eating disorder symptoms as all female athletes are at risk.

# Lack of Knowledge and Eating Disorder and Disordered Eating Identifiers

Five of the six participants in the present study did not feel confident about their actual knowledge about eating disorders and disordered eating, yet, still felt as if they would be able to deal with an eating disorder instance properly. This is consistent with previous research regarding NCAA Division I coaches knowledge and awareness of eating disorders (Heffner, Ogles, Gold, Marsden, &

Johnson, 2003). There is a cycle of coaches lacking knowledge and a continual confrontation of athletes with potential eating disorders (Arthur-Camesell & Baltzell, 2012). This statement about confrontation is important to this theme, because if coaches do not have proper knowledge of the symptoms of eating disorders, it is unclear how they would be able to confront an athlete about it. The present research study emphasizes how important the coach can be in identifying eating disorder symptoms in athletes.

Contributing to coaches' difficulty addressing athletes with potential eating disorders is the use of exercise as the most frequent technique of weight control among women (Greenleaf et al., 2009). Excessive exercise has been linked to maladaptive eating behaviors and eventual eating disorders (Cogan, 2005). Thompson and Sherman (1999) and Yates (1996) purport that, without proper education of eating disorders and weight management techniques, coaches may misconceive overtraining warning signs as dedication to their sport.

#### **Lack of Education and Improving Education**

The previous themes revealed a significant lack of education about eating disorders and disordered eating from four of the six participants. Turk, Prentice, Chappell, and Shields (1999) support this finding, as 38.4% of coaches in their study were not aware of any literature on eating disorders available to them from the athletic department. Athletes have expressed amazement at how little their coaches knew about eating disorders, despite how frequently eating disorders show up in the media (Arther-Cameselle and Baltzell, 2011). These statistics, and the results from the present study, are interesting as in 1989, the NCAA was asked to supply every NCAA-affiliated school with educational materials about eating disorders (Turk, Prentice, Chappell, & Shields, 1999). Considering that mandate was set in place twenty-four years ago, it is disconcerting that the coaches or the NCAA does not follow these

guidelines. There seems to be a strong need to improve education about eating disorders so that coaches can effectively recognize the difference between athletes' hard work and suffering.

# Eating Disorders and Disordered Eating Beyond the Athletic Realm

Female athletes face pressure in their sporting environment that that heightens the risk for developing an eating disorder (Greenleaf et al., 2009). Female athletes are subject to "pressure from coaches, social comparisons with teammates, team weigh-ins, performance demands, physique-revealing uniforms, and judging criteria (Greenleaf et al., 2009, p. 489). Research also denotes that additional pressures, such as the transition into college, increased responsibilities that come with maturation, and a perceived loss of social support, can increase levels of stress and anxiety in athletes and increase the likelihood of these athletes developing pathogenic eating behaviors (Greenleaf et al., 2009). The participants in this study believe that the media and society lends a hand in how athletes view themselves, regardless of their training for their specific sport. Athletes reported that the first step in treating an eating disorder should be finding the root of the problem. Coaches need to identify what might be causing these pathogenic eating behaviors and communicate with the athlete effectively. These steps relate with the themes of gaining more knowledge and education about eating disorders in order to help the athlete appropriately.

#### **Coach to Athlete Communication about Eating Behaviors**

How a coach can communicate with an athlete when talking about eating behaviors was a prevalent theme throughout the study. Participants expressed avoiding weigh-ins with their teams, not measuring body fat, using words like "lean" or "healthy," and not singling out an individual on the team unless it is in a private setting. Cogan (2005, p. 248-249) suggests de-emphasizing weight, eliminating group weigh-ins, eliminating unhealthy subculture

aspects, treating each athlete individually, offering guidelines for appropriate weight-loss, and controlling the contagion effect.

Research has reported that coaches might benefit from emphasizing sport skill instead of body weight when talking about trying to achieve performance goals. Many female athletes have the misconception of following the assumption that there is an inverse relationship between body size and performance level (Sanborn, Horea, Siemers, & Dieringer, 2000). Some coaches may have unrealistic expectations about weight and body image, which can add additional pressure on the athletes to conform to certain weight or image driven standards. For example, some coaches expect athletes to maintain a certain weight, or they hold a belief that weight loss automatically leads to an improved performance (Petrie & Sherman, 2007). This can lead to a contagion effect, where social pressures from a coach regarding eating may spread throughout an entire team (Thompson & Sherman, 2010, p. 74). If athletes are performing well yet exhibiting disordered eating patterns, teammates may associate their performances with the disordered eating. Teammates then emulate disordered eating patterns because of pressure from their coach and a desire to perform as well as their high performing teammates (Thompson & Sherman, 2010). Athletes are aware that being smaller in their sport might be a benefit, but they do not find it beneficial for a coach to point that out to them (Arthur -Cameselle & Baltzell, 2012).

#### **Approaches for Prevention and Need for Future Precautions**

One of the main purposes of this study was to observe what prevention techniques might already be in place in athletic organizations for eating disorders and what might need to be improved in regards to intervention strategies. All six of the participants wanted to the help of a nutritionist or dietician to educate their athletes on proper nutrition. Once again, this theme intertwines with the need for better education for coaches' so that they

are able to convey proper nutritional and diet advice to athletes when a nutritionist is not available. Ideally, participants in the present study preferred to take an educational approach to teaching athletes how to eat and exercise properly. The educational approach is consistent with previous research, as athletes have reported a desire for coaches to address nutritional needs in team meetings, especially concerning preparation for a competition (Arthur-Cameselle & Baltzar, 2012). Participants in this study are correct in the desire to use a nutritionist or dietician to help athletes understand a proper diet. Cogan (2005) suggests focusing on eating that is compatible with the energy expenditure required for each sport and emphasizing the potential for performance decrements if too much weight is lost in an unhealthy manner.

#### Limitations

Because this was a qualitative study involving a series of interviews between a few individuals, the sample size was small and purposive, and thus, the results are not generalizable to the population. A larger number of participants could have yielded greater insight on this topic. The study also focused on coaches at the NCAA Division I level, and potentially different experiences might have been found had coaches from other levels of competition been interviewed. The study also focused solely on female athletes competing at the NCAA Division I level. It might be appropriate to look into the male population in future studies. The last limitation to consider is the use of only one interview among the primary researcher and the coach. Multiple interviews might have given the researcher more in-depth data to examine. It could have also given the researcher the chance to re-ask questions and gain further insight into the participants' experiences.

#### **Conclusions and Implications for Future Research**

The present study indicates the coaches' lack of education and knowledge about eating disorders and disordered eating. While the results may have been consistent with previous findings, the topics addressed in this study demonstrate a need for further research and proactive interventions to increasing the education that coaches at any level receive about eating disorders and disordered eating. Previous research has already indicated that education about eating disorders is lacking throughout NCAA-affiliated programs. Some coaches do have the proper staff available to help with the identification and treatment of eating disorders and disordered eating, however, many participants in this study reported receiving no education on this topic.

Participants in this study were aware of the role that they play in recognizing eating disorders, but past research has shown that this is not the case in all athletic programs. It might be beneficial to develop regulations for coaches in regard to weigh-ins, weight policies, and dieting procedures on teams. While coaches should not diagnose and treat athletes with eating disorders, they can play a role in the identification of an eating disorder, as they see individual athletes on a daily basis. The main question is how can we educate coaches on this topic and help them follow through with preventative measures set in place by their athletic organization.

Another preventative effort that should be considered involves bringing together a treatment team for dealing with eating disorder cases and establish a protocol of how to handle an athlete who is exhibiting maladaptive eating behaviors. Future research might include looking into what the most effective treatment team might look like when treating athletes and what role each treatment team member should play. Results from this study indicate that the topic of eating disorder behavior must be addressed first through preventative measures to deter maladaptive eating patterns from

developing in the first place.

#### References

- American Psychiatric Association: Diagnostic and Statistical
  Manual of Mental Disorders, Fifth Edition. Arlington, VA,
  American Psychiatric Association, 2013. Web. [access
  date: 29 April 2014]. dsm.psychiatryonline.org
- Arthur-Cameselle, J. & Baltzell, A. (2012). Learning from collegiate athletes who have recovered from eating disorders:

  Advice to coaches, parents, and other athletes with eating disorders. *Journal of Applied Sport Psychology*, 24, 1-9. doi:10.1080/10413200.2011.572949
- Beals, K. A. (2003). Eating disorder and menstrual dysfunction screening, education, and treatment programs. *Physician and Sportsmedicine*, *31*, 33-38. doi:10.3810/psm.2003.07.434
- Beals, K. A. and Manore, M. M. (1994). The prevalence and consequences of subclinical eating disorders in female athletes. International Journal of Sport Nutrition, 4, 175–195.
- Bonci, C., Bonci, L., Granger, L., Johnson, C., Malina, R., Milne,
  L., Ryan, R., Vanderbunt, E. (2008). National Athletic
  Trainers' Association position statement: Preventing, detecting, and managing disordered eating in athletes. *Journal of Athletic Training*, 43, 1, 80-108.
- Bratland-Sanda, S., & Sundgot-Borgen, J. (2013). Eating disorders in athletes: overview of prevalence, risk factors and recommendations for prevention and treatment. *European Journal of Sport Science*, *13*(5), 499-508.
- Buchholz, A., Mack, H., McVey, G., Feder, S., & Barrowman, N. (2008). BodySense: An evaluation of a positive body image intervention on sport climate for female athletes. *Eating Disorders*, *16*, 308-321. doi: 10.1080/10640260802115910
- Cogan, K. (2005). Chapter 13: Eating disorders: When rations be come irrational. *The Sport Psych Handbook*, 237-253.
- Czech, D. C., Wrisberg, C. A., & Fisher, L.A. (2004). The experience of Christian prayer in sport. *Journal of Psychology and Christianity*, 1, 23, 3-11.
- de Bruin, A. P., Oudejans, R., Bakker, F., & Woertman, L. (2011).

  Contextual body image and athlete's disordered eating:

  The contribution of athletic body image to disordered eating in high performance women athletes. *European Eating Disorders Review*, 19, 3, 201-215. doi: 10.1002/erv.1112

- Gearing, R. (2004). Bracketing in research: A typology. *Qualitative Health Research*, 14, 10, 1429-1452. doi: 10.1177/1049732304270394
- Goodrich, L. B. (1988). *Deafness as difference: A phenomenologi*cal investigation of the experience of being deaf (Doctoral dissertation, University of Tennessee, Knoxville).
- Greenleaf, C., Petrie, T., Carter, J., & Reel, J. (2009). Female collegiate athletes: Prevalence of eating disorders and disordered eating behaviors. *Journal of American College*Health, 57, 5, 489-495. doi: 10.3200/JACH.57.5.489-496
- Heffner, J. L., Ogles, B. M., Gold, E., Marsden, K., & Johnson, M. (2003). Nutrition and eating in female college athletes: A survey of coaches. *Eating disorders: The formal treatment and prevention, 11,* 209-220. doi: 10.1080/10640260390218666
- Johnson, C., Powers, P., & Dick, R. (1999). Athletes and eating disorders: The National College Athletic Association study. *International Journal of Eating Disorders*, 26, 179-188.
- Nicholls, D. (2009). Qualitative research: Part three—Methods.

  International Journal of Therapy and Rehabilitation, 16, (12), 638-647.
- Patton, M. Q. (2002). Qualitative research and evaluation methods. Thousand Oaks, CA: Sage.
- Petrie, T., & Sherman, R. (2007). Chapter 9: Counseling athletes with eating disorders: A case study. *Handbook of Sports Psychology*, *3*, 121-137.
- Polkinghorne, D. E. (1989). Phenomenological research methods.

  In *Existential-phenomenological perspectives in psychology* (pp. 41-60). Springer US. doi: 10.1007/978-1-4615-6989-3 3
- Reinking, M. F. & Alexander, L. (March 2005). Prevalence of disordered-eating behaviors in undergraduate female collegiate athletes and non-athletes. *Journal of Athletic Training*, 40(1), 47-51.
- Ryan R., Lopiano D., Tharinger D., & Starke K. (1994). The mental health of female college student-athletes: Research and interventions on a university campus: A report to the Hogg Foundation for Mental Health and RGK Foundation. Intercollegiate Athletics, Department of Academics and Student Affairs, The University of Texas at Austin, 13-18, 56-60, 74-80,120-121,132-133.
- Sanborn, C. F., Horea, M., Siemers, B. J., & Dieringer, K. I. (2000).

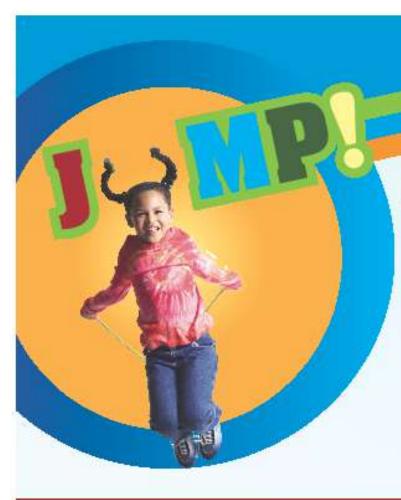
- Disordered eating and the female athlete triad. *Clinical Sports Medicine*, *19*, 199-213. doi:10.1016/S0278-5919 (05)70199-X
- Scoffier, S., Maiano, C., & d'Arripe-Longueville, F. (2010). The effects of social relationships and acceptance on disturbed eating attitudes in elite adolescent female athletes: The mediating role of physical self-perceptions. *The International Journal of Eating Disorders*, 43, 65-71. doi: 10.1002/eat.20597
- Sherman, R., Thompson, R., Dehass, D., & Wilfert, M. (2005).
  NCAA coaches survey: The role of the coach in identifying and managing athletes with disordered eating. *Eating Disorders*, 13, 447-466. doi: 10.1080/10640260500296707
- Thompson, R.A, & Sherman, R.T. (2010). Eating disorders in sport. New York, NY: Routledge.
- Thompson, R., & Sherman, R. (1999). "Good Athlete" traits and characteristics of anorexia nervosa: Are they similar?. *Eating Disorders*, 7, 181-190. doi:10.1080/10640269908249284
- Toloie-Eshlaghy, A., Chitsaz, S., Karimian, L., & Charkhchi, R. (2001). A classification of qualitative research methods. *Research Journal of International Studies*, 20, 106-123.
- Torstveit, M. K., Rosenvinge, J. H., & Sundgot-Borgen, J. (2008).

  Prevalence of eating disorders and the predictive power of risk models in female elite athletes: A controlled study.

  Scandinavian Journal of Medicine and Science in Sports, 18, 108-118. doi:10.1111/j.1600-0838.2007.00657.x
- Turk, J. C., Prentice, W. E., Chappell, S. & Shields, E. W. (1999).
  Collegiate coaches' knowledge of eating disorders. *Journal of Athletic Training*, 34, 19-24.
- Turocy, P., DePalma, B., Horswill, C., Laquale, K., Martin, T., Perry, A., Samova, M., & Utter, A. (2011). National Athletic Trainers' Association position statement: Safe weight loss and maintenance practices in sport and exercise. *Journal of Athletic Training*, 46, (3) 322-336.
- Yates, A. (1996). Athletes, eating disorders, and the overtraining syndrome. *Activity anorexia: Theory, research, and treatment*, 179-188.

Caitlyn Pecinovsky is a doctoral student in Health Sciences at the University of Wisconsin-Milwaukee. Daniel R. Czech is a professor of Sport Psychology at Georgia Southern University. Brandonn S. Harris is a professor of Sport Psychology at Georgia Southern University. Trey Burdette is an assistant professor of Coaching Education at Georgia Southern University. David D. Biber is a doctoral student in Exercise Psychology at Georgia State University.

For additional communication pertaining to this article, please communicate with David D. Biber at david.d.biber@gmail.com



# For FREE Membership in SHAPE America

Raise \$2,000 or more through your

Jump Rope For Heart or Hoops For Heart

event at your school and receive a

one-year FREE JUMP membership

to SHAPE America!

By joining SHAPE America, you become connected to the benefits and tools to support your profession. Empower yourself to SHAPE health, habits, policy and programs all year!

#### ONCE YOUR SCHOOL HAS RAISED \$2,000 OR MORE:

- Simply complete the portion below.
- Have your school principal sign it.
- FAX to 703-476-9527 or drop lt in the mail to: SHAPE America, 1900 Association Dr., Reston, VA 20191 to activate your FREE SHAPE America JUMP membership.

Visit www.shapeamerica.org/jump to learn more about our programs for JRFH & HFH coordinators.

Contact your State AHPERD to learn what special member benefits are available when your school holds an event.









Name			
Job Title	School		
Address	City/State/Zip		
Phone	Email		
With your JUMP membership you ge	t a subscription to the online edition of one of the magazines below		
	Strategies DOPERD		
Please select one of the following:			
Please select one of the following:  As principal, I confirm that my son Hoops For Heart event in School V	in our Jump Rope For Heart or		

### **SHAPE America National Convention & Exposition**

March 17-21, 2015 Seattle, Washington



### **Future Dates**

March 17-21, 2015 SHAPE America National Convention and Exposition:

Seattle, WA

June 9-11, 2015 Summer Institute at North Springs HS

October 25-27 Georgia AHPERD annual convention in Marietta, GA

October 27-31 SHAPE America PETE Conference, Atlanta, GA

### **Membership**

Are you interested in health, physical education, recreation or dance? Do you have passion and commitment for physical activity and wellness? Do you believe we can do more to help others and better prepare students for a lifetime of health and physical activity? Do you want to join the advocacy efforts of other dedicated professionals to pave the way toward a healthier generation of individuals? Do you believe in the power of numbers?

#### Join GAHPERD!

For more information, visit www.gahperd.org, contact Kim Thompson, Executive Director of the Georgia Association for Health, Physical Education, Recreation and Dance (kthompson.gahperd@att.net) or complete the membership form on the next page.

#### Mission Statement

GAHPERD, Inc. is a non-profit organization for professionals and students in related fields of health, physical education, recreation and dance. GAHPERD, Inc. 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.

# **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.

### Please include all requested information

New:	Renewal:		Female:	Male:		
Last Name:		First Nam	e:	(please circle)		
Classification and M	embership Dues (d	check one)	1-year	2-year	3-year	
Retired	(includes full time		\$25 \$12 \$8	\$45 n/a n/a	\$65 n/a n/a	
Preferred Mailing Ad	ddress: (Street, Apt.	<u>#)</u>				
(City)						
(State, Zip)						
County of Residence	2:					
County of Employme	ent:					
School/Organization	/Employer:					
Home Phone:		Wo	ork Phone:			
Cell Number: :		AX Number:				
Email Address:						
Second Email:						
Employment Classif Elementar Middle Sc Secondary	ry hool v	Two-Ye College City/Co Other	-	r		
Other Memberships		CAF	Van	NI-		
	Yes No		Yes ership #:	_ NO		
Areas of Interest:						
Division (che	eck one)		ns (check two)			
Dance		College/University				
Gene			NAGWS/Men's Ath	nletics		
Healt			Recreation	d (C) de de de de d	I	
Physic	al Education	·	Future Professiona	al (Students check	nere)	
Elementary PE  Middle School PE						
			Secondary PE			
		`	Jesonadi y i L			