Stress and the Young Athlete: The Child’s Perspective

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This article examines psychological stress in children’s sports by presenting results from a panel discussion held with four young athletes ranging in age from 11 to 16 years. The discussion focused on stress and its sources, consequences, and how to cope. Results validated existing research on youth sports stress by showing that most young athletes are not placed under excessive stress. Rather, certain children in specific situations experience high levels of competitive state anxiety. Consistent with previous research, the stress of sports competition was also found to be no more anxiety provoking than other childhood evaluative activities. Future research directions identified from the panel’s responses included the need to identify strategies for coping with stress and ways of teaching these to young athletes, as well as ways to educate parents and coaches on how to improve communication skills. Finally, based on the panel’s remarks, practical implications for facilitating the youth sport experience are discussed.

An important issue at the heart of the debate concerning the desirability of competitive sports participation for children is excessive psychological stress. The critics of competitive athletics for children argue that competitive sports participation often creates undue levels of stress. Proponents of children’s sports, on the other hand, contend that young athletes do not experience unhealthy levels of stress and, in fact, that sport participation serves as a training ground for developing stress management techniques which can be used throughout life. Because of these and other stress related concerns, pediatric sport psychology researchers have made the study of stress in young athletes a major focus of their efforts.

From a psychological perspective, stress is defined as a process that occurs when an individual perceives an imbalance between some physical or psychological demand and her or his resources to meet that demand in an activity he/she deems important (3). Typical demands experienced by children in sport include having to achieve a certain performance level (e.g., guard a skilled opponent,
make a critical foul shot) in challenging situations (e.g., in the presence of loved ones, with time running out in the game); resources involve the child’s physical (e.g., shooting ability, experience) and psychological (e.g., coping strategies) capabilities.

When an imbalance between resources and capabilities is perceived, young athletes respond with increased state anxiety (a “right now” feeling of apprehension, nervousness, and tension). High trait anxiety is a personality disposition that predisposes some young athletes to more often perceive an imbalance between environmental demands and their response capabilities, which in turn causes them to respond with increased state anxiety (9).

Fortunately, given two decades of systematic sport psychology research, we have greatly increased our knowledge of stress in children’s sports. Most notably, the vast majority of children tested have not been found to experience high levels of state anxiety during sports competition (3, 9). However, a significant minority of children have been found to experience heightened anxiety in competition, and a profile of these at-risk children has been identified, as well as the types of situations most often associated with heightened state anxiety. In particular, personal characteristics include high competitive trait anxiety, low self-esteem, lower levels of fun or satisfaction, low personal performance expectancies, and worries about failure and adult evaluation (3, 9). The main situational factors associated with elevated state anxiety include increased event importance, uncertainty regarding event outcome, and losing (3, 9).

In addition to traditional research studies like the ones that have been used to derive the aforementioned information, another excellent method for better understanding stress in children’s sports is to conduct in-depth discussions with young athletes. Using this approach, this article reports on the findings of a panel discussion held with a group of young athletes. Our goal was to provide an up-close and personal view of psychological stress from the young athlete’s perspective. The student athletes not only discussed their own experiences relative to the questions posed but also reported what they learned from interviewing peers relative to this topic. Thus the responses were based on the opinions of numerous young athletes, not just those on the panel.

By conducting this panel discussion, we hoped to accomplish three objectives. First, we wanted to learn more about stress in children’s sport—its sources and consequences as well as how young athletes cope with stress. Second, we wanted to examine the panel’s responses in light of current pediatric sport psychology research, hoping to validate current research findings on youth sports stress as well as identify future areas of study. Finally, we wanted to help personalize the research on stress in youth sports by focusing on the young athletes’ own descriptions of stress.

This article is organized into three sections. The first section provides background information about the young athletes who participated, as well as information on how they prepared for the panel discussion by interviewing their peers. This introductory section is followed by selected excerpts from the panel discussion itself, presented in a question-and-answer format. The final section includes the panel’s responses integrated with existing youth sport research; future research directions are identified.
Background Information

Young-Athlete Panel

The panel of 4 young athletes represented a team of 15 male and female middle and high school students from the Frederick County school system in Frederick, Maryland. The student athletes were selected to participate in the project by the second author, a middle school P.E. teacher, who had them as students. Unfortunately, due to financial constraints and conflicting activities, only 4 of the 15 students were able to travel to the 1991 national convention of the American Alliance for Health, Physical Education, Recreation and Dance in San Francisco to take part in the panel discussion. The backgrounds of these 4 student athletes, all males, are discussed below.

- **Respondent 1:** Male, age 11, Grade 6, honors program and honor student, member of the county math team in the 5th grade, soccer participant in several leagues, member of the school band, member of the Boy Scouts.
- **Respondent 2:** Male, age 13, Grade 7, qualified for talent search of Johns Hopkins Center of Talented Youth, school math count team, 2nd place school science fair, assistant editor of yearbook staff, debate team member, school orchestra, tennis.
- **Respondent 3:** Male, age 15, Grade 9, honor student, 1st place school and county science fairs, National Association of Biology Teachers’ award, SAT recognition from Johns Hopkins, debate team, baseball, basketball, soccer, skiing, and tennis participant (co-captain and offensive-player-of-year in JV soccer).
- **Respondent 4:** Male, age 16, Grade 11, honor student, National Honor Society, National English Merit Scholar nominee, student government officer, member academic team, debate team, violinist, tennis.

Athlete Panel Interviewer Training

The 15 student athletes comprising the interview team were trained in interviewing techniques. The first author, an experienced sport psychology researcher, conducted an afternoon training session for the students. The session included (a) a definition of science and explanation of what the scientific interviewing method involves, (b) an explanation of how social science techniques can be used to learn about topics of interest, and (c) a research plan for interviewing other young athletes at school. The research plan conveyed the purpose of the project (to interview other students and record their feelings about stress and nervousness in sport), specified who should be interviewed (3 to 6 other young athletes who vary in race, gender, athletic talent, and academic ability), and interviewing do’s and don’ts (e.g., be neutral as an interviewer and gather information, probe for clarification, write out exactly what is said; do not act like a spy, tell others outside the research team what someone said, or lead the subject on). Upon completing the interviews, the students met with the second author, shared their findings, summarized responses, and derived general conclusions.

**Interview Questions.** All student athlete interviewers asked their interviewees a series of identical questions and follow-up probes. These questions are contained in Figure 1.
1. How stressful or nervous do you become when playing sports? (Probes: at practice, regular games, during championships, when winning, and when losing)

2. In what sport situations do you feel most stressed? (Probes: at the start of games, when parents watch, when mistakes are made, in front of crowds and when losing)

3. How does the stress or nervousness of sports compare to other things you do? (Probes: band, school test, talking in front of class, singing, debate)

4. When you feel stress or nervousness, how does it influence you? (Probes: helps you perform better, have more or less fun, hurts performance, can’t think, feel sick, tighten-up)

5. What things do parents and/or coaches do that cause you to become stressed or nervous in sports?

6. What do you do to deal with your stress/nervousness?

7. Has playing sports helped you learn how to better deal with your stress or getting nervous in nonsport settings?

8. How can parents and coaches help you deal with stress?

Figure 1 — Interview questions and follow-up probes.

Athlete Panel Responses

Space limitations prohibit a detailed presentation of all the responses arising from the panel discussion. Instead, presented here are selected quotes from the panelists as they responded to the questions from three topical areas: stress and its sources, consequences of stress, and coping with stress. These responses are included here because they provide an accurate reflection of the major issues discussed at the AAHPERD Convention, site of the panel discussion. The format of the panel discussion involved each respondent reacting to a specified question followed by related responses from any of the other panelists who wanted to further address the same issue.

Stress and its Sources

Question 1 (Q1): How stressful or nervous do you and other young athletes become when playing sports?

Respondent 1 (R1): The kids I interviewed felt little or no stress at practices. For most regular games they reported lower levels of stress. Championships were slightly higher, but not very high overall. In fact, everybody seemed pretty laid back until right at the start of the game or until they were losing the game. I agreed with those I interviewed but would add making mistakes as being very stressful as well.

R3: The athletes that I interviewed varied in their responses from “nothing makes me stressed” to “everything makes me stressed.” Some of the specific causes of stress were “parents confuse me,” “coaches say you will have an extra hard practice if you lose,” and “they will yell at me.”
Q2: What other things do parents and/or coaches do that cause you to become stressed or nervous?

R3: Four things cause me to become stressed or nervous. First, they yell at me when I am playing the game, saying such things as “you’re not doing it right” and “we have done this a hundred times in practice.” This makes me feel that I shouldn’t be playing these sports because after all the long hours of practice leading up to game time, I still can’t perform basic tasks. Second, they try to talk to me when I’m concentrating on the floor, yelling such things as “you’re not moving off the picks quick enough.” While I’m listening to the coach, I am probably going to move even slower off the picks and do something else wrong, and I think that coaches should wait until a time-out or pull me out for a short while to talk to me if I don’t realize my error.

Third, they tell me that I need to score. Near the end of the game when we were either down or tied, my soccer coach would always yell at me, “don’t be denied!” I must admit that this did spur me on at times, but it gave me the feeling that the responsibility of scoring was only on my shoulders. Fourth, the fatherly lecture after the game: My father would always say “keep your mind in the game” and “don’t let your emotions take hold of your game.” This is good in a way, but I hear this after every game and it gives me this feeling of stress.

It is hard to explain. Fathers can give great advice, but the athletes would rather not hear it from them but hear it from a coach. If parents and/or coaches would not yell and/or criticize the athletes while they are performing [unless they are doing something extraordinarily unorthodox that needs to be reprimanded at the time] it would greatly reduce the stress on the young athlete. I should also say parents and coaches should understand that most of the athletes playing a sport give their all for the sport. If he or she wasn’t, would they be practicing for all those long and laborious hours leading up to game time?

Q3: How does the stress of competition compare to other things you do, like band, school tests, talking in front of class, singing, and debates?

R2: Okay, When I’m talking in front of a group like my class, I perceive more stress and get more nervous than during playing sports and taking tests. And playing in the band doesn’t bother me at all, but it seems that most of the people, the four or five kids I interviewed, felt that a big stress was participating in sports. They experience the same level of stress in all activities.

Q4: Was that a high level of stress they experienced in both situations?

R2: No, it was about a middle level of stress, not too high and not too low.

Q5: Okay, the stress was not too high and not too low. Was it okay to have that stress, or does it bother you and would you rather not have that stress?

R2: I’d rather not have it.

Consequences of Stress

Q6: When you feel stressed or nervous, how does it influence you? Does it help you perform better and have more fun? Or does it hurt your performance, make you feel sick, or make you tighten up?

R3: In soccer when I get a lot of action, I get stressed and nervous and my muscles tighten up. I don’t play as well. Some of the athletes I interviewed,
however, felt that stress helps them. It gets them real pumped up and causes them to do a better job. Other athletes reacted as I do and felt that stress hurts their performance. And still other students that I interviewed said that when they’re playing sports and feel stressed, they have a lot of fun.

**Q7:** From a physical standpoint, are there signs young athletes use to know they’re under stress? What did you learn from the athletes you interviewed?

**R4:** A lot of them mentioned about the yelling, the part when it suddenly intensifies with parents and coaches who are yelling. These individuals are giving more input than the athlete can sense. So they kind of feel more input coming in, more than they are hearing. This is when they know that is a stressful situation. Now they might not think to themselves “hey, this is really a bad spot,” but when they are getting all this input, that is really when they realize they are stressed.

A lot of the other things that the athletes talked to me about were butterflies in their stomachs. One of the guys who is my partner in tennis said his hands get really cold and clammy and, of course, in tennis you have to handle the racket, so he felt that affected his performance and things like that . . . I guess it is basically the general butterflies in the stomach, sweating, different things like that.

**Coping With Stress**

**Q8:** What do you do to deal with your stress or nervousness?

**R3:** What I do to deal with my stress and nervousness is, I reassure myself that I can rise to the occasion and tell myself “I will score” and “you can do it.” But one thing that really bothers me is that I don’t have a foolproof method on how to deal with my stress. I feel that this situation should be looked into by some sport psychologists because if the athletes can’t release stress in a healthy way, it’s just going to keep on building up and one time they’re just going to let it loose. In addition, the athletes I interviewed basically had the same answer. Some said that they remove themselves from the situation, and one said, “I reassure myself that I can do it”; but few of the athletes interviewed knew how to deal with their stress.

I feel that something needs to be done about this situation with young athletes not knowing how to deal with their stress. Some adults believe that kids don’t get stressed. These adults need to realize that we are just like them, and we need to have strategies to deal with our stress. If young athletes learn at a young age that they can apply their strategies for managing stress to stressful sport situations, they will be able to apply the same strategies for dealing with stress to situations that will occur to them later in life.

**Q9:** Have your parents and/or coaches ever talked to you about stress and how to deal with it in a game, or do they just say relax and have a good time? Do they ever give you any in-depth information?

**R3:** They used to tell me to keep my mind in them emotions take control of the game. So that’s what my dad always said.

**Q10:** Do you know how to do that?

**R3:** Uh, no, I’m not very good at that because I’m a very emotional player. Nobody has ever really taught me—they tell you but they don’t do anything for you.

**Q11:** How can parents and coaches help you deal with stress?
The majority of the responses I received called for the fostering of some mutual understanding between the parties involved. Some of the athletes asked that parents and coaches give positive reinforcement and constructive criticism. Some student athletes are actually punished, whether verbally or physically, as a result of poor performance. Of course some of the students said that parents and coaches put no stress on them at all.

The suggestions given by the student athletes fell under the blanket statements that winning isn’t everything and the main purpose is to have fun. By not taking sports so seriously, the parents and coaches will take off some excess stress that already accompanies the athletes from game time. One student athlete suggested that parents and athletes “cut down on sugar.” A swimmer that I interviewed said that her coach reserved plane tickets for a national meet that she had not yet qualified. She found this to be rather stressful. In conclusion, an understanding between parents, coaches, and student athletes should be made. Stress can be bad or it can be good; but if everyone involved can communicate their feelings well, maximum performance could be achieved.

Okay, if I’m your coach in tennis and I think that you are getting stressed out and choking on the big point, what should I do? I want you to take my perspective and be in my shoes as a coach. How should you coach me? As a coach, what should you say in this situation? “You’re getting stressed out and choking on the big points”? Or should I dance around the issue? If you were the coach, what is the best way to approach the athlete in that particular setting?

Well personally, if there is something specific that you see I’m doing wrong, maybe just point that out, and once that’s brought up to me, I can realize I’m not tossing the ball high enough . . . I’m not tossing it over my head well enough. I would be able to correct that. So maybe naming specific things. Because I know last season, my partner and I, whenever we would run into trouble our coach would say, “just play your game, just play your game well.” Obviously we are not going to play someone else’s game so . . . I guess there are specific areas you can target.

One follow-up to that. If I am your coach and I say “play your game, play your game,” and you think that it is kind of absurd, I doubt if you would tell me. Is that correct?

I guess nothing that you can really, like, pinpoint because some coaches are really amenable and you can really approach them. My tennis coach, he’s the kind of guy that is really strict, but he likes to have a lot of fun so he is someone that you can approach. But of course during game time it’s a communication level that isn’t really as relaxed—everyone’s all tense. I guess [the ideal atmosphere would be] time to relax—being able to talk to him in a relaxed atmosphere.

Should parents come to your games or should they not attend your games? Should parents say things to you during games? Is it stressful to have parents attend and interact with you at games?

Well, it is nice to have parents come there and support you and all that, but like, after a game you lose and everything, and it is also nice to be alone and have them not bother you.
**R1:** I think that in instances when you lose or something, your coach should tell you what you should have done and encourage you. Instead they punish you.

**Q16:** If you don't try in a game, should they say something to you?

**R1:** No really.

**R3:** I would have to agree with both of what they're saying—I don't want to be talked to. I just want to go sit up with my friends in the bleachers and watch the varsity play or something like that. Maybe they could be there for you to ask questions about, because I usually ask “well, how was my jumpshot today?” or “how far off was my shooting today?” or something like that. My dad will give me a good response and, like, he's always there no matter what. He won't be yelling things. He will talk to me after the game when I want to talk with him.

**R4:** I think you are asking like a general application question, but I think it really depends on each individual athlete. One person on the tennis team I know likes it when both parents are there watching and they root for him and go talk to him between points, and others just like to be by themselves and not have the stress. I guess, again, you have to open up the communication lines. Parents need to ask the students “would you like me to be there at practice and games?” So if they open up the communication line they can have that clarified.

**Q17:** Has playing sports helped you learn how to better deal with the stress of getting nervous in nonsport settings?

**R4:** Well, the majority of the students interviewed on the team responded positively that it does help in nonsport settings. Some of those that I interviewed, however, personally felt that learning to deal with stress in sports is no help at all in nonsport situations, and specifically school. These athletes felt that the stress in sports is nothing compared to speaking in front of a class and therefore gives no help in dealing with that sort of stress.

I personally agree with the majority opinion that playing sports helps with dealing with stress in nonsport settings. Experiencing stress in sports helps me become more familiar with stressful situations. I become familiar with the physical aspects such as butterflies in the stomach and can deal with them better the next time they occur. The exposure of having stress to perform well also helps to develop a mental toughness for school. Because I must consistently concentrate while playing sports, it makes it all the easier to develop the same concentration in school. Sports also helps deal with stress in the nonsport setting of school in that it can act as an outlet for all the stress that is built up in the classroom. It sure does feel good to go out on the tennis court and whack a few good ones after taking a calculus test, submitting a physics lab, and taking an in-class essay all in the same day.

**Analysis and Integration**

As evidenced by the comments of this panel, young people have much to tell us about the psychological stress of youth sports participation. However, this information must be analyzed and integrated with existing pediatric sport psychology research in order to be useful to pediatric educators. Therefore the present findings will be discussed relative to three issues: (a) validating the existing
research on stress in youth sports, (b) identifying future research directions, and (c) facilitating the youth sports experience.

Validating the Existing Research

One of the most frequently asked questions relative to competitive sport participation for children is, how stressful or anxiety-provoking is participation? According to the children and youth taking part in this discussion, overall most young athletes are not placed under excessive levels of stress. This same conclusion has been reached by investigators who have reviewed the empirical literature on this topic (3, 9).

Although it appears that most children do not experience high levels of stress while participating in sport, this may not be true for certain children in specific sport situations. In fact, it is estimated that as many as 10% of the children who participate in competitive sports may experience excessive stress (4). As noted earlier, these children are typified by low self-esteem and high trait-anxiety personality dispositions, and consequently they perceive the sport experience as less fun and less satisfying. They frequently worry about losing and how their performance will be evaluated by parents and teammates.

Not only were many of these findings corroborated in this interview, but several previously unidentified sources of stress were also identified. In particular, the panel indicated that overloading young competitors with information during competition and interrupting concentration and flow during play were major sources of stress for young athletes. Given the fact that none of these have been examined, future researchers would do well to examine these sources of stress in greater depth.

When these young athletes compared the stress of sports participation to participation in other school and nonschool activities (e.g., band, tests), in general they indicated that sports were not more stressful. In fact, other activities were cited as sometimes being much more anxiety provoking than competitive sport. This finding closely parallels the work of Simon and Martens (10), who found that boys, ages 9 to 14, did not experience undue levels of stress in sports as compared to other childhood evaluative activities (e.g., band solos), and in fact often had lower levels of stress. As consistently pointed out by the young athletes in this interview, however, there are vast individual differences, and youth sport coaches and leaders must constantly be alert to those children who find youth sports participation extremely taxing. Responses to questions about the consequences of stress on the young athlete revealed that children seem to react to stress in much the same way that adults do, with heightened muscle tension and increased worries (5).

Future Research Directions

Implied in the remarks of these young athletes were suggested directions for research on stress in youth sports. As previously mentioned, for example, the young athletes indicated that information overload (e.g., parents and coaches yelling too much information too quickly to them during competition) was a major source of stress. Yet, although information overload as it pertains to skill acquisition is often discussed in the motor learning literature, it has never been
examined as a source of stress. Hence it would be especially timely for a collaborative project among motor learning, motor development, and sport psychology investigators. Similarly, while considerable attention has been paid to examining the anxiety/performance relationship in adult athletes, this topic has not been examined in youth populations.

Coping with stress was discussed in some depth by these young athletes. Despite a considerable focus on this important topic in the developmental psychology literature (2), it has been virtually ignored in the pediatric youth sports research. The panel of young athletes emphasized the importance of identifying specific strategies for coping with stress. They indicated that parents and coaches typically tell them to relax but do not tell them exactly how to do so. With this in mind, researchers should examine the efficacy of varying stress management techniques for children. For example, Weiss (12) has recently identified stress management intervention strategies such as goal setting, relaxation training, and mental imagery, which might be useful to examine in this regard. Similarly, there is a need to determine whether stress coping strategies learned in the sport environment would transfer to nonsport settings. The young athletes felt that this was often the case, but no empirical investigation of the issue has been conducted.

Throughout the interview, the young athletes repeatedly emphasized the need for enhanced communication between parents, coach, and athlete. A number of youth sports researchers (1, 6, 7, 11, 13) have identified components of a positive coaching style that enhances young athletes’ motivation, self-esteem, and satisfaction, particularly the importance of noticing and rewarding children for what they do correctly, conveying contingent information and technical instruction after successes and failures, and de-emphasizing criticism and punitive behaviors. Especially important would be evaluation research examining the most effective ways to educate parents and coaches on how to improve their communication skills.

**Facilitating the Youth Sport Experience**

Not only did many of the points raised in this panel discussion have important implications for future research, but suggestions for facilitating the youth sports experience were identified as well. Parents, coaches, physicians, and sport scientists can rest assured that competitive sports participation does not place excessive stress on the vast majority of the children involved. However, substantial individual differences were reported, so coaches and parents must carefully monitor young athletes and look for those who are at risk for experiencing high levels of stress. The young athletes also revealed how adult leaders and parents can unknowingly create stressful sport environments by placing too much emphasis on winning and too much importance on athletic participation.

The panel noted that it is especially important for coaches and parents to open the lines of communication between themselves and the young athletes. This may require some adjustment on the part of the parties involved. For instance, based on the opinions of these young athletes, parents may want to focus on providing social support to their children (“be there” psychologically, no matter what) and leave the informational feedback to the coach. It also appears that many young athletes have difficulty receiving feedback and criticism from their parents. Perhaps parents could ask their children what they prefer in terms of parental involvement.
Several implications for coaches surfaced in the young athletes’ remarks. First, in helping young athletes cope with stress, it is important to provide specific information on how to cope. Panel members said that all too often they are merely told to relax or calm down but are not told how to do so. This also implies that coaching education programs must do more than simply helping coaches identify young athletes who experience excessive stress. Coaches must be taught specific stress management strategies. Second, the panel implied that the coach should act and look relaxed in competitive situations, otherwise young athletes will be negatively influenced by the coach’s demonstrated stress. This same stress modeling technique has been reported by highly successful elite coaches (8). Finally, the positive style of coaching that has been identified in the youth sport research of the last 15 years was strongly endorsed by the young athletes as a way to keep youth sports fun and to reduce stress. This coaching style emphasizes reinforcement of desirable plays, and encouragement plus feedback after mistakes; it discourages yelling and criticism.

Conclusions

As sport scientists, we conduct our research in an adult world and discuss what young athletes like, feel, and hope to accomplish in sport. In doing this, we sometimes forget that the young athletes themselves are an excellent source of knowledge in their own right. When asked, they can provide meaningful information that can further validate existing research, offer recommendations for future research, and provide tips on facilitating the youth sports experience. As authors, we are indebted to this panel of young athletes for helping us expand our knowledge of stress and the young athlete.

References


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