In the near future autism spectrum disorder (ASD) is projected to affect more American families and children than other serious illnesses. According to Autism Speaks (2013), “More children will be diagnosed with autism this year than with AIDS, diabetes, and cancer combined” (p. 6). Autism spectrum disorder is rapidly overshadowing the number of cases of other developmental disabilities (Autism Speaks, 2013). Myers and Johnson (2007) and Newschaffer et al. (2007) have also identified this trend, reporting that autism is affecting a greater number of children than ever before, and the number is projected to increase. When considering the effect of the increased prevalence of ASD on society, it is necessary to recognize that the number of participants affected by ASD in community-based sports and recreation programs will also likely increase. Therefore, the managers and administrators of sport and recreation programs must consider program development and implementation to meet the needs of these participants.

There are several types of sport and recreation programs available for children with special needs and children affected by ASD. Certain programs are designated as therapeutic recreation programs, with the specific structure and resources to support and provide activities for children with special needs. However, private and municipal youth leagues for soccer, baseball, and basketball generally focus on serving the general public without the resources and specific means to address the needs of children affected by ASD. The purpose of this article

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is to focus on the sport and recreation programs that are not considered therapeutic recreation programs.

**Characteristics of ASD**

It has been noted that there is a wide range of symptoms of ASD, which include functions of behavior, cognition, mental abilities, and development (Newschaffer et al., 2007). Daily activities requiring motor skills, paying attention to assigned tasks, social interaction, and maintaining interpersonal relationships are affected by ASD. Children, teens, and young adults with ASD vary significantly in abilities (MacFarlane & Kanaya, 2009; Myers & Johnson, 2007; Newschaffer et al., 2007). One child may be lacking certain competencies, while another has exceptional skills. Children can be classified as high functioning or low functioning when diagnosed on the autism spectrum (Myers & Johnson, 2007; Newschaffer et al., 2007).

Autism spectrum disorder is complex because every child has specific and different symptoms. Certain disorders have the same or similar symptoms and the symptoms are generally the same in every child, which narrows the scope of the illness. However, the symptoms of ASD vary drastically depending on the child, and the range of symptoms is extreme. To gain greater insight into the differences between children who are low functioning versus high functioning, one can analyze motor skills, attention span, and communication skills. The child who is low functioning on the spectrum may lack the coordination needed to complete certain athletic movements such as throwing or kicking a ball. Moreover, the same child may have difficulties focusing on the specific task assigned by the coach. The child’s verbal expressions, which include basic communication skills, are also hampered due to the effects of ASD. The child who is high functioning can potentially participate in a competitive youth basketball league, and his or her physical ability may be similar to or even the same as peers without ASD who participate in the program. Moreover, the child has the ability to focus on drills during practice and communicate to a certain degree with the coach and teammates.

**Review of the Literature: Autism and Youth Sports**

Scholarly research on youth sports and the participation of children affected by ASD is lacking; however, a small number of studies have been identified (Brookman et al., 2003; Obrusnikova & Cavalier, 2011; Orsmond, Krauss, & Selzer, 2004; Pan & Fray, 2006). Pan and Fray evaluated the activity levels of children between the ages of 10 and 19 who were affected by ASD. The physical activity levels were analyzed during school, after school, and also during the weekends. Physical activities included, walking, jogging, martial arts, swimming, and weightlifting. The study established that children with ASD have lower levels of physical activity than children who are not affected by ASD. Moreover, the physical participation level of children with ASD declined with age (Pan & Fray, 2006). Obrusnikova and Cavalier (2011) conducted similar research on participation levels and barriers to participation. The participants in the study were between the ages of 8 and 14. The research indicated that the children affected by ASD were more likely to participate in activities that were technology based and that did not include social interaction, such as computer games. It was found that physical activities including physical movements or exercise were in general not the preferred choices (Obrusnikova & Cavalier, 2011).

Brookman et al. (2003) included research on the experiences of children affected by ASD in the summer-camp setting. Children between the ages of four and 10 years old participated in a summer camp with peers not affected by ASD. The children were provided support by trained staff that was experienced in teaching children with ASD. Furthermore, each child developed goals to achieve in relation to interpersonal relationships and appropriate conduct during the camp. The participants in the research were included in all the events and activities during the camp. It was determined that the experience was successful and the resources, staffing, and strategy were effective in including the children in the summer camp (Brookman et al., 2003). Orsmond et al. (2004) investigated the level of participation in recreational activities among young adults and adults affected by autism. The findings indicated that 35% of the study participants participated in group recreational activities. The majority recorded that they preferred to participate in exercise that does not involve social interaction (Orsmond et al., 2004).

It is evident that scholarly research is lacking in the area of youth sport participation among children with ASD. Yet the participation of children with ASD in youth sport is essential because it provides a sense of normalcy, allows the children to experience a fun activity with their peers, and develops important interpersonal skills. To effectively support participation, organizations will need to adopt a structure, practices, and resources to meet the needs of children with ASD (Autism Speaks, 2013). It is essential that the program administrator lay the foundation for the development and implementation of a sport program that is inclusive.

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The Role of the Sports Manager

The responsibilities of the sports manager—the administrator who implements and coordinates community sport programs for the public—are wide-ranging and vary in nature. Managing staff, facilities, and programs may be obvious responsibilities, while understanding and meeting the needs of families and children affected by autism may be less apparent. This is why the training of a coaching staff that works with the children is an essential component in providing a positive experience for families and the participants. The sports manager that develops community involvement, identify resources, emphasize training for the coaching staff, and provides family support will effectively meet the needs of the participants affected by ASD.

Community Involvement and Support

The initial step involves community involvement. This entails forming a small committee of experts in the area of ASD. This is not a formal committee, but rather a small group of individuals who can provide input on ASD and children with ASD, and who have access to resources that will assist the sports manager when developing programs and training for coaches. Suggested committee members include a local member of the Autism Society or Autism Speaks, a special-needs teacher from the school district, and a parent who has experience with a child affected by ASD. Community involvement related to ASD is crucial for providing adequate programming, ideas for training, and program management.

In addition, there are exceptional resources in the local community with individuals and groups that can provide information and specific training on children diagnosed with autism. These include Autism Society of America (www.autism-society.org), Autism Speaks (www.autismspeaks.org), American Academy of Pediatrics (www.aap.org), and Autism Science Foundation (www.autismsciencefoundation.org). For example, the Autism Society website outlines the programs and services offered at the organization’s national and state offices and provides general information related to understanding autism, behaviors influenced by autism, trainings, and online courses (Autism Society, 2013). Local resources can be obtained through the individual state organizations. One example is the New Mexico Autism Society office in Albuquerque. The state office includes an executive director, who coordinates meetings, events, and community outreach. The Autism Society office out of Albuquerque supports the local autism communities and is involved in activities related to planning, support, and advocacy (New Mexico Autism Society, 2013).

Department Handbook

After the input and support of the committee, the sports manager needs to develop a handbook for the specific program and department related to ASD. The purpose of the handbook is to set the direction of the programming, and to inform and educate the staff. Completing this handbook will allow the manager to become the subject-matter expert in the department. Gathering and compiling the information for the handbook will make the manager more familiar with the current resources and community organizations associated with ASD. The initial step is to ask the members of the committee what information may be useful to include in the handbook. These individuals can assist in the development of the handbook and guide the manager throughout the planning and writing of the handbook. One of the members of the committee could help to ensure the accuracy and relevance of the content. For example, according to Autism Speaks (2013) one of the fundamental elements of offering effective programming for children affected by autism is the organizational mission statement. The mission statement in the handbook should address the organization’s direction of including and meeting the needs of everyone (Autism Speaks, 2013).

Each department and organization will decide what elements to include in the handbook; however, here are six subject headings that could potentially be included:
- Organizational mission statement
- Autism as a developmental disorder
- The effects of autism on children and their families
- Autism and related behaviors
- Best practices in working with children affected by autism
- Resources and literature on ASD and the ASD community (Autism Speaks, 2013)

The information in the handbook will also function as the basic curriculum for the staff training that the manager will implement. This training must be inclusive, specific, and relevant. The manager can use the same subject headings when developing and implementing the training for the coaching staff.

Departmental Training

Youth who are involved in sports and recreational programs have varying needs and challenges while they participate alongside their peers. This is especially relevant when a child is diagnosed with ASD. Yanardag, Yilmaz, and Aras (2010) emphasized the importance of understanding the needs of children with autism
It has been suggested that structured sports and recreational activities for children with autism, with the supervision of a coach, can foster learning in the areas of social and interpersonal interaction.

**Reasonable Accommodations and Participant Safety**

Justin, a 13-year-old boy, was registered to participate in a recreational youth basketball program. Justin loved to play basketball. Justin had previously been diagnosed with ASD and was lacking certain physical motor skills and abilities. One could see Justin’s enthusiasm. He was having the time of his life when he was running up and down the court. Yet, compared to the other participants, Justin did not have the same skills and abilities. After two games, it was apparent that Justin could not participate with his age group at that level of play. Instead of addressing the issue immediately, the coach decided to reduce Justin’s playing time. The coach did not know what to do.

Justin is one example of why sports managers and coaches need to be proactive and prepared to work with youth and families affected by ASD. Justin simply could not keep up and did not have the coordination to play with his peers. Furthermore, Justin’s coach did not know how to handle Justin’s needs. The coach lacked the knowledge and understanding of ASD and had never coached a child diagnosed with ASD before. The coach was afraid to communicate with Justin’s parents and ultimately contacted the person in charge of the program.

The sports manager should make every effort to work with the coaches and families to allow the child to fully benefit from participation in the program. The child’s experience in the program depends on the opportunity to compete with his or her peers, learn the skills of a specific sport, and enjoy the fun of being involved in a team sport. Due to the nature of ASD some children will not be able to participate at a certain level of competition. If a child is not able to participate with their age group or level, it can be suggested that he or she play with a different age group or level of competition. The child who is able to participate, but who needs additional guidance and support, can be supported by an assistant coach or parent. If the sports manager and coach have established that the child is not able to participate, this should be communicated in a sensitive and professional manner to the parents. It is important to recognize that some children are not able to participate in sport leagues, such as youth basketball, soccer, or baseball, that are offered in the community. However, if the child has the physical and

combined with being encouraging and supportive, will be helpful for the participant and the parents. In the case that a coach suspects that a participant has ASD, the coach needs to be understanding, patient, and respectful when coaching the participant and communicating with the parents. It has been suggested that structured sports and recreational activities for children with autism, with the supervision of a coach, can foster learning in the areas of social and interpersonal interaction (Solish, Perry, & Minnes, 2010).
cognitive ability it can be beneficial to participate in those programs because of the socialization and interpersonal relationships with teammates. It may require that the assistant coach or parents monitor or work with the child during practices and games.

In addition to considering the level of competition, the participants’ safety is of utmost importance. Autism Speaks (2013) identified that safety involving children with autism is based on providing the activity in a secure setting, having knowledge of the potential hazards and dangers in or near the physical location of the activity, and providing direct supervision. For example, when the coach is holding soccer practice he or she must evaluate the field, park, and immediate area for these elements. These efforts can be supported by an assistant coach or parent. Constantly monitoring the children and maintaining a structured environment can prevent negative incidents and unsafe situations. Moreover, giving the children specific instructions and expectations related to appropriate behavior can be helpful to ensure a safe environment for everyone to participate (Autism Speaks, 2013).

Conclusion

With the projected increase in the number of children affected by ASD, local community programs will be required to accommodate the children who participate in sport and recreation programs. The programs give children the opportunity to gain important health benefits but also social benefits from interacting with their peers in a fun and structured environment. The sports manager who develops and implements programs based on community support, knowledge of autism and the impact of autism on children, staff training, and effective practices will be more apt to meet the needs of the children and families affected by autism.

References


To learn more about this topic, refer to these AAHPERD resources at www.aaahperd.org/shop: Meeting the Physical Education Needs of Children with Autism Spectrum Disorder: Designing and Implementing Effective Adapted Physical Education Programs.