

MIND GAMES

THE VIEW FROM THE TOP

60 SECOND SUMMARY

HOT OFF THE PRESS



OLYMPIC COACH

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Message from the
Managing Director



WHAT ATHLETES SAY:

Why do I play sports?

What do I like about my sport?

**What does my coach do
that I don't like?**



POSITION PAPER ON YOUTH WEIGHTLIFTING



WINTER TRAINING TIPS

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ON THE COVER

Photo: Agence Zoom/Getty Images

Nordic Combined is an Olympic sport that combines cross-country skiing and ski jumping. It involves ski jumping, which requires physical strength and technical control, and cross-country skiing which demands endurance and strength. Shown is Todd Lodwick, who finished 8th in the Individual Gunderson 15k and the Low Hill Team competition along with a 7th place finish in the Team 4 x 5k and 9th in the sprint 7.5 k at the Torino Olympic Games.

Message from the
**PERFORMANCE
SERVICES MANAGING
DIRECTOR**
by
DOUG INGRAM

Coaching is one of the greatest occupations. The highs of watching your athletes succeed is beyond comparison, whether that success is finally catching a batted ball for a six year old or being on an Olympic podium. That feeling of accomplishment is shared by athlete and coach.

For this issue, we went to athletes to find the answer to three questions: Why do you play sports? What do you like about your sport? What do you not like about your coach? Our respondents come from different parts of the country and with different sports, but you will find an amazing similarity in answers. They will speak about fun, fairness and passion. They will talk about great coaches and some very candid comments about what really bothers them about their coaches.



Coaching is a delicate balance of teaching and correcting, of providing positive motivation and helping an athlete overcome frustration (which can be frustrating to the coach as well). Coaching is truly an art and a science.

The coach is the largest determinant if an athlete continues to participate in a sport. How crucial is that first coach to the future of the development of athletes- extremely important. Let's pull out one quote (this is from a 12 year old boy) from the questions posed to the athletes in this edition. "I did have a coach that did a lot of things I didn't like. He didn't teach the fundamentals before he taught advanced moves, didn't coach everyone evenly, didn't run a good practice, overall he was a bad influence for the sport of wrestling. That's why I am thankful that I have the wonderful coaches I have now and didn't give up wrestling." This athlete could have been lost from wrestling or all sport based on his experience with his first coach.

USA Swimming did a study on why children quit swimming. The action of the coach (described as a negative coach) was the number two reason for athletes to leave swimming. When the USOC studied Olympic athletes, coaches showed up as number three on the list for success factors and obstacles.

As you read the quotes from the athletes —think about your role as the coach. How do you think your athletes perceive you? Do you see yourself in any of the comments?



Why

do I play sports?

I play hockey because it is fun and it keeps my body strong.

Xylia, age 7-10, St. Paul, MN

So I can get better at it.

Hayden, age 7-10, Flagstaff, AZ

Sports are fun and they give me something to work toward. I know that perfection in sports can not be obtained, but it makes you work harder to become the best that you can be. When I get older, my goal is to play on the Olympic Volleyball team.

Age 11-14, Springfield, MO

I play sports to keep in shape and its fun. I also get to meet lots of different people.

Ben, age 11-14, Wellington, FL

I play sports because I am really active and competitive. Also, when I am in the game it is like I am in a whole new world. It is so much fun.

Shannon, age 11-14, Sturgeon Lake, MN

Fun, I love competition.

Trent, age 11-14, Springfield, MO

Because I'm competitive, it keeps me in shape, and I like being a part of a team.

Dani, age 11-14, Springfield, MO

I play sports for many reasons. I have met most of my friends through sports. Sports build self-esteem, they teach you responsibility, dedication, commitment, respect for others, good sportsmanship, how to be part of a team and work together, how to accept loss, and also how to take constructive criticism. Sports also teach you about setting goals for yourself, and making a plan on how to reach your goals. My goals are to play hockey in college, and hope to have the opportunity to play for the USA Team in the Olympics. I also play sports to stay in shape, and stay healthy.

Kristi, age 11-14, Lake Elmo, MN

I play sports because they are fun and they keep me in shape for what ever is coming next. Sport teaches you a lot of things like cooperation with other kids and how to work together. You learn a lot about your teammates this way. It is a good way to get to know your teammates.

Jaclyn, age 11-14, Moose Lake, MN

I play sports to stay active, make new friends, and have fun.

Courtney, age 11-14, Springfield, MO

I play sports because I love to be competitive. It keeps me active. Also it teaches me the proper way of goal setting and determination which will be useful not only in sports but in real life experiences such as school. I play sports because I love it.

Nicole, age 15-18, Anoka, MN

To win, to play at the college or Olympic level, and to be involved in an activity.

Katie, age 15-18, Rochester, MN

I play sports because it helps you stay in shape and helps to clear your mind and let out frustration.

Nicolas, age 15-18, West Palm Beach, FL

I play sports, anything from backyard football to state championship tennis, for the reason that it is fun. You can be intense and focused, but still laugh and enjoy it, and when it is done whatever the results were you always have a second chance. Plus it doesn't hurt that I am good at them.

Elsa, age 15-18, unknown

To fill my need for competition and accomplishment. Along with the exercise.

Kyle, age 15-18, Springfield, MO

Being a part of a team, playing a game I love, the competition and staying fit.

Kate, age 15-18, Chanhassen, MN



I play sports for a number of various reasons. First of all, I love sports because they are fun to play and there is nothing like friendship among team members. I also love playing sports because I enjoy the challenge of forcing myself to master the skills needed in order to become a better player. Finally, I enjoy sports because they are my escape from school, parents, friends and the everyday stresses of life. When I get on the ice or the field all my stress and worries disappear and I'm able to focus on something else.

Meghan, age 15-18, Maplewood, MN

I play sports so that I can meet new friends, stay in shape, and have fun!! Also it is a great feeling to win at something that you worked hard for.

Stacey Hull, age 15-18, Grand Rapids, MN

Because I love to compete and be a part of a team. It also keeps me in shape.

Jacque, age 15-18, Springfield, MO

I play sports because it is fun and exciting. It is exciting when I become better at a move or score a goal or make a higher caliber team. Performing well makes me feel good about myself. It is fun to compete against other girls and beat them one-on-one and as a team. It also keeps me in shape.

Nicole, age 15-18, Maplewood, MN

I play sports because one it's something to do and I love meeting all the people that agree with me and enjoy playing the sport or sports. For me, sports was always a goal or something that I wanted to prove to everyone including myself that I could accomplish anything I wanted if I just put my mind to it.

Hillary, age 15-18, Elk River, MN

I play sports because it keeps me physically fit and I enjoy working out with friends. I also get to meet a lot of new people when I am participating in different hockey camps.

Christine, age 15-18, Woodbury, MN

I love to compete.

Jeff, age 19+, Springfield, MO

It helps me be a well-rounded individual.

Victor, age 19+, Springfield, MO

I just love sports, always have.

John, age 19+, Springfield, MO

Because I like to continually challenge myself and see personal improvement.

Michelle, age 19+, Springfield, MO

Competition, against others, and in my sport against myself. In the sport of weightlifting you can be your own competition. I compare my results from the last meet, to the current meet. I always want to better myself. Each time I go to lift, I challenge myself to do better than I had done the previous time. There is always room for improvement because you are always capable of lifting more weight and becoming stronger.

Resident athlete Colorado Springs Olympic Training Center

I play sports because I have fun playing them and fortunately I can still participate in a sport full-time.

Resident athlete, Colorado Springs Olympic Training Center

I play sports because it's what I have a passion for versus other people having a love for music or whatever hobby. I have the intensity and competitive nature that sports bring out in me.

Resident athlete, Colorado Springs Olympic Training Center

I do gymnastics because I have an all encompassing passion for it. I have also dreamed of the Olympic Games since I was six years old and though I love playing many sports, gymnastics is my best chance to make that dream a reality.

Resident athlete, Colorado Springs Olympic Training Center





What do I like about my sport?

It's fun and keeps me healthy.
Hayden, age 7-10, Flagstaff, AZ

I like hockey because it is physical and fast.
Xylia, age 7-10, St. Paul, MN

Volleyball is fun and I like the mental aspects of the game.
The competition is intense and fast-paced.
Unknown, age 11-14, Springfield, MO

I like hockey because when I am on the ice and going fast that is really cool. I feel like I am going 100 mph.
Kalli, age 11-13, Roseville, MN

It is exciting, encouraging and very intense.
Courtney, age 11-14, Springfield, MO

My sport is wrestling which is very tough and challenging both physically and mentally. It has given me a great deal of confidence in myself. After all once you've wrestled everything else in life is easy (I think Dan Gable said this first).
Ben, age 11-14, Wellington, FL

What I like about my sport is; it makes me feel good about myself when I am playing it. I like the people I play hockey with during the regular season, and meeting new people in the off- season while attending camps or while playing on tournament teams. I am always trying to learn new things and enjoy the challenge that it gives me while trying to accomplish them.
Kristi, age 11-14, Lake Elmo, MN.

I like that while you are playing you also have to think so it makes it challenging and you learn something new every game or practice. While it is still hard work it is a lot of fun during the work also.
Shannon, age 11-14, Sturgeon Lake, MN

I feel myself getting stronger while I compete.
Trent, age 11-14, Springfield, MO

I like my sport because you get to go sooo fast and feel the air through your body and when you score a goal it's so exciting and fun. I love to play hockey and it is a good way for me to stay in shape.. You get so much out of the sport of hockey especially if you do the CODP camp because they push you so hard.
Jackie, age 11-14, Moose Lake, MN

I like hitting, the thrill of a good rally, and the competitiveness.
Dani, age 11-14, Springfield, MO

I love hockey because the game is not about being perfect. It is about making mistakes and adapting to yours and everyone else's mistakes as well. And the best players turn the mistakes into something beautiful on the ice, and that to me is amazing.
Elsa, age 15-18, MN

The intensity, working hard and the speed.
Kate, age 15-18, Chanhassen, MN

I like the everyday challenge to become a better player. I like when I'm forced to push my limits but can also have fun while doing so. I also like the friendships that I create by being on a team or in a training group. I get to meet people that share a common interest with me and I also get the opportunity to meet new and interesting people. I also enjoy playing in the games. I love the intensity and the adrenaline when I play in an important game or when the game is on the line. I love games, especially when we're winning and having fun working our hardest.
Meghan, age 15-18, Maplewood, MN

I love hockey because it is a fast paced game with lots of action. I fell in love with it five years ago and it has become the center of my life ever since.
Lizz, age 15-18, White Bear Lake, MN

What I like about hockey is that it is a combination of many skills. It's difficult, challenging, and very competitive. Hockey is also a sport of commitment and determination. You can't just show up and skate... you show up and give it your all not because you have to—because you want to.
Nicole, age 15-18, Anoka, MN

It's physical and you always have to be thinking, and aware of what is going on.

Katie, age 15-18, Rochester, MN

Wrestling is the sport I choose because it is one on one contact sport. When you lose, it's on you, and also gives you motivation to get better and train harder; but when you win, it's the best feeling ever, you know that you are the best and that your training is working.

Nicolas, age 15-18, West Palm Beach, FL

During hockey season you eat, sleep and breathe hockey and it is a great way to express yourself. I love the early morning practices when you can get up and go to the rink, and when you step on that ice it brings back childhood memories of skating on the pond behind our house, but yet it also reminds you what your out here to do, and that's to play this sport that you love. I love when your getting ready for a big game and you are so excited that your hands won't stop shaking and then you run through the chute and your heart is racing so fast that you think it's going to explode, and then you step on the ice and everything is gone. It becomes something that is second nature.

Kayla, age 15-18, Anoka, MN

I like how people know me because of my sport. It helps me to feel like I've accomplished something that others struggle with.

Nikki, age 15-18, Springfield, MO

The thing I like about my sport is that hockey is a skill that some people can master if they put in their time, dedication, and love for the sport. I basically really think that most of my life is pretty much based on hockey. I've played it since I was seven or eight years old. The one thing I remember telling myself was that hockey would make me a good person, and it has through the hard work and dedication of people before me to help mold me into the person I am today.

Hillary, age 15-18, Elk River, MN

I like my sports because of the team bonding that happens before, during and after the season. It is wonderful to be on a team of 18 girls and bond as a family and become closer to one another. I know that they are always there for me on and off the ice/playing field. I also like my sports because when I work hard, it might be hard while I am doing the sprints or killers but in the games it pays off. It feels good when I work for so long and hard for something and then achieve it.

Nicole, age 15-18, Maplewood, MN

There are a lot of goals. I see them and work on reaching them.

Jacque, age 15-18, Springfield, MO

I love hockey mostly because it is a very competitive, challenging and physical sport. Just when you think you have mastered one thing about the game you find out that you can add on to it and make it even better. I also like it because not that many girls play it and when you say you are a girl hockey player people think that it is very cool.

Danielle, age 15-18, unknown

You get to travel and earn money.

Jeff, age 19+, Springfield, MO

I like that it's a tough sport and I like seeing the self improvement.

John, age 19+, Springfield, MO

Can't go anywhere but up!

Michelle, age 19+, Springfield, MO

By looking back on myself as a 13 year old starting the first sport I have ever done, I realize that I have obtained so much from sports, physically, mentally, and emotionally. Through sports I have obtained self confidence, the ability to focus and becoming more goal oriented. This also has crossed over from sport to other areas in my life that will benefit me when I retire from competing. Being an athlete gives you not only skills for being in the gym, but also being outside of the gym. Without sports, I would not be the person that I am.

Resident athlete, Colorado Springs Olympic Training Center

I like that fact that, if maybe only for a moment, it feels like an escape from reality. When we are doing dismounts off the high bar or tumbling on the floor, it feels like we are flying! Though I am 26, I feel like I am six years old all over again and I don't ever want to lose that feeling or sense of joy.

Resident athlete, Colorado Springs Olympic Training Center

I love cycling because it give me a lot of freedom to make my schedule the way I want it and it takes me out to new places that I have never been, whether it is immediately around where I live or the remote corners of the world.

Resident athlete, Colorado Springs Olympic Training Center

I love the teamwork in volleyball, the friendships I've gained, the healthy lifestyle it allows me to have and the opportunity to travel.

Resident athlete, Colorado Springs Olympic Training Center





What does my coach do that I don't like?

He yells.

Hayden, age 7-10, Flagstaff, AZ

There is nothing about my coach I don't like.

Xylia, age 7-10, St. Paul, MN

Says negative and threatening things- that doesn't work for me, it makes me more nervous and I can't concentrate on what I should be doing—instead I worry about what he got on my case about and it seems like I do worse.

Jackie, age 11-14, Grand Rapids, MN

He yells a lot and sometimes he gets a little too serious and sometimes pushes us over the limit.

Megan, 11-14, unknown

She teaches techniques that are different from other coaches and camps I've been to.

Dani, age 11-14, Springfield, MO

The coaches I have now don't do any thing that I do not like. I did have a coach that did a lot of things I didn't like. He didn't teach the fundamentals before he taught advanced moves, didn't coach everyone evenly, didn't run a good practice overall. He was a bad influence for the sport of wrestling. That is why I am thankful that I have the wonderful coaches I have now and didn't give up on wrestling.

Ben, age 11-14, Wellington, FL

To be completely honest, my coach never did anything I didn't like. She was always working on improving everyone's skills. My coach's volleyball career was very successful and she was trying to make everyone on the team as athletic as she was.

Courtney, age 11-14, Springfield, MO

Well, he never really disciplines the team. He never gives the not so good players a chance. He is kinda wimpy to the other girls like if they say I'm gonna quit if you don't play me, he gives in and plays them, even when we have a good chance of winning. I still believe that the people that aren't so good, should still try to improve and have a chance at playing, because if they are still in the sport it means that they love it and should have a chance.

Jennifer, age 11-14, Moose Lake, MN

Yells, when something is not right in the drills.

Jenna, age 11-14, unknown

Great things come from hard work, so I guess I would say that we don't get worked hard enough physically during our practices. We should also work more on "game" situations. The best high school hockey teams incorporate dry land into their workouts on a regular basis, so I would add dry land to our practices.

Kristi, age 11-14, Lake Elmo, MN

I don't like that he favors some girls and he doesn't push us hard in practices.

Shannon, age 11-14, Sturgeon Lake, MN

I can't say that there is too much that I don't like about my coach, but one thing is that at times he is a little bit too negative when we really need positive support, but over all he is great.

Kayla, age 15-18, Anoka, MN

What I dislike about my coaches is sometimes they assume our commitment. Sometimes my coach does not understand that we have other commitments to other teams and programs. We are expected to show up for all of our trainings even if we just had a training with another program yet they still expect us to train the same. People need breaks, time to recover and sometimes they don't understand that.

Nicole, age 15-18, Anoka, MN

My coach sometimes trains us too hard and expects a lot out of us. This helps us in the long run, because the physically and mentally strong will stay and use the training and expectations to help us.

Nicolas, age 15-18, West Palm Beach, FL

I don't really think that there is anything that my coach/coaches do that I don't like. They push us hard, but it is for the best, even though I might not like it at the time.

Stacey, age 15-18, Grand Rapids, MN

With one set of my coaches, I hate how they get so angry over the littlest details like a couple of bad passes or a weak shot. I feel like with them it's not "ok" to make a mistake and that I need to be perfect in everything I do. I also don't like how they pick out one girl as their favorite and make everything about them. With my high school coaches, I don't like how they are so laid back. I wish they would push our team to work harder in practices in order for my team to have greater focus and intensity when it comes to game time.

Meghan, age 15-18, Maplewood, MN

The one thing that I don't like about my coach is that she isn't always at the session that I practice in. The program is so large that she sometimes has to coach in a session that is at the same time as my session, but at a different location.

Lizz, age 15-18, White Bear Lake, MN

Sometimes the way she answers a question makes me feel like I should have known the answer.

Katie, age 15-18, Rochester, MN

One thing I do not like about my coach is that he can sometimes pick favorites when he should think about the whole team not just individuals.

Danielle, age 15-18, unknown

When he doesn't play me, even though I think I should be on the ice.

Elsa, age 15-18, unknown

No communication, negative attitude, disrespectful and non-complimentary.

Kate, age 15-18, Chanhassen, MN

The thing I do not like about my coach is that he plays favorites. If he sees a girl who he thinks could be the next Chrissy Wendel (captain of the USA Olympic hockey team) he helps her more and plays her more. He always has one favorite on the team and it makes the rest of us feel like we are not deserving of playing time.

Nicole, age 15-18, Maplewood, MN

My coach is good at what he does, but sometimes he can come off as an aggressive person, but once you get to know him he's a really good guy.

Kyle, age 15-18, Springfield, MO

Something that my coach does that I don't like is sometimes in practice we do the same breakout drill everyday and we don't change it up to accommodate different situations.

Christina, age 15-19, Woodbury, MN

The thing I don't like about my coach is his laid back approach on things. I know for myself and possibly many girls out there who are trying to make varsity to prove themselves and it is very hard to do that nowadays. For me it was the fact that I thought I had proved myself to my coach and that I was pretty much ready for anything coming my way during the hockey season. I felt that whenever I did something that would help the team he would pull me off the ice for so many shifts. I also didn't like that during the hockey season practices that we hardly ever did killers or any skating improvement drills to challenge both myself and my teammates. I think that for every girl who plays hockey seriously, they want the challenge and coaches should try to bring that to the plate.

Hillary, age 15-19, Elk River, MN



Position Statement and Literature Review: Youth Weightlifting

by Kyle C. Pierce, Ronald J. Byrd, Michael H. Stone
Position Statement

The number of organized youth sports groups and associated competitions is steadily on the rise worldwide. The popularity of weight training and the sport of weightlifting for children are also increasing despite anecdotal reports and conjecture regarding injury. There are still those who insist that training with weights and particularly the sport of weightlifting should be avoided until a person is fully developed.

The lack of data is the issue; the alarmist negative response by well-meaning physicians and scientists has done an immeasurable disservice to the sport of weightlifting. The sport is actually safer than is generally believed, especially if training and competition are appropriate for the age group and properly supervised (Pierce, Byrd, & Stone, 1999; Byrd, Pierce, Reilly, & Brady, 2003).

LITERATURE REVIEW

Considerable controversy and lack of understanding surrounds children and weight training and especially the sport of weightlifting. The American Academy of Pediatrics (1983) produced a position statement that has had serious negative impact for two decades. The paper concluded that weightlifting has a high injury rate and should be avoided by preadolescents. Sewall and Micheli (1986) concurred with the American Academy of Pediatrics, recommending that any resistive training for preadolescents should be controlled and slow and that weightlifting competition should not take place until after skeletal maturity is achieved. In contrast, Micheli (1988) admitted later that there was little scientific evidence regarding injury potential of preadolescents in resistive training and that "...potential for growth plate injury may actually be less in the prepubescent than in the pubescent, however, because the growth plate is actually much stronger and more resistant to sheer stress in younger children than in adolescents." Furthermore, Faigenbaum, Wescott, Micheli, Outerbridge, Long, LaRosa-Loud, and Zaichkowsky (1996) in a study of 7-12-year-old boys and girls, Tanner Stages 1 and 2, reported large and significant increases in strength from resistive training, with no injuries.

A second position paper by the American Academy of Pediatrics (1990) recommended, "Unless good data become available that demonstrate safety, children and adolescents should avoid the practice of weight lifting, power lifting, and body building..." (p. 802). This same notion was again stated in a third position

stance by the American Academy of Pediatrics (2001). A position paper by the American College of Sports Medicine was in support of weight training, but not with maximal weights (Faigenbaum & Micheli, 1998). This by implication would constitute a position against traditional competitive weightlifting for children. An exhaustive literature review and position paper by the National Strength and Conditioning Association (Faigenbaum, Kraemer, Cahill et al., 1996) supported children's resistive training if programs are appropriate and supervised by trained professionals. However, they fail to specifically address weightlifting, but do recommend against "interindividual competition, effectively precluding involvement in the sport.

The sport of weightlifting and the ballistic movements associated with it have been criticized as producing excessive injuries (Brzycki, 1994), however, there is little objective evidence substantiating this claim. Reviews and studies of injury type and injury rates associated with weightlifting indicate that rates of injury are not excessive and the incidence of injury is less than those associated with sports such as American football, basketball gymnastics, soccer or rugby (Hamill, 1994; Stone, Fry, Ritchie, Stoessel Ross, & Marsit, 1994). Injuries that may occur are generally the result of poor technique, excessive loading, fatigued training, poorly designed equipment, ready access to the equipment, or above all, lack of qualified supervision.

The controversial aspects of weightlifting and lack of understanding are exacerbated when dealing with children. This controversy exists even though little information is available indicating that,



under proper supervision, these activities are less injurious to children or adolescents than are other sports. In addition, the weightlifting injury rate appears to be even lower than other forms of resistance training (Hamill, 1994). Pierce, Byrd, and Stone (1999) reported no days of training lost from injuries incurred in weightlifting over a period of a year's competition and training by 70 female and male children ranging in age from 7 to 16 years. The young lifters were allowed to perform maximal and near-maximal lifts in competition as long as correct technique was maintained. Both the males and females increased strength as measured by weightlifting performance. A more detailed study of 3 females (13.7 ± 1.2 y) and 8 males (12.5 ± 1.6 y) across a year's competition (534 competition lifts) produced similar results. Both boys and girls showed marked weightlifting performance improvement and no injuries requiring medical attention or loss of training time (Byrd, Pierce, Reilly, & Brady, 2003). The conclusion drawn from these observations was that weightlifting is safer than is generally believed, especially if training and competition are appropriate for the age group and are well supervised. The authors of these papers (Pierce, Byrd, & Stone, 1999; Byrd, Pierce, Reilly, & Brady, 2003) emphasized that these results must be viewed in light of the scientific approach to training and competition with these children. Only under these conditions do the authors' suggest that resistive training or weightlifting is appropriate for children, a factor that should be true for all sports. Inappropriate training programs and competition format for any sport may increase the potential for injury.

According to Balyi and Hamilton (2004) developmental factors are absolutely essential considerations when training children/

adolescents. They propose that eight to twelve years of training is necessary for a talented athlete to reach elite levels. This is obvious in football and basketball with three years participation in middle school, four years in high school, and generally four to five years in college before playing professional sports. We often try to hurry this process in weightlifting (and many other sports).

In the book, *Weightlifting: Fitness for all Sports*, authors Dr. Tamás Aján, President of the International Weightlifting Federation and Member of the International Olympic Committee, and Lazar Baroga (1988) propose the "initial stage of training" for weightlifting should take place between the ages of 11 to 16. Starting at the ages of 11 to 12, they suggest, however, the aim of training should focus on general physical preparation and that specialized training that should not comprise more than 40% of the total training plan. This plan includes a variety of dynamic exercises and exercises to assist in the development of movement habits necessary for sport development. Participation in activities associated with track and field and basic gymnastics along with sporting games such as basketball, volleyball, and swimming are recommended as part of the training at this age, along with exercises with the barbell. The authors go on to suggest that the aims and objectives in the second year of training (ages 12-13) should be on general physical development (50%) and stress "correct habits of execution" when learning the technique of the competition exercises. More specialized training should be added gradually in successive years, remembering that for the greatest results over the long-term, each phase of training should be built on the previous phase.

The starting age for weightlifting training in Bulgaria decreased an average of 2 years from 1983 to 1993. The recommended age to begin training, in this small country that has been highly successful in weightlifting, is ten (Dimitrov, 1993). The training plan for these young athletes was well integrated with their physical development and each phase of training was built on the previous phase. A considerable amount of time was spent on general physical development in earlier years with specialized training added gradually in successive years. It must be remembered that many and likely most of the athletes participating in Eastern European weightlifting programs were selected, based primarily on genetic potential, through a comprehensive talent identification search. The emphasis for children starting at these recommended ages needs to be on general physical development that is compatible with sports specific fitness early on for at least two to three years (Aján & Baroga, 1988; Nádori, 1989). For example: weightlifting developmental fitness for children would include considerable training dealing with general body strengthening (e.g. weight-training, gymnastics, tumbling), endurance factors and enhancing cardio-respiratory ability, mobility and flexibility. However, any emphasis on cardiovascular endurance that includes primary

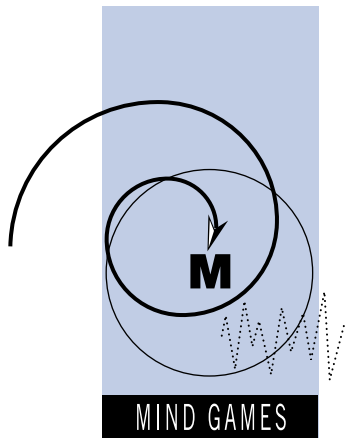
aerobic exercise (e.g. long distance running, swimming, cycling, etc.) should be avoided. Typical aerobic exercise has been shown to limit adaptation to strength and high power training.

SUMMARY

As with any sport, weightlifting competition and weightlifting training should be carried out with reasonable safety measures in place. In normal supervised environments the potential for injury is remarkably low. It is clear that the potential for injury is an issue that requires ongoing scientific study. The need to clarify anecdotal reports and conjecture regarding injury is essential. There is no doubt that competitive weightlifting can be appropriate for children who are supervised in training and competition by well-qualified professionals. Well qualified implies an understanding of the sport sciences, especially those related to developmental stages, with the ability and drive to apply this knowledge. Finally, in support of weightlifting for children, as with other sports, motivation would be minimal without some form of competition.

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COACHING IN THE LAST FEW MINUTES: Ten Things To Remember

By Sean McCann, USOC Sport Psychologist

One of the ironies of a coaching life, is that the great majority of the long hours that elite coaches spend are not evaluated, while a small minority of their work is endlessly and publicly scrutinized. For most coaches, 95% of their work and time is spent in training and practice, yet the evaluations of coaches are often based on that 5% of time spent in competition. For coaches of some team sports, it is possible to take time-outs and talk to your team during competition, but in the great majority of Olympic sports, the ability of coaches to influence athletic performance stops the moment the event begins. Because of this reality, the last few minutes before a competition can loom large in the mind of coaches.

Is it possible, through your words and actions in those last few minutes, to help an athlete win a gold medal? Is it also possible, through your coaching words and coaching actions, to cause an athlete to lose a gold medal? While the impact of these last few minutes is often overstated in the media, there is certainly some value in considering the best ways for coaches to manage this time. Based on observations of great coaches, feedback from great athletes, as well as having watched things go terribly wrong in those last few minutes, here is a list of do's and don't's for coaches in the last few minutes before competition.

1. Have a coaching plan for the last few minutes. Just as we tell athletes to come up with a specific plan for competition (the goal being to maximize ideal thoughts, emotions, and behaviors), it is certainly worth taking the time to prepare a specific plan for managing yourself at competitions. As we tell the athletes, however, a plan should help free up your mind to adapt to the situation, not be a straitjacket that limits your behavior. A plan based on past excellent coaching moments reminds you of who you are at your best as a coach, and gives

you a framework for managing those last minutes before competition. Set aside time to think through what has gone well and what has gone poorly in the last few minutes, and make some notes. Summarize this raw data into some rules for coaching behavior just before competition and you will be more likely to succeed in those situations. It sounds simple, but I would guess that fewer than 10% of elite coaches have done this exercise.

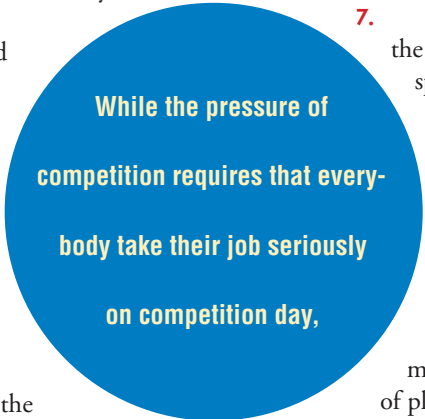
- 2. Have a clear idea of what behaviors you are looking for from each athlete.** The odds of influencing behavior go up dramatically in your favor when you know what impact you want to have and what behavior you want to see. Successful coaches know how each of their athletes behaves at their best and their worst, and will orient their interactions with each athlete to maximize the best behaviors. This is a simple idea, but frequently under pressure, coaches do not take the time to clarify in their mind what they want to see from each athlete.
- 3. Try to do what you normally do.** One of the most common complaints we hear from Olympic coaches and athletes about the Olympics, is that too many things are different at the Olympic Games. These differences make everybody uncomfortable and out of their normal routine. Unfortunately, coaches can also change things up at big competitions, and this is frequently a mistake.



If you have been doing a good enough job to get to the big competition, you probably have managed the last few minutes just fine. Why change that at the biggest competition? An exception to this rule is when you observe that the normal program is obviously not working. A good rule of thumb is to do a lot of work determining the best pre-competition program for your athletes, with plenty of experiments early on. Then, once you have decided on the best program, stick with it. Athletes like routine, routines build confidence and certainty, and routines reduce decision making on competition day.

only know if they are effective if you have actually practiced these situations in training. Essentially, the goal is to organize competition simulations in which your athletes have to handle conditions at least as tough as the worst case scenario. Examples include competing without a normal warm-up, changing the time of competition, playing loud crowd noise (USOC Sport Psychology has a 30 minute crowd noise CD we have distributed to coaches and athletes), and any other logistical wrinkle or challenge you can throw at your athletes.

4. Individualize. Some athletes need to be pumped up. Some need to be calmed down. Some need a clear head. Some need specific technical information. Some need to laugh. Some need to get angry. NFL great Marshall Faulk was recently asked if coach Dick Vermeil deserved his reputation as the best pre-game motivational speaker. Faulk replied that he didn't know, since he didn't listen. His pre-game focus was on reading defenses, understanding new plays, and other specific tasks for the game. In my experience, the best way for coaches to determine what each athlete needs in the last few minutes is to ask each athlete individually. One strategy I have used is to have the athletes fill out a competition plan with their ideal thoughts, feelings, behaviors, and coach interactions. Once this is filled out, I have the coaches and athletes meet and discuss it.



5. Raise energy, but not negative energy. While the pressure of competition requires that everybody take their job seriously on competition day, too many coaches equate a serious approach with a joyless one. While I have certainly seen exceptions, most of the best big event coaches raise their intensity but not their negativity for big events. When coaches are able to enjoy themselves under pressure, the message gets sent that everything is going to be ok. There is very little down-side to positive energy. Negative energy, on the other hand, can disrupt, distract, and drain useful excitement from staff and athletes. Frequently, negative energy comes from focusing on what might go wrong, or what has gone wrong. Either of these thoughts means that you aren't focusing on the present. The worst negative energy is externally-directed sniping at athletes or coaching staffs. Interpersonal conflict at competitions is distracting and threatens performance.

6. Prepare for the worst (but expect the best). Coaching in the last few minutes is much easier when you have done all the work you needed to in the hours, days, weeks, and months, preceding the last few minutes. Coaches who are scrambling in the last few minutes because they haven't prepared for the kinds of things that can change or go wrong at competitions, are rarely effective. When you have effective contingency plans for the worst case scenario, you can relax as a coach. You can

7. Think questions, not just speeches. We have all seen the movies where a coach gives an inspirational speech and the team goes out and "wins one for the gipper". Many coaches believe that a powerful speech is part of a job requirement to be a great coach, but as evidenced by the Marshall Faulk story, many athletes may not need or want speeches. I have seen many successful coaches use an alternative to speeches: good questions. Instead of a coach giving a speech, reminding players about a key defensive assignment, a coach simply asks each player or groups of players, "What is your key in this defense?" The athlete's answer tells you if they understand or not.

When athletes understand the keys to their performance, the process of answering a question actually impacts that athlete's self-talk in ways that you can see and react to. You simply don't know if that is happening when you give a speech.

When a coach uses open-ended questions such as "what's your main goal today?", athletes give that coach a wonderful opportunity to react and modify thinking. For example, I have seen athletes say "my main goal is to get a decent result" to which the coach responds, "Great! So, what do you need to do to make that happen?", which shifts the athlete's mind away from outcome onto the task at hand. By doing this, the coach keeps the athlete in the present, and keeps the athlete's focus on the controllable. If this coach had simply told the athlete what to think, the athlete would probably have just nodded, with the coach thinking they had gotten through, when instead, the athlete was still thinking about results. Effective questioning may be the best tool in a coaches bag of tricks in the last few minutes before a competition.

8. Don't Say "Don't!" (Frame behaviors in the positive). I will never forget a trip I took to work with coaches at one of our country's traditional college football powers. The football coach at that time had done a great job recruiting, but was under pressure because his team's regularly under-performed in big games, especially the annual giant game with a conference rival. We met in the football team's auditorium, and on the wall were the top 5 team "rules for success" on a giant sign. I immediately understood why the team failed on the biggest stage when I saw rule #1: "The team that makes the fewest mistakes wins." It's not that this isn't true. It's that athletes



and coaching staffs that focus on not making mistakes are not focusing on winning. They are focusing on not losing, not getting yelled at, not getting benched, not getting fired. This is the dark underside of perfectionism, and it makes athletes and coaches vulnerable in the big games, with the most pressure. In the case of this football team, rather than attempting great plays, the team focused on safe plays. Years later, a staff member on the team said that their opponent's defense in the big conference game was calling out the plays, knowing exactly what the team would do, because the team was avoiding anything risky. Contrast this fear of making mistakes to the quote from UCLA basketball coach John Wooden, whose teams dominated the big games for a decade: "The team that makes the most mistakes will probably win. There is much truth in that statement if you analyze it properly. The doer makes mistakes, and I want doers on my team -- players who make things happen."

By identifying specific goals to go after, rather than specific things to Not Do, coaches can help athletes focus on execution and excellence, reduce worry, and stay optimistic and positive. These are hallmarks of athletes who perform under pressure. Nowhere is this approach more important than in the last few minutes before competing. Identify what you want to see, not what you don't want to see, and keep the conversation on the positive competition behaviors.

9. Sweat the little stuff well before competition. The last few minutes before competition is the time for stripped down thinking, focusing only on simple, powerful, and useful ideas. Unfortunately, many coaches make the mistake of obsessing about little details that don't matter at that point in time. There is a time and a place for sweating the details, and the time is early and the place is away from competition. When you develop

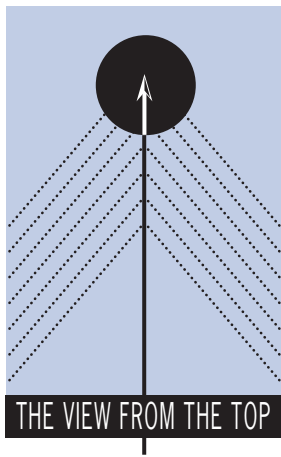
your personal plan for competition (see point #1), you have a great opportunity to think of every possible detail and make a plan to ensure that the details are taken care of. If you are worrying about details at the competition, you didn't do your work ahead of time. I have known many nervous coaches, constantly and obsessively checking, and these coaches tend to irritate everybody around them. These coaches are frequently avoided by athletes and other coaches in the last few minutes, because the worrying rubs off on everybody and you may not have time in the last few minutes to clear your thoughts of these worries. If you are a coach who worries more than most people, you need to find a way to take care of the worries and let them go for those few minutes before competing. If you don't, you will have an unintended negative impact, creating much more lasting damage than some little detail left undone.

10. Remember the role of emotions. Emotions are the wild card in the last few minutes before competition. Sometimes strong emotions produce personal best results, and sometimes they create disasters. Because many of us are afraid of strong emotions, we frequently do what we can to put a lid on emotions. In the last few minutes before competition, the last thing many coaches want to see is an athlete crying, since many of us believe that someone who is crying is out of control. On the other hand, if you develop the skills to coach even when emotions run high, you can operate much more effectively in the last few minutes. If an athlete is able to tell you they are afraid, then you can help. If the athlete is unable to do that, then you cannot help, and the athlete will probably fail. Which situation would you prefer?

If you remember a couple of basic ideas when faced with emotions in the last few minutes, you may have an easier time with this important skill. One simple idea is not to be afraid. If tears or anger don't scare you, you can keep talking, and keep on working. Another simple idea is don't be embarrassed. Many coaches who see athletes with strong emotions stay away, because they feel the eyes of observers watching them and they are embarrassed to be on stage. If you act as if strong emotions are a normal occurrence, it has a calming impact on everyone in the vicinity, especially the athlete. One final idea when dealing with strong emotions is not to make any assumptions about what those emotions mean. An angry athlete may or may not know why they are angry. The anger may or may not have anything to do with the competition. The anger may be related to the coach, or it may not. The key strategy is engaging the athlete, talking through the situation, and remembering what you ideally want to see from this athlete in competition (point #2). As long as you know where you want to go, you can get there, even when working with a very emotional athlete. If the strong emotion throws you off your stride, however, and you forget your goal, you may end up throwing away a performance opportunity in those last few minutes. To summarize, if a coach is unafraid, unembarrassed, and doesn't make assumptions, they can be a great resource for an emotional athlete in the last few minutes before competing.

WINTER Outdoor Training Tips

- 1. HYDRATION** - Typically, we don't think about hydration needs in the winter. You may not sweat as much as you would on a warm summer day, but your body is being bombarded by drier air, both inside and outside your home or work. The need for fluid might actually increase. Hydration status can be checked by looking at your urine, ideally it should be clear or a light pale yellow. Bright yellow indicates dehydration, which will affect your performance.
- 2. CLOTHING** - Layer- Layer- Layer—you want fabrics that will wick away moisture (there are a lot of these on the market), so a cotton T-shirt as a base is not the right option. The problem arises when the material gets wet, either from your sweat or weather conditions like snow or rain. If there is wind present, the moisture absorbed by your cotton clothes will act as a coolant, not the action you want on a cold day. Hats are extremely important as most of your body heat will escape from your head, if left uncovered. Exercising with your legs covered is not advisable.
- 3. CHANGE OF CLOTHES** - when you are through training and you may have to drive or do another activity before going home; make sure that you change out of your damp workout clothes. It will make you more comfortable and less susceptible to the cold.
- 4. START YOUR WORKOUT INTO THE WIND**—you get the hard part over when you are fresh.
- 5. KNOW THE WARNING SIGNS OF HYPOTHERMIA.** The American Red Cross Sport Safety Training Courses lists them as:
 - a. Shivering, numbness, glassy stare
 - b. Apathy, weakness, impaired judgment
 - c. Loss of consciousness
- 6. UNDERSTAND WIND CHILL**- The greater the wind speed, the faster we lose body heat. What we might consider a moderate temperature in the winter, with a moderate wind can be extremely dangerous for training.
- 7. BREATHING**- Because of the drier and colder air in the winter time, we have found athletes who train a lot in the outdoors (particularly snowy areas) have an increased possibility of experiencing Exercise Induced Asthma (EIA). Dr. Randy Wilber, USOC Senior Physiologist, who has studied elite level athletes in preparation for the Olympic Games, notes that one in four of the winter sport athletes will have some experience with EIA.



The View From the Top: George Dallam

Dr. George Dallam is the coach of Hunter Kemper. Hunter is currently the top ranked Olympic distance triathlete, a two-time Olympian (2000, 2004) and six time National Pro Champion. George was the national coach for Triathlon from 1996-97. He was a finalist for the prestigious "Doc" Counsilman Award in 2004, given annually to a coach who integrates sport science research and coaching.

How did you get into coaching?

I started into athletics very early (6 yrs old in competitive swimming) and both my parents were coaches. My mother coached swimming and my father wrestling. I read Counsilman's *Science of Swimming* at 15 and starting developing training programs for my mother's high school team at that time based on some of his ideas. I was a head coach by the time I was about 18 and was involved in coaching age group water polo and some summer league swimming.

What is your educational background?

I got my B.S. in Physical Education with a minor in Biology and my M.S. in Exercise and Sport Science at the University of Arizona. At that time the faculty included some great names like

Jack Wilmore, Victor Convertino, Roger Enoka and Fred Roby. I got my Ph.D. in Physical Education concentrating in Exercise Physiology with a split minor in Physiology and Statistics at the University of New Mexico. The excellent faculty there included Rob Robergs and Vivian Heyward. They gave me the leeway to do my dissertation work at the OTC with strong support from Randy Wilber, Sarah Smith and J.T. Kearney. In addition



to this, I've learned an immense amount from Nicholas Romanov, a biomechanist and track coach for the former USSR, as well as from a legion of other elite coaches and individuals participating in our coaching certification programs.

What is the single most important issue that a coach must understand in order to be successful?

I don't think there is just one thing but I can list several I consider important:

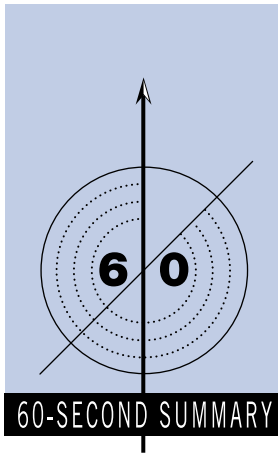
- Creation of a motivational environment for both training and skill development.
- Use of individualization in both physiological training and skill development.
- Creation of a positive control environment - how to create the behavior you would like to have occur in others.
- The value of measuring and evaluating what you do whenever possible — making data-driven decisions as well as intuitive ones.
- The need to de-emphasize ego orientation (you are only successful by beating someone else) and overemphasize task orientation to counter cultural learning and reduce the "performance pressure" on athletes with whom you work.
- The need to become a student of sport and the science that helps you to understand it.
- The need to be come a realistic optimist.

What advice would you give to a coach about coaching?

Expand your knowledge and experience beyond what your coaches taught you. Try to learn something from everybody you encounter.

What book would you recommend to any coach about coaching?

I'm afraid I can't begin to recommend one book, because there are so many that are excellent — my recommendation is simply to read everything you can and with as great diversity as you can muster.



Active versus Passive Recovery within a workout

by Catherine Sellers, USOC Coaching

One definition that seems to be carried out throughout the research is that the passive recovery is complete inactivity; it can be just lying or sitting down without movement. Active recovery is a little harder to define when reviewing the literature. One paper says that it should not be higher than 60% of the athlete's maximum heart rate (Hultman and Sahlin, 1980), other research used active resting ranges from 28% to 60% of max VO₂.

So which is the best recovery method to use? This is one of those—"it depends" questions. It depends on the type of exercise that you are doing— aerobic or anaerobic, what you want the outcome of the training to be—fatiguing or not, and possibly what you plan to do the next day in training.

For passive recovery, a simple answer would be if you are doing a steady state activity or brief five to ten second bouts of all-out work "with little lactic acid build-up, then recovery is more rapid with passive recovery, because exercise would only serve to elevate total metabolism and delay recovery to the resting level". (1)

Active recovery has long been associated with lactic acid removal. "Longer periods of anaerobic exercise are performed at the expense of lactic acid buildup in the blood and exercising muscles... more



time is required for complete recovery". (1) For team sports along with tennis and badminton (and possibly others), the athlete is pushed to interminant high levels of anaerobic activity and they may not be able to fully recover during time outs, half-times or even short breaks within the game.

You start acquiring lactic acid and it begins to accumulate when you train at greater than 50-60% of your max VO₂. Lactic acid has been determined to be a limiting factor in performance and there is a preponderance of evidence that active recovery accelerates the removal of lactic acid. Two studies showed that the active recovery should be in the 60% range of the max VO₂. The first shows the greatest reductions of lactic acid to be when active recovery is at 63% and a second study reported "the average optimal exercise recovery rate" to be 61% (2). A third study



explains that this is dependent on the activity, for example, the range for cycling is “between 29% and 45% of the max VO₂ and 55% to 70% of max VO₂ when the recovery involves treadmill running” (1).

Now for the tricky part, active recovery is great for removing lactate, but “the use of passive recovery following intense exercise results in a greater amount of muscle glycogen resynthesis than active recovery over the same duration”. (3)

It becomes even more unclear because “the literature is equivocal with regard to whether lactate reduction under certain circumstances results in improved performance”. (4) One such study looked at Judo athletes, and the research showed that there was a difference in levels of athletes (National/International caliber v. City medalists) and their ability to maintain power outputs after intermittent anaerobic exercise and that lactate removal was better with active recovery, but active recovery did not improve performance in later intermittent anaerobic exercise. (5)

Active recovery is great for reducing lactic acid, but the ability to handle lactic acid is a key factor for success in many sports. The question is not whether improvement happens in the successive trials of the workout, but how does the athlete handle the stress for future workouts.

One of the problems in the research is the length of the recovery, the research reviewed ranged all over the place from 25 seconds, three minutes to 15 minutes, with a lot of variation in between. A second factor appears to be the caliber and the training level of the subjects.

So which should a coach use active or passive recovery? The answer goes back to “it depends” on the type of exercise that you are

doing-- aerobic or anaerobic, what you want the outcome of the training to be—fatiguing or not, and possibly what you plan to do the next day in training.

KEY POINTS:

1. Active recovery reduces lactic acid, but may not improve performance in that day’s workout.
2. The use of passive and active recovery can be used as another variable in training plans, with each having a beneficial affect.

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