Routledge Handbook of Applied Sport Psychology
A comprehensive guide for students and practitioners

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Intellectual disabilities are “characterized by significant limitations both in intellectual functioning and adaptive behavior as expressed in conceptual, social, and practical adaptive skills” (American Association on Mental Retardation, 2002, p. 6). Individuals with intellectual disabilities are generally described using ten adaptive skill areas – for example: social, communication, and employment (Conyers, Martin, Martin, & Yu, 2002). For the applied sport psychology practitioner, familiarity with these adaptive skills is more relevant than the classification of the degree of intellectual disability. Understanding the needs and abilities of athletes, both those with and without intellectual disabilities, is necessary for effective service delivery.

When considering organized sport, the most widely available resources for athletes with intellectual disabilities are the Special Olympics programs. Founded in 1968, these programs have grown to include more than 2.5 million athletes, in over 180 countries (Special Olympics, 2009). The mission of the Special Olympics centers on participation with the added intentions of enhancing fitness levels, motor skills, confidence, and self-concept. Sport participation at elite levels takes place through the International Sports Federation for People with an Intellectual Disability (INAS-FID). The INAS-FID fosters competitive sport environments for athletes who choose open competition governed by the rules of the international sport federations (INAS-FID, 2009). Working in a complementary fashion, the Special Olympics and the INAS-FID aim to improve society’s perceptions of individuals with intellectual disabilities through sport participation. Athletes may participate in events hosted by either, or both, organizations.

Practical considerations for working with athletes with intellectual disabilities are examined throughout this chapter and include: ethical considerations, communication and feedback, motivation, and group interactions. Finally, I discuss how traditional mental skills for performance enhancement may be effective when suitably adapted for the specific population.

**Ethical considerations in service delivery**

Athletes with intellectual disabilities commonly have difficulties making autonomous decisions and may be reliant on (and vulnerable to) the influences of others. Ethical principles
that guide sport psychology practitioners (e.g., American Psychological Association [APA], 2002) must be upheld at all times. It is essential that sport psychology practitioners treat all athletes with dignity and respect, and allow athletes to make their own decisions. Athletes with intellectual disabilities must be given the opportunities to consent to, or withdraw from, working relationships with sport psychologists, and as sport or research participants. It is best to inform important others such as caregivers, parents, or coaches, of the nature of the working relationship. Involving important others in the process will help ensure the athletes’ needs are being met, and will foster understanding. Athlete participants must give their own assent or consent to participate, overriding that of important others (see the APA’s ethical principles for further guidelines).

Practitioners’ stereotypes about athletes with disabilities should be identified and resolved as much as possible. The APA guidelines recommend that practitioners reduce the effect of their biases based on disability. Rather than focusing on the disabilities of the athletes, effective practitioners will focus on their abilities (Hanrahan, 2004) and construct programs that will encourage the development of these abilities for positive outcomes (Travis & Sachs, 1991). Practitioners need to address their own biases and limited experiences when working with athletes with intellectual disabilities.

Communication and feedback

Sport is often a safe setting where athletes with intellectual disabilities may be challenged and take risks (Travis & Sachs, 1991). It is important to acknowledge the athletes’ abilities and help them to cope with challenges rather than taking on a protective role (Gorely, Jobling, Lewis, & Bruce, 2002). A paternalistic approach to communication and the consultation process is not useful (Travis & Sachs, 1991) and will hinder the practitioners’ rapport with athletes (Farrell, Crocker, McDonough, & Sedgwick, 2004). Some athletes may be nonverbal, posing particular challenges to communication. Others may have limited verbal and written communication skills. These challenges to communication will require creativity on the part of the sport psychologists to develop novel and effective methods of conveying their messages and to ensure they are clearly receiving the athletes’ communications. Athletes indicate they want input into their training and for coaches to be open to their ideas (Farrell et al., 2004); it would not be unreasonable for athletes to have the same expectations for their sport psychology practitioners. Much of the advice in this chapter applies to both coaches teaching physical skills and sport psychologists instructing athletes in cognitive and emotional techniques for their sports.

Sport psychologists may find that athletes with intellectual disabilities have a propensity for acquiescence, or a tendency to answer positively. Though potentially problematic, with careful planning acquiescence can be circumvented (Matikka & Vesala, 1997). A combination of observation and interviews or questioning techniques is more likely to provide a complete picture rather than using only one technique (Mactavish, Lutfiyya, & Mahon, 2000). Questions that require dichotomous (yes/no) responses should be avoided, because these types of questions are most likely to lead to acquiescent responses (Matikka & Vesala, 1997). Questions that require athletes to consider their answers allow practitioners to garner valuable information (e.g., “Can you tell me a time when the cue word ‘ice’ might be useful?”; Gorely et al., 2002, p. 361). Asking athletes to repeat instructions back to the practitioner is another useful strategy (Travis & Sachs, 1991). Working with athletes’ communication strengths will help build rapport and lead to better information. For example, when working
with athletes who have limited verbal communication or writing skills, using visual cues such as pictures or having the athletes draw may be more effective methods for the athletes to express themselves than oral interviews or written questionnaires.

As Hanrahan (1998) suggested, specific praise and feedback are core practitioner behaviors when working with athletes with intellectual disabilities. Using abstract terms such as “Great!” or “Do your best” are too vague and may be confusing. Instead, tell the athlete precisely what was great (e.g., “Your cue words ‘go, go, go!’ are really good.”) or what is expected of them (e.g., “When you breathe in make your tummy stick out.”). Keep concepts simple, particularly when teaching a new skill, and break these skills into parts (Hanrahan, 2007). Repetition of instructions and practising parts of the skill may be necessary. Concepts that are generally assumed to be understood may need to be explained: it is important to adapt coaching and teaching styles to the level of the individual’s understanding (Hanrahan, 2004). For example, in the middle of an interval on the track an athlete with an intellectual disability may stop to tie her shoe in the lane rather than moving to the side of the track out of the way of the other runners. Corrective feedback instructing the athlete to move off the track to tie the lace would solve the issue.

Frequent positive feedback and praise lead to feelings of competence and control (Farrell et al., 2004) and are important for developing and maintaining motivation. Caution must be used when providing negative feedback because it could lead to withdrawal from sport (Farrell et al., 2004). As with all athletes, positive feedback and praise should outnumber instances of negative feedback. In particular, athletes with intellectual disabilities often have self-doubts, and benefit from the reassurance and support from important others. This support leads to the sense that their participation in sport is valued (Farrell et al., 2004). Gillespie (2003) indicated that every-trial knowledge of results enhances the acquisition of new sport skills in youth with intellectual disabilities. Compared to every-trial knowledge of results, summary knowledge of results following several practice attempts of the skill has a greater influence on skill retention. When athletes are given visual and verbal cues that serve as reminders, combined with knowledge of results, their performances on closed-skill tasks (e.g., basketball free throws, overhand softball throws, dart throws) can be improved (Yang & Porretta, 1999).

Providing frequent positive feedback during the early stages of sport participation fosters skill acquisition, self-efficacy, motivation, and long-term sport participation. As athletes’ commitment to participation increases and self-efficacy for participation improves, a schedule of summary feedback may be introduced leading to long-term participation and skill retention. Regardless of the schedule of feedback, effective communication combined with positive feedback and valuing athlete input will help create a positive sport experience.

Motivation

Athletes with intellectual disabilities participate in sport for similar reasons as athletes without disabilities: fun, fitness, affiliation, competency, and to experience success (Farrell et al., 2004; Shapiro, 2003). Athletes have many motives for participating in sport, but generally they can be grouped into task, ego, or social approval orientations of competence (Shapiro). Athletes with strong task orientations are driven by a desire to develop competence, test themselves, and compare themselves to their own standards or previous levels of performance. Individuals with strong ego orientations compare themselves to others, play to win, and compete against others. Athletes participating for social incentives seek recognition from important others, and feelings of relatedness. Athletes with intellectual
disabilities from a variety of sports rate task and social motives as more influential to participation than ego-oriented motives (Shapiro, 2003).

All athletes who participate in Special Olympics events receive a tangible reward (e.g., medal, ribbon) for their participation. Because all participants receive an extrinsic reward for participation, the focus is not on being better or worse than others: “coaches and athletes perceive an emphasis on the accomplishment of personally relevant goals, effort, and improvement rather than on winning and success” (Shapiro, 2003, p. 157). Farrell et al. (2004) supported this notion, and Požeriene, Admomaitiene, and Ostasevičienė (2008) suggested that the medals and ribbons for Special Olympians emphasize information about the athletes’ competencies.

Travel is rated low in importance as a participation motive for athletes without disabilities. In contrast, athletes with physical and intellectual disabilities indicate travel to competitions and practices as a relatively important motive (Shapiro, 2003). This difference in the motivational role of travel may be because of fewer overall opportunities to travel, reliance on others for travel, and increased opportunities for social interaction (described in the following section) as a result of travel.

Coaches and sport psychologists can reinforce a task orientation and create opportunities for social incentives in the sport environment (Shapiro, 2003). One method of developing and reinforcing social competencies is to involve athletes with intellectual disabilities as assistant coaches. This approach reinforces the sport knowledge and abilities that experienced athletes bring to the training environment, can positively influence newer athletes by providing models to which to aspire, and may keep athletes involved in sport by helping them feel valued and by continuing to challenge them (Farrell et al., 2004).

Athletes with intellectual disabilities indicated that they have higher participation motivation when they are in a self-determined environment. Farrell et al.’s (2004) interviews with 38 Special Olympians, training and competing in a variety of sports, revealed that the athletes preferred to train in an autonomous or self-determined environment and to have input in their training programs. Coaches who listen to their athletes, take their suggestions on board, are flexible and knowledgeable about the sport, and value the participants’ experiences and ideas, are favored. Assigning roles to athletes to give them opportunities to act as leaders and provide input for their programs will go a long way toward meeting the needs of the athletes and fostering their motivation.

**Group interactions**

The need for relatedness and social support may be more important for athletes with intellectual disabilities than autonomous experiences and feelings of competence, because these athletes generally have smaller social networks than athletes without intellectual disabilities (Farrell et al., 2004). The sport environment provides opportunities for interaction and striving for achievement as a team (Požeriene et al., 2008). Part of this motivation results from the positive feeling of belonging associated with involvement in a social group (Požeriene et al., 2008). Sport participation by athletes with intellectual disabilities facilitates social integration, leading to a greater sense of autonomy when athletes feel as though their input into the program is valued (Farrell et al., 2004). Enhanced social skills that transfer to daily life outside of sport may also result. In particular, sport participation leads to the development of friendships with teammates and competitors. These social relationships are significant because individuals with intellectual disabilities often experience difficulties...
making friends and tend to have limited social circles (Zoerink & Wilson, 1995). Social approval for participating in sport, coming from friends, family, support workers, and coaches, helps to enhance the athletes’ feelings of self-efficacy and leads to positive emotions (Farrell et al., 2004). Opportunities for socializing should be built into sport programs, and team building can be used to help develop relationships.

Mental skills for performance enhancement

Most of the literature in the area of sport psychology and athletes with disabilities has focused on descriptive profiles of these competitors and comparisons to athletes without disabilities (Zoerink & Wilson, 1995). There has only been limited exploration of the effectiveness of psychological skills training for athletes with intellectual disabilities. It is important to modify psychological skills training programs to meet the needs of any individuals, but these modifications may be particularly salient for athletes with intellectual disabilities (Hanrahan, 2004) where a textbook approach may be suboptimal.

In one of the few published reports of psychological skills interventions with athletes with intellectual disabilities, Gregg, Hrycaiko, Mactavish, and Martin (2004) successfully modified existing interventions with three athletes in a Special Olympics track and field program. Several modifications suitable to the functioning levels of the athletes were made (e.g., happy, sad, and neutral faces rather than Likert scales were used to describe goal attainment). The athletes engaged in the psychological skills of goal setting, self-talk, and imagery of goal achievement. Following the intervention, the participants spent more time on-task, had overall increases in work output, and were successful in setting and achieving their practice goals. Gregg et al. suggested that although it is possible to use a standard packaged approach when delivering psychological skills to athletes with intellectual disabilities, it may be more pragmatic to use psychological skills one at a time rather than in combination, such as imagery alone. It is most efficacious for the athletes to learn one psychological skill at a time and have the athletes integrate those skills into their regular training program. Similarly, Gorely et al. (2002) recommended limiting the use of psychological skills to include only the most pertinent ones, and pointed out that interrelated skills are likely to be most effective and easier for the participants (athletes and coaches) to manage.

Goal setting may help direct athletes’ attention, improve effort, encourage athletes to persist for longer, and enhance athletes’ sense of independence and self-efficacy, leading to feelings of autonomy (Hanrahan, 1998). The effectiveness of goals is improved by setting cooperative goals and through record keeping. Cooperatively set goals are more effective than assigned or self-selected goals (Hanrahan, 1998); to foster goal effectiveness the coach or sport psychologist should assist the athlete in setting realistic goals. In preparation for the state championships for athletes with intellectual disability, a men’s basketball team used team goal-setting to help direct effort and clarify roles (Gorely et al., 2002). Modifying the recording of goals by using audio recordings may avoid issues with literacy and writing ability (Hanrahan, 2004). Gorely et al. (2002) also used audio recordings to remind athletes how and when to use their cue words to help them relax, focus, and listen, to use deep centered breathing, and to replace negative thoughts with positive ones.

Athletes with intellectual disabilities, like other athletes, often experience anxiety prior to competition, and this anxiety may adversely affect their performances (Porretta, Moore,
& Sappenfield, 1992), and this heightened state anxiety may result in a corresponding performance decrement. Gorely et al. (2002) successfully used cue words and deep centered breathing to teach relaxation to basketball players with intellectual disabilities. The players reported using the techniques in basketball as well as in daily life, including “when frustrated, when trying to sleep, and before free throws” (Gorely et al., 2002, p. 358). The keys to the success of the techniques were the coaches’ reinforcement and repetition throughout training sessions and at competitions. Athletes with intellectual disabilities have also successfully engaged in guided progressive muscle relaxation (Hanrahan, 2004). Relaxation and anxiety management techniques provide the athletes with direction rather than simply leaving the athletes on their own to manage their anxieties, but repetition and reminders may be required. Any pre-existing self-management skills may be limited due to “shortened attention spans, indecision about what to do, or inability to remember the process” (Hanrahan, 1998, p. 352). Abstract concepts are challenging for athletes with intellectual disabilities; using concrete instructions and examples will allow the athletes to be more successful in their anxiety management (e.g., “put your hand on your belly and notice as you breathe out your belly slowly goes down”, Hanrahan, 2004).

Pre-competition plans help athletes enter competition confidently and minimize stressors. These plans should include elements such as: travel arrangements, food, water, competition schedule, equipment and uniforms, and general and specific on-site physical and mental warm-up activities. Planning may help athletes feel autonomous and reduce reliance on others for assistance prior to competition (Hanrahan, 1998). Given that athletes with intellectual disabilities often have difficulties making decisions, developing alternatives in case things do not go as planned (e.g., competition is behind schedule, resulting in a need for a longer physical warm-up) should help athletes cope with the changes. Familiarity with facilities and routines leads to feelings of comfort (Hanrahan, 1998) resulting in less pre-competition anxiety. Coaches and sport psychologists should assist athletes in developing pre-competition plans and their alternatives, have the athletes practise the plans in training before entering the competition environment, and give feedback and suggest modifications to the plans. Making recordings of the pre-competition plans is helpful because it will prompt athletes to follow their plans, and may help athletes overcome challenges with memory and stay on task (Hanrahan, 1998).

Imagery is the most commonly used mental skill in interventions for individuals with intellectual disabilities (Gorely et al., 2002). Athletes have a clearer image of their physical skills when they combine their physical practice with imagery practice. Imagery combined with physical practice improves performance beyond physical practice alone (Porretta & Surburg, 1995). Porretta and Surburg suggested that imagery helps athletes with intellectual disabilities to anticipate appropriate responses and overcome limitations of attention capacity, with almost an immediate influence on performance. Furthermore, Porretta and Surburg stated that “[i]magery practice in conjunction with physical practice seems to provide subjects with the time needed to attend to the task as long as they are given direction by the teacher or coach” (p. 1180). Providing concrete cues while requesting the athletes engage in imagery practice helps direct the athletes’ attention to task-relevant cues. Gregg et al. (2004), for example, provided participants with a picture of the athletic facility to help them to imagine participating in that venue.

Frequently athletes with intellectual disabilities have been encouraged to imagine specific sport skills such as a start in running events (e.g., Gregg et al., 2004). Imagery may also be used for mastery experiences such as imagining oneself in a difficult situation, and then imagining overcoming that difficulty (e.g., seeing oneself behind at the start of a race and
then successfully catching the pack.) These types of images can help increase athletes’ self-efficacy. Gorely et al. (2002) suggested that the use of videos may be helpful to aid athletes in forming images for these additional purposes. Qualities such as being relaxed, focused, and confident may be modeled by others; athletes may learn to image and perform these qualities by observing and imitating the model.

Maintaining focus and managing distractions is necessary when coaching or consulting with athletes with intellectual disabilities. Gregg et al.’s (2004) primary intervention outcome was frequency and duration of off-task behavior (e.g., talking to other athletes during intervals other than scheduled rest periods). The psychological skills training program was effective at reducing the duration and frequency of off-task behaviors of the athletes. In an evaluation of a psychological skills intervention in a physical activity program for children with intellectual disabilities, parents reported their children had improved focus during the physical activity sessions as a result of the intervention, which included positive thinking, autonomous behavior, relaxation techniques, imagery, and goal setting (Spassiani & Fraser-Thomas, 2008). Activities aimed at improving concentration should be modified to a suitable level so the athletes do not get frustrated trying to do a task that is overly difficult (Hanrahan, 1998).

Creative approaches may be useful in assessing an individual athlete’s understanding of mental skills and how to apply them. Practice situations, such as competition simulations where the athletes try to apply the techniques, can provide information about the consolidation of the skills (Gorely et al., 2002). Gregg et al. (2004) used log books and one-on-one interviews to check for understanding. A simpler method, particularly when working with a large group of athletes, is to ask questions to test for understanding. When athletes are taught mental skills that are modified for their needs and abilities, systematically integrated into practice and competition settings, and frequently reinforced, these skills can help the athletes achieve success in their sport performance, and facilitate enjoyment of their sport experiences.

Conclusion

In this chapter I examined practical considerations for working with athletes with intellectual disabilities. Many of the recommendations in the chapter are suitable for athletes with and without intellectual disabilities. Practitioners should not shy away from working with athletes with intellectual disabilities; by making minor modifications and planning in advance, this challenge is rewarding and fosters innovation. To enhance the effectiveness of sport psychology programs practitioners must gain rapport with the athletes by avoiding a paternalistic approach and encouraging the athletes to take active roles in the process. Athletes can, and should, make decisions and provide input into the program. Practitioners must check for their own understanding as well as the athletes’, to ensure effective communication in both directions. Using concrete statements and repetition will improve the clarity of instructions and enhance the acquisition of mental skills such as relaxation techniques. Athletes will be motivated to participate in the program if they have opportunities to master tasks and to engage in social interaction. Athletes can benefit from mental skills training, but to be effective the programs need to be modified to suit individual needs. See Box 46.1 for practical suggestions for sport psychologists working with athletes with intellectual disabilities.
Box 46.1

Practical suggestions for practitioners working with athletes with intellectual disabilities

- Provide opportunities to experience and develop autonomy.
- Avoid acquiescence with creative approaches to assessment.
- Focus on and work within athletes’ abilities.
- Provide frequent, positive, and specific feedback and praise.
- Speak in simple, concrete terms.
- Provide opportunities for travel and socializing.
- Focus on and reinforce a limited number of psychological skills.
- Assist athletes in setting goals.
- Guide athletes through relaxation exercises.
- Use routines to help alleviate stressors.
- Combine imagery with physical practice.
- Provide instruction to help athletes attend to appropriate cues.

References


