WE ARE CHAMPIONS

By Shannon Milliken
SHAPE Colorado President

SHAPE Colorado convention has always been a highlight of my year! Walking away with great new ideas and activities to try with my students, meeting new people and of course catching up with friends that sometimes you only see once a year, makes it three of the best days of the school year for me.

This year was no different and I had the honor and privilege of stepping into the role of President of SHAPE Colorado. Our Past-President, Elizabeth Sharp encouraged us to enjoy our journey to potential this last year. My journey was building upon my leadership skills so I can now lead others. I’m very excited about what this next year will bring for SHAPE Colorado and its members!

My personal goal as a champion teacher, is to continue learning. I’ve committed to being a lifelong learner. Engaging in professional development opportunities reenergizes me to come back to my students with innovative ideas, fun games and activities, and new ways of doing things that I never even thought of or thought possible. I was able to slip into a few sessions during convention and take away some great new ideas that I’ve already started to implement in my classroom. I also had some amazing experiences which includes physical education and health education in the definition of a well-rounded education. Professionally, it is important that we continue the momentum to be a forefront as decisions are made around ESSA funding and to continue to advocate for quality physical education and health programs in schools.

My theme for the 2016-2017 year is “We Are Champions: For our students, for our schools, for our communities and for our profession”. All students deserve a champion teacher! An individual who is willing to go above and beyond and fight for what is best for students and help them reach their potential. Do not forget, we are champions every day, not just for our students but for our schools and for our communities. As a profession, we have never been in a better place to be on the same playing level as other subject areas, with the passing of the Every Student Succeeds Act (ESSA),

see Champions on page 2
2016 Convention was Awesome!

By Renee DeBell
Convention Manager

Thank you to everyone who attended the 2016 SHAPE Colorado annual convention at the Hotel Elegante in Colorado Springs. I am basking in the afterglow of such an incredible convention. Some of my favorite highlights included the fencing pre-con workshop (getting the suit on is far harder than it looks), President Shannon Milliken’s body rocking Zumba class on Friday morning and the heartfelt acceptance speeches from the awards dinner.

While I love to savor success, I am eager to start planning the 2017 annual conference. To put on another (dare I say, even better) conference, we need your help. A post-convention survey arrived in your email box recently and I am asking that you PLEASE fill it out. We need your feedback on social functions, content for sessions and feedback on growing our digital presence and membership. Is there a topic we should address? A session that we should bring back from a previous conference? The post-convention survey is your opportunity to speak up. We are only as good as the information we have, so please share your thoughts, suggestions and comments with us.

And of course, please save the dates of October 19-21, 2017 for next year’s conference which will return to the Hotel Elegante in beautiful Colorado Springs.

5280 Professional Development grant application closes January 9th

Members may apply for grant money up to $1,000 for professional development that relates to the improvement of knowledge and practice of HPERD, where the end result will benefit children to the extent of the mission of SHAPE Colorado. Convention registration, transportation and lodging are areas that may be covered by the grant.

For more information go to http://www.shapeco.org/grants.html

SHAPE CO November 2015 Volume 41, No. 3, Page 2

conversations with other teachers, exhibitors and past leaders.

A couple of shout outs to some individuals who helped us have another successful convention. Thank you to the SHAPE Colorado Board for helping throughout convention; stuffing bags, setting up, helping at registration, directing traffic and answering questions. Convention cannot run like the well-oiled machine it is without your help. Thank you to our exhibitors and presenters who came near and far to be a part of our convention. Thank you to Elizabeth Sharp and Terry Jones for all of the planning leading up to convention. Last but certainly not least, thank you to our amazing convention manager, Renee DeBell. Renee is by far the brains and brawn behind this whole convention. She makes it seem flawless and she does it all with a huge smile on her face.

This year, I challenge you to think about what you need to be a champion teacher for your students. How can SHAPE Colorado help you become a champion whether it is for your students, your school or your community? What do you need from your organization that represents you? Please share your feedback with us!

Thank you for this opportunity to serve as your President. I’m proud to represent and work with an amazing group of individuals who devote countless hours to our students to help them be their best selves.
On behalf of the SHAPE Colorado Board I want to thank everyone who attended the annual SHAPE Colorado Convention at the Hotel Elegante’ on October 20th – 22nd, 2016 in Colorado Springs. We hope you found the conference informative and worthwhile. The primary goal of the conference was to bring together over 300 of the top physical education and health leaders from around the state.

We believe our diverse and dynamic group of speakers and panelists provided in-depth insight in such topics as 50 Million Strong, Every Student Succeeds Act, integrating technology into physical education and a variety of health education topics. We would also like to thank our partners who made this event possible: Colorado Education Initiative, RMC Health, Western Dairy Council and the American Heart Association. Most of all I want to thank the SHAPE Colorado Board for their countless hours of hard work to making this event possible. Hosting an event of this magnitude is truly a team effort.

Now is the time to start thinking about the 2017 convention that will be held in Colorado Springs at the Hotel Elegante’. The call for session proposals will go out in February and we hope that you will join us to share your expertise. The SHAPE Colorado Board is already hard at work putting together a convention to remember.
Attending the SHAPE Colorado convention, I leave each year feeling inspired and extremely excited about all the amazing things happening in schools for our students. There were so many great sessions this year at convention and I think it’s easy to say there are some cool things happening in schools right now!

My favorite part of the convention was the awards banquet when we got to celebrate incredible individuals who go above and beyond to be the very best for their students. As each of the award recipients accepted their award, I was in awe of how inspiring they were. It is something special to be a part of a community like we have at SHAPE Colorado. I think the new slogan is very fitting, we have lots of champions in our schools who are doing amazing things! There are so many more physical education and health teachers out there, I think it is our job to introduce them to SHAPE Colorado and encourage them to be a part of this community and mission of people achieving active and healthy lifestyles. This is not a race and it cannot be accomplished alone, we must continue to network, inspire and encourage each other to be the very best for our students and community.

I attended a couple of sessions on assessment and grading, and I think it is important to recognize the impact that assessment has on physical education. Student assessment provides accountability for standards-based learning and is a key component of the education process in all subject areas (SHAPE, 2016). With the success of Every Student Succeeds Act (ESSA) in 2015, physical education is now recognized as part of a well-rounded education. This means physical educators need to provide evidence to support student learning achievement. The amount of assessment/grading sessions was a clear indicator that Colorado is ahead of the game and being proactive about assessing in our classrooms, this is fantastic!
I have attended the convention for the past three years. Every year it has inspired me to love what I do and bring back ideas that I can use right away. When I am feeling down and tired of working, I attend the convention and it brings me back to life. The energy everyone has, whether it is in a class or the awards ceremony, makes you feel appreciated.

I look forward to coming to the convention to collaborate with others and gain new knowledge that I can use and even share with my colleagues at work.

If you have never attended or not sure if you want to attend, please do, it is a great way to communicate and get ideas on how, what, and when to teach students to be active for a lifetime.
SHAPE Colorado, three days out of the year when past, present, and future Physical Educators of all levels get together to learn new things to teach in their classrooms, network, and get up to date on the latest trends or ideas in Physical Education and Health Education. You also have the possibility to score free equipment!

I attended the SHAPE Colorado conference for the first time ever as a future professional this year, and I was amazed at how much I learned. One of my greatest takeaways from the three-day conference were the things I learned at the future professionals’ session on Thursday moderated by Emily Graves and Elizabeth Miner. In this session, not only did we focus on what makes a good resume and how to make ours stand out, but we also heard some of the hardest questions you could be asked in an interview and went over the answers and some good words to use in an interview. We also got to mingle with other future professionals and discuss what they are doing in their Physical Educators clubs on their campuses. In this session, we got time to learn some games that Elizabeth and Emily use in their classrooms and create our own game with limited equipment and space, practicing what I think is the single hardest skill to master in the profession.

During this conference, I also participated in a Fitnessgram session in which I learned how to integrate practicing for the Fitnessgram tests into a daily warm up that prepares the kids for the real test. I learned about new equipment you can use during the testing of Fitnessgram too; like the push up counter that beeps and counts your pushups. I would recommend the SHAPE Colorado conference to all future professionals because you learn so much information in such a short time period. You will learn things you didn’t even know you weren’t learning in your college classroom.
Each year, our elementary students begin the year asking, “When is Scooter Highway Day?” They have come to expect this event and enjoy it almost as much as Field Day. We implement this activity at the end of our scooter unit as a reward for learning to use the scooters safely. It offers the students some freedom with the scooters and a whole lot of creative play.

In order to create Scooter Highway we pull just about every piece of physical education equipment we own out of our closet. The idea is to make the gymnasium appear as a city and as colorful and exciting as possible. We use cones to create a giant, one-way, track outside the basketball court with a series of roads leading to a traffic circle in the center of the gym. We use poly-sport arrows and traffic commands, such as stoplights, railroad crossing, one-way and yield signs to help direct traffic. Throughout the course, we place stations for students to stop and interact, the car wash usually being the favorite event. To create the car wash, we stand up mats and hang flag belts across the top. Students will roll (one-way only) underneath the flag belts to wash their cars. Other exciting stops have been a hotel, which is just a mat for resting, a petting zoo with rubber or beanbag animals, a cup stacking station, a bowling alley, a scooter soccer area, a gas station with a noodle for filling up the car, and a fix it shop, which uses various equipment or tools to mimic fixing a broken scooter. Sometimes we hang a giant parachute over the traffic circle to create a tunnel. Restaurants, rest stops, scenic views, or amusement parks could be set up to mimic a road trip. The sky really is the limit when creating the side activities, and or stations for Scooter Highway.

The way in which the teacher explains Scooter Highway is the most important piece. The teacher should emphasize fun, creativity, and safety. Students should be given strict rules about speed and limited ways to ride the scooter, but be encouraged to make their own choices about what activities they would like to try along the course. In the past, we have been the “traffic police” and have put kids into a “jail” if they are caught speeding, colliding, or riding their scooters in an unsafe way. This can be fun, however, many of the students think it’s fun to go to jail and try to get in trouble. The teachers have found that giving them a longer time out in jail can be effective to avoid repeat offenders.
DANCE EDUCATION MASTER OF ARTS

Blend your teaching talent and your passion for dance into the Dance Education Master's Degree. In this program, you will be able to build on your teaching strategies, develop theoretical knowledge as it relates to teaching and learning, and develop your dance/movement skills.

Change your career, change your salary, change your life.

EXTENDED.UNCO.EDU/DanceEd
When students select a scooter for Scooter Highway, it's fun to let them name which car they are going to be driving or if they can't think of one, tell them, "Here is your purple Jeep," etc. Some students simply go around and around the track the entire class. Others may visit each station and make sure they participate in all possible options. There are usually very few disciplinary actions on Scooter Highway day, as the students really do respect the equipment and value the day. This is all due to the teacher preparing the class prior to the event and setting it up in a structured way. The students believe they are getting a day of freedom, when really the activity is quite structured. It’s a physical education hit!

**Colorado Adapted Physical Education**

By Bryan Wickoren
Adapted Physical Education Teacher, Jeffco District

This past SHAPE Colorado Adapted Physical Education Pre-Con session was highlighted by David Geslak (Coach Dave), founder of Exercise Buddy. Coach Dave highlighted many aspects of the importance of movement for students with Autism. “Research has proven that exercise plays an important role in managing the behavioral symptoms associated with autism. Exercise helps increase focus, build self-esteem, and improve relationships. Exercise Buddy uses established teaching strategies, proprietary exercise visuals, and peer-led videos to teach and inspire without challenging parents and teachers.” The fastest growing population in our physical education classes is students with autism. In your physical education class, keep in mind whether you use the Exercise Buddy or not; students with autism will be more successfully with a visual board to provide support for them.

Continued from SHAPE America on page 5

redesign how we deliver physical education and health education to America's students. Hear how progress will be measured, what current evaluation tools and processes can be used to evaluate success, and how you can be a "champion." Complimentary 50 Million Strong T-shirts will be given away to the first 300 registered participants.

Research will also have a large presence in Boston. The Research Council is hosting a session titled, "Learning from the Past, Making History" which will be a session that contains a historical perspective of SHAPE America and its research disciplines followed by a discussion about the future. This session will include research and discussion by SHAPE America members Hans van der Mars, Missy Parker and Kevin Patton. Russ Pate of the University of South Carolina will present the "U.S. Report Card on Physical Activity in Children and Youth" while CDC Health Scientist Shannon Michael discusses the "Report on Secular Changes in Physical Education Attendance in the U.S." and Christina Economos, associate professor, Tufts University, presents "Best Practices in School District-Wide Efforts to Promote Students' Physical Activity."

Want to see what other convention sessions you’d like to attend? Check out the preliminary program and schedule-at-a-glance chart! Then, head to the convention registration page to take advantage of $75 in early-bird savings!
Assessment of Mental Toughness in Athletes at a Southern Colorado High School

By Esther Villa, B.S. and Carol Foust, Ph.D.
Colorado State University—Pueblo

Abstract:
Mental toughness can be defined as having the natural or developed psychological edge that enables people to cope better than others when demands are placed upon them. Loehr (1986) defines people with mental toughness as disciplined thinkers who have the ability to respond to pressure and stress in a way that allows them to stay calm, focused, relax and even energized by the pressure by channeling the energy from the stress in a positive manner. Mental toughness plays an important role in sports performance. This study assessed mental toughness in a men’s high school soccer team and hypothesized that participation in athletics would improve mental toughness over the course of the high school soccer season. The team consisted of 18 high school age male athletes. Loehr’s Psychological Performance Inventory (PPI) (1986) was implemented at the beginning of the soccer season and compared with a post season measure to determine if involvement in sport influenced mental toughness over the course of the high school season. The PPI measures self-confidence, negative energy, attention control, visual and imagery control, motivational level, positive energy, and attitude control which makes up the different components of mental toughness. A dependent t-test demonstrated a significant difference between athlete’s mental toughness scores before season and after season with a significant increased in all of the mental toughness factors. The athletes scored the highest on Motivation level and Positive Energy Control. They scored the lowest on Negative Energy Control and Attention Control. Although the factors are very inter-related, it is valuable for a coach to assess and understand the stronger and weaker areas of mental toughness. Coaching techniques and the coach’s interpersonal skills can influence the factors of mental toughness in an athlete.

Introduction
Mental toughness can be defined as having the natural or developed psychological edge that enables people to cope better than others when demands are placed upon them. Loehr (1986) defines people with mental toughness as disciplined thinkers who have the ability to respond to pressure and stress in a way that allows them to stay calm, focused, relax and even energized by the pressure by channeling the energy from the stress in a positive manner.

The Diversity Gap in Colorado Public Schools

By Nhu Nguyen
Metropolitan State University of Denver

Diversity Representation
Our schools have a growing need to diversify our teachers to better represent and reflect the student body population. It is important for schools to mirror the images of its population. Students as well as parents and guardians may also feel a better sense of school community and parental involvement if the school staff also reflects the community and its spoken languages and cultures. According to the Bureau of Economic Research, a correlation exists between being a successful minority student and having a minority teacher (Fairlie, Hoffmann, Oreopoulos, 2011; Ehrenberg, Goldhaber, Brewer, 1995; Dee, 2011).

“As percentages of minority student populations increase, the representation of minority teachers continues to be problematic. (http://archive.kare11.com/news/news_article.aspx?storyid=139942; http://www.ewa.org/blog/latino-ed-beat/iowa-struggles-find-minority-teachers; http://www.southcoasttoday.com/apps/pbcs.dll/article? AID=/20140330/NEWS/403300329; http://www.oregonlive.com/beaverton/index.ssf/2014/03/beaverton_school_notes_beavert_1.html).” “It would only be fair for students to have teachers in the classroom that look like them...Students need role models and people to model for them. They need to see that face.” said Judy Henderson, who is black and a history teacher at Burnsville High School. Similar situations occur across the United States (Unmuth, 2014). Kevin Welner, professor of education and director of the National Education Policy Center at the University of Colorado at Boulder, said “There are a lot of outcomes besides test scores. Does it help retain students? Does it help keep kids in schools? Does it help them to see the benefits of going to college? Does it help them to feel more welcome in school and experience school in a more positive way? Those are harder to measure, and we often don't talk about them as much as test scores."

In Colorado, Education leaders throughout the state have, for the past decade, cited efforts to increase diversity. They say...
that allows them to stay calm, focused, relax and even energized by the pressure by channeling the energy from the stress in a positive manner. Mental toughness plays an important role in sports performance. Mental toughness can aid an individual in being more consistent in remaining focused, confident, resilient, and in control under pressure. It also leads to motivation in having an internalized desire to succeed and bounce back from any setbacks. It can cause an individual to remain focused on their task and avoid any distractions and be able to regain psychological control following unexpected or stressful events and accept the inevitability of anxiety while being able to cope with it (Yukelson, 2012). Gould, Dieffenbach and Moffett (2002) defined mental toughness as the mental factor most often referred to as a contributor to increased effective sports performance. Individuals who are mentally tough also tend to be easygoing and flexible because they are able to remain calm and relaxed. They are competitive in many situations and have a lower anxiety levels than others (Gucciardi, 2012).

The interest in mental toughness in both academic and professional settings has increased in recent years. Research indicates mental toughness can incorporate a person’s values, attitudes, cognitions, emotions, and behaviors. It can also have an effect on an individual’s self-belief, context intelligence, resilience, emotional awareness and regulation, attentional control, optimistic thinking, ability to handle challenges, and success mentality including both positive and negative life experiences (Gucciardi, 2012). Self-Determination Theory (SDT) expands the boundaries of mental toughness research and provides new perspectives in understanding the development and consequences of it. Mental toughness can be linked to motivational variables encompassed by self-determination theory and also the physiological health and objective sport performance of athletes (Mahoney, Gucciardi, Ntoumanis, & Mallet, 2014).

A recent research article argues that basic physiological needs theory offers a positive effect to the mental toughness in the mechanism for optimizing human functioning. A high increase in levels of continuous effort is more likely to result in individuals who feel a sense of mastering a new skill, goal achievement, and a sense of productivity. This causes a positive effect in the perception of an individual. The opposite effect can occur in individuals who put little effort. Results showed the conceptual model that aids in understanding some of the antecedents and consequences of mental toughness (Mahoney, Gucciardi, Ntoumanis, & Mallet, 2014).

Mental toughness is a key characteristic that influences the way a person approaches and appraises both positive and negative events rather than acting as a fixed personality trait. It has been linked to have an effect on an individual’s ability to consistently achieve his or her goals. Mental toughness can be related to the developmental experiences of an individual. Performance in sports has shown to strongly influence an individual’s mental toughness since sports offer challenges and adversity and it requires long term commitment in order to accomplish goals (Guillén, & Laborde, 2013).

Mental toughness plays an important role in how a person approaches everyday situations. Mentally tough individuals tend to be more prepared to remain focused and in control of different situations. Mental toughness can benefit individuals on and off the field (Gucciardi, 2012). Research continues to be done on the effect mental toughness has on individuals regarding sports and other life challenges.

Coaches and players see mental toughness as one of the most critical aspects to performance excellence. Coaches can play an important role in influencing an athlete’s development of mental toughness. Results indicated that psychological skills, motivation to succeed, and resilience have a strong correlation between coaches and athletes. Coaches need to provide a positive mental environment which plays an important role in athlete’s confidence and persistence (Weinberg, Butt, & Culp, 2011).

One study investigated the higher-order structure of mental toughness and examined the differences in mental toughness between athletes and non-athletes. Between athletes and non-athletes, it has been linked that athletes will tend to have a higher mental ability. Results indicated athletes did in fact have a higher mental toughness rate than non-athlete. This indicated that higher mental toughness levels are usually associated with higher sport performance. It can be concluded that sport participation is associated in the development of mental toughness in individuals (Guillén, & Laborde, 2013). Mental toughness plays an important role in how a person approaches everyday situations. Mentally tough individuals tend to be more prepared to remain focused and in control of different situations. Mental toughness can benefit individuals on and off the field (Gucciardi, 2012). Research continues to be done on the effect mental toughness has on individuals regarding sports and other life challenges.

**Research Hypothesis**
The purpose of the study was to assess mental toughness in a men’s high school soccer team. It is hypothesized that participation in athletics will improve mental toughness over the course of a high school soccer season.

**Methods**
The men’s soccer team consisted of 26 high school players at pre-season. Loehr’s Psychological Performance Inventory (PPI) (1986) was implemented with the men’s soccer team in a high school setting. The PPI has been researched to support the validity and reliability of the inventory (Golby, Sherd, & van Wersch, 2007). Data from soccer athletes was collected at the beginning of the soccer season and compared with a post season measure to determine if involvement in sport influenced mental toughness over the course of the high school season. Eighteen players completed the pre and post assessments.

Mental toughness was evaluated in this study based on the factors identified by Loehr in his theory:

- **Self-Confidence** – belief that one can perform well and be successful
- **Negative Energy Control** – ability to cope with negative emotions such as anger, fear, and frustration to achieve success
- **Attention Control** – ability to stay focused and to have high performance
- **Visualization and Imagery Control** – ability to create positive mental images
- **Motivation level** – the willingness and energy to persevere
- **Positive energy control** – ability to maintain fun, joy and satisfaction
- **Control of attitude** – ability to stabilize thoughts and continue with progress

Loehr (1986) identified the categories that result in a range of scores of 6 to 30 for each factor. Higher scores indicated stronger attributes in each category. Loehr's high school SHAPE CO November 2015 Volume 41, No. 3, Page 11

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**Continued from Mental Toughness on page 10**

SHAPE CO November 2015 Volume 41, No. 3, Page 11
Fuel Up to Play 60, the in-school nutrition and physical activity program from National Dairy Council, local Dairy Councils and National Football League, in collaboration with the United States Department of Agriculture (USDA), is helping to make wellness part of the game plan.

Sign up to be a Program Advisor! Program Advisors are the coaches of their in-school team. They engage and empower students to implement Fuel Up to Play 60, plus they’re eligible for funding, rewards and recognition opportunities.

Join and sign up as a Program Advisor today, at FuelUpToPlay60.com
diversity not only provides role models for children of color but also offers a cultural understanding of students' learning needs. Still, wide gaps remain throughout the state, according to a Denver Post analysis of Colorado's student and teacher racial and ethnic makeup over the past 10 years. More important, state data shows the needle has not budged much over the past decade...DPS Superintendent Tom Boasberg and Aurora Public Schools Superintendent John Barry, leaders of two of the most diverse districts in the state, said they have implemented various programs to boost the number of minorities in their teaching ranks. Both districts offer teacher-residency programs, which allow prospective teachers to spend a year in a classroom with a mentor as they work toward a certification. District officials from Denver and Aurora also travel to states to recruit teachers from universities that have higher numbers of graduates who are Latino and black, and they recruit from the Teach for America Program, which they say is traditionally more diverse. Boasberg said DPS also has a teacher cadet program that encourages minority students to pursue degrees as teachers" (Torres, Zahira 2013).

Data Collection
The most current data were obtained through the present 2014 school district websites, through the Colorado Department of Education public data, and via correspondence with physical education district coordinators. In the Denver-metropolitan area of Colorado the following are the demographics (2013-2014) for the current student population:

<table>
<thead>
<tr>
<th>school district</th>
<th>% non white students</th>
<th>% non white teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>45.64%</td>
<td>10.30%</td>
</tr>
<tr>
<td>Aurora</td>
<td>78.40%</td>
<td>16%</td>
</tr>
<tr>
<td>Brighton</td>
<td>49.68%</td>
<td>13%</td>
</tr>
<tr>
<td>Cherry Creek</td>
<td>52.50%</td>
<td>12.10%</td>
</tr>
<tr>
<td>Denver</td>
<td>75.60%</td>
<td>8%</td>
</tr>
<tr>
<td>Douglas</td>
<td>22.90%</td>
<td>6%</td>
</tr>
</tbody>
</table>

- Adams County Five Star Schools, 45.64% of students are non-white, as compared to 10.3% of teachers non-white. ([http://adams12.org/living_here_demographics](http://adams12.org/living_here_demographics); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf)
- Aurora Public Schools, 78.4% of students are non-white, which represent 130 countries and 120 languages. Only 16% of the teachers are non white ([http://aurorak12.org/communications/docs/General.pdf](http://aurorak12.org/communications/docs/General.pdf); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf))
- In Brighton 27j school district, 49.68% of students are non-white, as compared to 13% non-white teachers. ([http://www.localschooldirectory.com/district-schools/0040/Brighton-27j-School-District/CO#district_information@students_faculty](http://www.localschooldirectory.com/district-schools/0040/Brighton-27j-School-District/CO#district_information@students_faculty); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf))
- Cherry Creek School District, 52.5% of students are non-white, as compared to 12.1% of teachers are non-white ([http://www.cherrycreekschools.org/AboutUs/Pages/default.aspx](http://www.cherrycreekschools.org/AboutUs/Pages/default.aspx); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf))
- Denver Public Schools, 75.6% of students are minorities, with most prevalent languages spoken include: Spanish, Vietnamese, Arabic, Somali, Amharic, Nepali, and Russian. Teachers of color represent 8% of the teacher workforce ([http://communications.dpsk12.org/facts.html](http://communications.dpsk12.org/facts.html); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf))
- In Douglas county school district, 22.9% of students are non-white as compared to 6% of non white teachers ([http://www.ed.gov/labor-management-collaboration/conference/douglas-county-school-district](http://www.ed.gov/labor-management-collaboration/conference/douglas-county-school-district); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf))
- In Jefferson County Public Schools, 29% of students are non-white, as compared to 9.4% of non white teachers ([http://www.jeffcpubulschools.org/report/index.php?numbers](http://www.jeffcpubulschools.org/report/index.php?numbers); [http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf](http://www.cde.state.co.us/sites/default/files/Count%20of%20Teachers%20by%20District%2C%20Ethnicity%20And%20Gender.pdf))

The major districts in Colorado describe data indicating 22.9%- 78.4% population is non-white students. On the contrary only 6%-16% of Colorado teachers are non-white. In physical education, some school districts are faring well above the overall teacher statistics in Colorado. For instance, Denver Public Schools (DPS) physical education teachers have much more favorable numbers more than doubling the 8% rate of DPS teachers of color, with 21.5% of physical education teachers of color (E. Larson, personal communication, August 17, 2014). Aurora Public Schools also has a rate of physical education teachers of color just slightly higher (10.9%) than the district norm (10.3%) (K.Webb, personal communication, September 23, 2014).

Discussion for Physical Education and Future Directions
The data indicate the significant discrepancies between the percentages of non-white/students of color versus the percentages of teachers of color in Colorado. DPS and APS have over 75% of the student population defined as non-white students of color, with not more than 16% teachers of color, which leaves a huge gap of the ratio between the students and teachers of color. Specifically, in physical education, the ratio fares better than the overall district percentages, yet the gap is still wide.

What can we do to narrow the gap? Future research may explain why the gap exists and why the gap may be narrower in physical education. School districts may need to: a) be aware the gap exists, b) understand and value diversity and the impact on students of color, c) research internal recruiting and hiring practices, d) create a
believed the factors to be inter-related and to be an indication of mental toughness in an athlete.

**Results**

(Tables/Figures are on page ___)

Table 1 displays the statistical values of mental toughness for athletes before the season started. Table 2 shows the statistical values of mental toughness for athletes after the season was completed. Table 3 shows the average scores for self-confidence, negative energy, attention control, visual and imagery control, motivational level, positive energy, and attitude control which makes up the different components of mental toughness. The athletes scored the highest on Motivation level and Positive Energy Control. They scored the lowest on Negative Energy Control and Attention Control. Although the factors are very inter-related, it is valuable for a coach to assess and understand the stronger and weaker areas of mental toughness.

Figure 1 displays the graphed components of mental toughness for athletes at pre-season and post-season. Table 4 details results of the dependent t-test for pre-season and post-season. The athletes had a significant increase in every component of mental toughness. The largest increase was in Negative Energy Control.

**Discussion**

After analyzing the data, the hypothesis was correct. A dependent t-test was applied for pre-season versus post-season mental toughness scores for the men’s soccer team in each mental toughness factor. This demonstrated that there was significant difference between athlete’s mental toughness scores before season and after season.

Athletes did significantly improve their mental toughness score from pre to post-season. In each category of mental toughness, athletes scored higher at post-season. Although athletes scored higher post-season than they did pre-season, many factors can play a role in an athlete’s ability to perform well. The athletes scored the highest on Motivation level and Positive Energy Control. They scored the lowest on Negative Energy Control and Attention Control. The largest increase in score over the season was in Negative Energy Control. Although the factors are very inter-related, it is valuable for a coach to assess and understand the stronger and weaker areas of mental toughness in their athletes. Coaching techniques and the coaches’ interpersonal skills can influence the factors of mental toughness in an athlete.

A coach can influence a player’s ability to perform. Weinberg determined that coaches can play an important role in influencing athlete’s development of mental toughness (Weinberg, Butt, & Culp, 2011). For example, the way a coach conducts practices, responds to an athlete after a win or loss, or simply when or how a coach praises or criticizes a player can affect the athlete's development of mental toughness. Mental training of athletes has been increasingly used to improve performance. Physical skills alone are not necessarily adequate for the best strategic plan to attract diverse applicants, e) create mentoring programs to retain teachers of color, and f) build strong teaching communities where teachers of color can collaborate and identify with colleagues. In addition, in physical education, do the statistics for Physical Education teachers of color mirror that of students of color in Physical Education programs at Colorado universities? What are students of color experiences that attract or deter them from entering the field? What is the turn-over rate for pre-service students of color and the turn-over rate into the first years of teaching? At the university level, what can we do in our field to encourage students of color into the field of Physical Education? Are there specifically designed programs, incentives, and scholarships, peer groups/clubs to attract or mentor teachers of color?

**References**


E. Larson, Personal communication, August 17, 2014.


See Mental Toughness on page 16

Continued from Mental Toughness on page 11

Continued from Diversity Gap on page 13

See Diversity Gap on page 17
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Improving mental skills such as those that determine to make up mental toughness like self-confidence, motivation level, negative energy control and attitude control can improve overall performance (Sadeghi, Mohd-Sofian, Jamalis, Ab-Latif & Cheric, 2010). Athletes can learn and practice the skills that will improve mental toughness which will improve athletic performance (Jones, Hanton, & Connaughton, 2007; Thelwell, Weston, & Greenlees, 2005).

One way to improve this research would be to use a control group of non-athletes for comparison or to compare mental toughness between genders and different sports. Players could also be followed through sport development to assessment mental toughness control or to determine if mental toughness is a factor in continued participation in sport or success in school. Some sports require different aspects of mental toughness which may play an important role on a player’s psychological development.

Coaches can use this assessment to determine the influence of their coaching strategies on the mental toughness development of their players. The Psychological Performance Inventory document can be accessed through a google search. There are numerous publications that suggest mental and physical training methods that can improve the components of mental toughness including Loehr’s book The

Figure 1: Average mental toughness scores (6-30) for each category of mental toughness for pre-season athletes and post-season athletes.

Table 1: PPI data for athletes pre-season

<table>
<thead>
<tr>
<th></th>
<th>Self Confidence</th>
<th>Negative Energy Control</th>
<th>Attention Control</th>
<th>Visual and Imagery Control</th>
<th>Motivational Level</th>
<th>Positive Energy Control</th>
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<td>15</td>
<td>13</td>
<td>7</td>
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<tr>
<td>Maximum</td>
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<td>23</td>
<td>25</td>
<td>27</td>
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Table 2: PPI data for athletes post-season

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<th>Attention Control</th>
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<tbody>
<tr>
<td>Mean</td>
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<td>21.8</td>
<td>22.4</td>
<td>24.9</td>
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Table 3: Average scores for each category of mental toughness

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Table 4: t-test analysis data for pre-season and post-season athletes

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<td>.0023</td>
<td>.0057</td>
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</table>

See Mental Toughness on page 14

See Mental Toughness on page 17
New Toughness Training for Sports (1995), Bring Your A Game: A Young Athlete’s Guide to Mental Toughness (Etnier, J., 2009), and Mental Toughness in Sport: Developments in Theory and Research (Gucciardi & Gordon, 2013) to name a few.

This research study was conducted by Esther Villa during her under graduate studies at CSU-Pueblo under the direction of faculty member Carol Foust as she completed her under graduate studies at CSU.

References:


Continued from Diversity Gap on page 14


Submission Guidelines

Would you like to submit an article, lesson plan or story to the next issue of the SHAPE CO Newsletter? The submission deadline for the next issue will be February 1st.

The SHAPE CO Newsletter will be published four times per year. We would like to invite and encourage all of our members to submit contributions for other professionals to view. Articles may be research based (please use proper citations), be program success stories, or be lesson plans that you would like to share with your colleagues. Action pictures or diagrams that go along with your article are always appreciated. All articles will be reviewed by a panel of editors. Authors should indicate in their cover letter if they want the manuscript refereed (blind review) rather than editor-reviewed.

Average word count for an article is between 300-400 words, not to exceed 1000 words. If you have a longer article it may be divided up in parts between issues. Submit a head shot with your submissions with correct spelling of your name so that we can recognize you for your contribution. Please submit online at http://www.shapeco.org/journal-archives.html

Email any questions to Elizabeth Sharp at esharp@coloradomesa.edu