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## **Psychology within the Paralympic Context - Same, Same or Any Different?**

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Is working with a Paralympian the same as working with an Olympic athlete from a coaching and sport psychology perspective? Certainly, both are athletes and the experience of being an athlete has the potential to facilitate basic psychological need fulfillment, while also combatting need thwarting. Psychological need fulfillment is important for human flourishing. Within self-determination theory three basic psychological needs are emphasized, including feeling competent, a sense of autonomy and relatedness (Ryan & Deci, 2000). Need thwarting of these basic psychological needs can lead to ill-being and need fulfillment can actually be a greater challenge in the population of disabled individuals. Obviously, when dependent on support and compared to people with no disabilities, feelings of being less competent may occur. In addition, autonomy may be challenged in many cases since disabilities may create different degrees of dependency on equipment, personal, and technical support. In contrast to feelings of relatedness, physical and cognitive disabilities often result in exclusion and feelings of not belonging in many domains in society and the sporting community. It is therefore important to be aware of the fact that, while sport has value in everyone's life, it is even more important in the life of a person with a disability.

Based on our shared experience of working as sport psychology consultants with Olympic and Paralympic athletes in everyday practice, in preparation for the Games, on-site during and after a number of Olympic and Paralympic Games, we constantly get challenged to adapt and refine our skills to deliver in each context. We have learned that each context is somewhat similar but also unique, and self-determination theory has become a useful guide for us. As we explore the question of the uniqueness of the Paralympic athlete, let us begin with an applied example that acknowledges the importance of meeting the basic psychological need of relatedness. The applied example is a teambuilding exercise, which took place at a pre-camp leading up to the London 2012 Olympic Games with the Swedish Paralympic Team. The whole team got together for the first time across the different sports. The main purpose of the exercise was to facilitate a sense of belongingness and relatedness to the team as a whole. Considerable time went into preparation for this exercise. Professional quality pencils, colors, and canvas were bought in Sweden, transported and set up in an appropriate space to assure the best quality of the painting exercise. During the exercise, several groups were formed across sports and disabilities, and each group was assigned a carefully chosen keyword, which was meaningful to the context of performing at the Games, to discuss and define. Keywords were chosen to include both potentially desirable and undesirable constructs, such as flow, relatedness, fear, anxiety, exhaustion, trust, responsibility, joy, happiness, control,



and mindfulness. After each group reached an understanding of the keyword, they were asked to write a definition. In the next step, each of the 17 groups was asked to express the keyword in a painting as a collaborative effort. Figure 1 is chosen as one example out of the total of 17 paintings accomplished during the exercise.



*Figure 1: "Relatedness is important across boundaries. No matter color, form or looks – we will support each other and stand united." Relatedness described by Paralympic athletes.*

The following day, an arts exhibition was organized with finger-food and sparkling drinks (non-alcoholic, of course) and everyone circled around to hear each group present how they discussed and understood their key word, and how their understanding was expressed in the painting. After this exercise, each of the paintings was carefully stored, transported and at last displayed in the forthcoming Swedish house in the Paralympic Village that is usually a very sterile and cold environment. Upon arrival at the Paralympic Village, the paintings were perceived by many athletes as welcoming and created a sense of relatedness. The exercise was successful in creating a sense of team, belonging and feeling more at home in the village. Yet, we also learned an important lesson in how the Paralympic environment is different, requiring an extra dose of sensibility and planning. One of our visually impaired athletes, sadly enough, pointed out after the Paralympic Games that no one told this athlete about all of the paintings being a part of the environment in the Paralympic Village. The athlete participated in the creation of one of the paintings, but was not aware that it was in the village. This emerged as a strong message in feedback to continue developing our repertoire, sensitivity, and support within sport psychology to better meet the different needs of Paralympic athletes in order to enhance their performance and well-being.

Much is to be learned, and before moving on it should be noted that sport psychology practice and research has explored the domain of elite sport since the late 1970s, but it is only in the last 10–20 years that researchers have started to conduct sport psychology research with a focus on athletes with disabilities. Consequently, Paralympic and disability sports have received much less coverage in academic circles in comparison to the Olympic and able-bodied sports.

Interestingly and on a similar note, female elite athletes have been less included in sport science research compared to their male counterparts. The growing number of female participants in sport is gradually reflected in the research output with a focus on female participants. The advance in knowledge continues to inform the discussion on similarities and dissimilarities between female and male athletes across scientific disciplines. At the Munich 1972 Olympic Games, only 15 percent of athletes were females. At the Sydney 2000 Olympic Games, the number had increased to 38 percent, and eight years later at the Beijing 2008 Olympic Games, the number became historic with over 50 percent female participation. As the number of female athletes increased, it became evident in research findings that female athletes often experience medical disorders to a larger degree than male athletes. For example, female athletes are at greater risk to develop conditions of disordered eating, amenorrhea and osteoporosis (i.e., loss of bone density) – the female athlete triad is a well-known collection of these three interrelated conditions. Younger female athletes that compete in so-called weight bearing, weight class, and aesthetic sports are at an especially greater risk. In general, elite female athletes are at greater risk of injuries as compared to male athletes. With the increasing number of Paralympic level athletes, the same trend of increased sport science research will hopefully occur. More research is needed to advance knowledge regarding similarity or dissimilarity, and to better inform professional practice in coaching and sport psychology.

There has been rapid growth and development since the first official Paralympic Games held in Rome in 1960 with 400 participants from 23 different countries. Over 4,237 athletes from 164 countries competed in 20 sports at the London Olympic Games, with an amazing crowd of 2.7 million spectators. The rapid performance development was highlighted by 251 world records set in the 503 medal events at the Games. Most recently, another 547 winter sport athletes represented 45 countries and competed in five sports at the Sochi 2014 Olympic Winter Games. Classification is and always will be an important and integral part of the Paralympic movement. The main purpose of classification of impairment is to ensure that competition is fair and equal. The current classification code was adopted in 2007, providing rules and procedures for Paralympic classification to minimize the impact of impairments on the sport disciplines. According to the International Paralympic Council (IPC), sport opportunities are offered to athletes that have a primary impairment that belongs to one of the following “eligible” impairment types: impaired muscle power, impaired passive range of movement, limb deficiency, leg length difference, short stature, hypertonia, ataxia, athetosis, vision impairment and intellectual impairment. While some sports include athletes of all impairment types (e.g., athletics, swimming), other sports are limited to one impairment type (e.g., goalball, boccia) or a specific range of impairment types (e.g., equestrian, cycling). A comprehensive explanation of the current classification criteria and procedures can be found on the IPC [website](#).

Despite significant health benefits associated with moderate physical activities, there is also an increased risk of negative outcomes when training and competing at a more intense level (i.e., international elite level). The strain on health and well-being is well captured in the 60-minute documentary, “[The Prize of Gold](#),” which captures the mental and physical struggles of a number of



Swedish Olympic athletes with overuse injuries, overtraining syndrome, burnout, depression, anxiety and eating disorders on the path to [Olympic glory](#). Consequently, as noted by Van de Vliet, participation in elite sport is associated with risk of injury, which is also true for Paralympic athletes. Van de Vliet argues that the Paralympic movement should also consider the psychological components of disabled sports besides sport medicine care. As a practical example, research on athletic identity has demonstrated that although many athletes with a disability view themselves as committed and serious athletes, they typically feel that the public does not view them as legitimate athletes (Van de Vliet, 2012). Not being viewed as a serious athlete is a potential example of need thwarting, as it threatens the need for competency. When working with a Paralympian, invariably one might communicate views on the athletic ability and performance of disabled sport sometimes unconsciously compared with the norms of able-bodied athletes. Communication around this theme has the potential to nourish or deprive the need for competency in the Paralympian.

The purpose of this article is primarily to discuss psychological issues within the Paralympic context. Despite some obvious visual differences, everyone is foremost a human being and then an athlete. In any context, it is possible to focus on either diversity or uniformity within the community of human beings. This is also true within the community of elite level Olympic and Paralympic athletes. We would like to argue that the notion of difference, particularly in light of a physical impairment, is often automatically interpreted as less capable and less valuable to some degree. In this context, we want to strongly emphasize that our mindset to different and how we approach different will determine the majority of responses in how we interact with people who are different. As a case in point, impaired athletes are often exposed to people that offer them unnecessary and unwanted help in society. Although well-intentioned, these acts of kindness unfortunately are often counter-productive as they can reinforce or lead to feelings of inferiority in the helped person. Awareness about this subtle mechanism is important in the context of providing psychosocial support to Paralympic athletes for coaches, staff and sport psychologists. We suggest moving beyond a black and white categorization of good or bad when it comes to differences. Treating differences as shades of grey will facilitate more creative solutions outside of traditional boundaries in terms of supporting well-being and performance in the Paralympic athlete.

To challenge our attitudes, beliefs and stereotypes about being different, we suggest a brief imagery exercise. First, picture yourself in the shoes of a competitive female elite level athlete, then shift to a male, then shift to being black and then white, and finally shift from being an able-bodied athlete to a disabled athlete.

What images and thoughts do you have regarding a person in a wheelchair, or a person with an amputated limb or a blind person? How do you think that your image will influence the way you may interact with disabled individuals? Figure 2 is a playful way to challenge and think beyond our stereotypical images of a person in a wheelchair.





*Figure 2: Think pink, yellow, black and white, queer, going left of going right. Challenge your stereotypical image of a person in a wheelchair.*

Dieffenbach and Statler (2012) pointed out that it is unfortunate that the mindset of disability is often seen as a cue for different or special needs in the sporting context. This mindset from able-bodied individuals will mirror and often impact the disabled individuals. The following story also supports that notion outside of the sporting context. A wheelchair athlete once told us that a lot of people in the street questioned how difficult it must be to get up from the streets to the side walk since the curbstone is always so high. He nicely pointed out that he focuses and looks for the easiest way to cross the streets, avoiding areas with the highest curbstones. Fortunately, the London 2012 Paralympic Games had a significant impact on British society. Research ahead of the Closing Ceremony found that one in three U.K. adults changed their attitude toward people with disabilities. As stated, during the Closing Ceremony – the Paralympic Games is about ability, not disability – to highlight what people can do instead of what they can't. Perhaps more strikingly, Paralympians also meet negative attitudes toward disabilities among themselves. Attitudes toward disabled categories was surveyed with the U.S. team (N=138) competing at the 1992 Paralympic Games, and included their perceptions of five disability classifications set by the IPC at the time of publication (amputation, cerebral palsy, paraplegia/quadruplegia, visual impairment, and les autres: other impairments that do not fit the other categories). The authors found that out of the five groupings, the least preferred groups were cerebral palsy and visual impairment. Amputation (71–92% preferred by other groups), followed by les autres and paraplegia/quadruplegia, were judged to be the more desirable groups (68–74% preferred).

Martin (2012) briefly reviewed and described how Paralympians could prepare for the Sochi 2014 Olympic Winter Games based on mental skill use. One case included the perception that travel was stressful. More specifically, a wheelchair athlete reported that flying from England to the Games was the biggest source of stress leading up to the Paralympic Games. The athlete's concerns included boarding the plane first, getting off last, transferring from wheelchair to flight seat, bathroom access and personal care aid (Martin, 2012). This story can be embedded in the concept of autonomy versus dependence. Moreover, for many disabled elite athletes, participation requires the use of advanced and high specification state-of-the-art assistive and enabling technology, yet the athlete is not independent from the technology they employ.

Perhaps most sadly, in terms of relatedness, there are too many instances of disabled people having been met and treated in society which have resulted in feelings of exclusion and being an outsider. A wheelchair athlete at the age of 36 pointed out that each time he meets with people in authority, they talk above his head to his personal assistant, which triggers a feeling of inferiority in him. Another blind athlete suffered from a limited social life, perceiving the visual impairment to be a barrier in making friends.

As we noted above, research with a focus on the psychology of the Paralympian is limited. Based on this limitation, Dieffenbach and Statler (2012) explored the current understanding of the similarities and uniqueness between Olympic and Paralympic athletes. They arrived at the conclusion that the athletes are more similar than different. More specifically, some studies found both similarities and differences between elite able-bodied and disabled athletes. Overall, research indicates that the psychological needs and characteristics of Paralympians have not been found to differ significantly from those of their Olympic counterparts. Most notably, reasons for participating and the mental approach necessary for pursuing elite competition found among athletes with disabilities are analogous to the findings in able-bodied sport literature (Dieffenbach & Statler, 2012).

Recently, Jefferies and colleagues (2012) published the first systematic review of the psychosocial literature on the well-being of a Paralympian. They reviewed 16 papers and concluded that, relative to the research into the biomechanical aspects of a Paralympian, the psychosocial research remains limited and diffuse. Seven psychosocial themes emerged from the 16 papers:

1. participation, motivations and goals;
2. mental imagery;
3. stress and coping;
4. personality;
5. attitudes towards other disabled athlete groups;
6. knowledge and attitudes towards doping; and
7. transitions to retirement.

According to their research, athletes engage in Paralympic sport for accomplishment and prowess. In addition, it is worthwhile to note that the reviewed studies describe the close friendships that were developed as a result of participation, and that demonstrating competency to others was a strong motive for taking part (Jefferies, Gallagher & Dunne, 2012).



Despite previous research indicating more similarities than differences between able-bodied and disabled athletes, as we saw in some of the examples discussed, the very nature of performing at an elite level with a disability requires some understanding of potential challenges unique to disabled sport (Dieffenbach & Statler, 2012). Based on our applied experience, let us look at four more areas of differences that we believe are unique, important and impact the psychology and performance of Paralympians. First, we will contrast classification with perceived competence, autonomy and relatedness within the frame work of Self-determination Theory (Ryan & Deci, 2000). Second, we will briefly discuss the older age in the population of Paralympians. Third, we will offer our thoughts on acceptance of the disability as it relates to resilience and finally we will address the role of the guide/support person.

### *Classification*

Classification, as previously noted, is an important and integral part of Paralympic sport and mainly creates classes of athletes with similar disabilities to ensure that competition is fair and equal. In some disciplines (for example cross-country skiing), a weighting system is also used so that athletes with greater disabilities can compete against athletes with lesser disabilities. The classification process is becoming more clear and robust, but the system will constantly present challenges in terms of misclassification and the difficulty of operating in the “grey zone” of functionality. These issues often lead to frustration within the Paralympic community, as there is a perception (and reality) that some individuals have gained a performance advantage due to an incorrect or “lenient” classification. For athletes and coaches, this often leads to a performance distraction similar to being suspicious about some athletes competing with illegal performance enhancing drugs (i.e., steroids or epo) in able-bodied settings. Misclassification can be the root of much frustration and anger among athletes, as well as coaches and other staff. Losing to a competitor who should be in a higher class can be very upsetting (Martin, 2012). Despite improvements in the classification process and given its nature, this will undoubtedly continue to be an issue within Paralympic sport. Thus, there will always be a need to help athletes and coaches deal with frustrations around the classification process both before and after competitions.

Additionally, within the Paralympic community, classification is linked to different attitudes. The categories of visually impaired athletes, athletes with cerebral palsy or cognitive impairment are the least desirable categories. This perhaps mirrors the general attitude in society. We still experience a negative stigma towards mental disorders or abnormalities. Further, attitudes within the Paralympic community concerning the origin of impairment often differ. Specifically, individuals who have acquired disabilities (through accidents for example) are often viewed differently than those with congenital/genetic impairments. Indeed in our experiences, the psychology of these two different groups needs to be considered when working with individuals with disabilities. For example, the life experience of an individual who has had an impairment since birth will differ from an individual that may have been injured as either a former elite able-bodied athlete or non-active sport participant with a potential trauma and post-traumatic stress-syndrome in their history (Crawford, Gayman & Tracey, 2014). How fast a former able-bodied person will transfer into becoming a Paralympian will also relate to acceptance, as will be discussed later. Furthermore, re-injury or change in their disability can often lead to concerns with regards to being “re-classed” into a different Paralympic class and perhaps more importantly, the impact this may have on their quality



of life after sports. Ethically, this is often not considered and may be worthy of serious consideration in some cases.

### *Age*

Disabled athletes are often significantly older as compared to Olympic athletes on average, and consequently they are at different stages of life development. Thus, a younger sport psychologist may find a somewhat greater challenge to support, build rapport and gain trust with significantly older athletes with arguable greater life experience and more adversity. This can also be true for younger coaches who transfer into Paralympic sports from able-bodied sports without previous experience of coaching impaired athletes. Due to the older demographic, issues such as financial pressure, family and relationship challenges are often greater for disabled high performance athletes, compared to that of younger able-bodied athletes. There is no doubt that the age demographic of Paralympic athletes is changing (even over the past two Paralympic cycles, we have noticed a reduction in the typical age of disabled athletes); however, there will still be many disabled athletes who are older than their coaches. Another area of understanding is an appreciation of the fact that an impaired athlete may require more time to get ready for competition due to an increased dependency on support equipment, technical support and personal assistance. This suggests that pre-performance routines will be substantially longer in time among Paralympic athletes as compared to Olympic athletes. Time management is usually related to thoughts, emotions and behavior that will be addressed by coaches and sport psychologists.

Another related area of concern that negatively impacts performance and the sport experience for athletes with disabilities is the lack of qualified coaches (Dieffenbach & Statler, 2012; McMaster, Culver, & Werthner, 2012). In fact, the majority of coaches reported limited exposure to and minimal training with athletes with disabilities prior to working with this population. It was noted that limited coaching experience with and knowledge of athletes with disabilities have consistently been identified as factors having detrimental effects on performance. For example, “coach transfer” from stand-up basketball, curling, tennis, table tennis, skiing to the sitting version of these sports seems to include challenges, including elements of psychology. Interestingly, an experienced elite coach, who after several years of coaching able-bodied athletes started to coach disabled athletes, shared with us how that specific experience challenged his coaching and facilitated his performance as a coach with able-bodied athletes.

### *Acceptance and Resilience*

Acceptance within Acceptance Commitment Therapy (ACT) is essential to the psychological strength (flexibility) of individuals. We believe that this is also true for Paralympians in terms of acceptance of the disability and the current life situation. In fact, a review of amputees in sports stated that sport participation helped the athletes to accept their disability and to improve their quality of life, self-esteem and overall motor skills (Bragaru et al., 2011). Frequently humor, with a dose of morbidity regarding their life situation, is evident from the athletes themselves – such behavior could be viewed as a defusion technique within the ACT context. Defusion is a technical term in ACT that expresses the notion of “creating a mental distance” to your negative automatic thoughts that you often tend to get stuck with in a loop (i.e., “fused” with dysfunctional thoughts). Again, in our experience, those individuals who have learned to accept the reality of their



disability are often the ones that are more resilient in terms of dealing with the challenges of executing in high performance environments. Thus, the role of a psychologist within a Paralympic setting may often relate to helping athletes come to terms with being a disabled individual in an able-bodied world.

However, there is also a potential flip side of disability in terms of mental toughness or resilience: due to their experience of adversity, are Paralympians mentally tougher, stronger and more resilient than able-bodied competitors? Can Olympic athletes learn from Paralympic athletes? Resilience is becoming a growing topic in research and professional practice. The growth through adversity hypothesis (Haidt, 2006) suggests that having to cope with adverse events could allow an individual to learn strategies that enable them to adapt more effectively with environmental and situational demands. If applied to a sporting context, it could be suggested that athletes having to overcome adversity, in particular physical disability, may exhibit different psychological skills profiles to athletes who have not experienced a similar life event. However, not everyone that experiences adversity will grow stronger from it. Adversity can be too much to handle and could take a psychological toll, as is evident by people who suffer from post-traumatic stress disorder. For adversity to be beneficial, it probably needs to happen to the right person (e.g., somebody who is characterized by high hope and optimism), at the right time in that person's life (late adolescence to early adulthood) and to the right degree.

#### *Role of Guide/Personal Support*

In many instances, disabled athletes are often either assisted by or compete with an able-bodied support person. A question we have often considered is, "What is the role of the support person for a disabled athlete - is the individual considered an athlete?" In many cases, the support person also acts as a personal assistant in everyday life and 24/7 during Paralympic Games. This intense dyadic relationship can be quite demanding for both, and could potentially cause intrapersonal conflict and consequently performance issues. For instance, a completely blind athlete will develop a close relationship based on trust with her/his personal guide. In some events, such as track & field, cross country and cycling, the athlete and guide compete together and both have to finish the race to receive potential awards during the medal ceremony. It is a fine balancing act to develop an athlete-guide relationship that allows for healthy interdependency, in contrast to a relationship where the athlete is dependent on the guide. The role is further lacking clarity, since the guides rarely view themselves as athletes (at least not within the Paralympic context). Awareness of these issues becomes particularly important for coaches and sport psychologists in preparation and during pinnacle events. Time spent together in these intense dynamic relationships increases along with the demands to perform as a dyad. In fact, it is sometimes the guide/personal assistant that approaches the sport psychologist to request support for the athlete. It should further be noted that sport psychologists and coaches can easily forget about the guide/personal assistant and her/his psychological needs in this context, which is unfortunate as the guide is an integral part of the performance of the impaired athlete.

On a final note, it should be acknowledged that two white, middle class, academic, heterosexual male authors, happily married with children, and no disabilities easily could fall into the trap of saying to someone of a different socio-economic, gender or disability grouping, that we fully



understand your situation. We will make our best effort to understand each unique situation and convey that we understand, while constantly reminding ourselves that the athlete is the expert on living and competing with a disability. To avoid this trap of a lack of understanding, awareness and empathy that we all can easily fall prey to when working with disabled athletes, we must keep coming back to a personal sense of humility and gratitude for working in the Paralympic setting.

On a deeply personal note, while it never felt appropriate to share this story before, it is fitting in the context of this article to mention that one of the authors lost his younger brother at the age of 19 due to an inherited severe muscular disease, Duchenne's. Duchenne is a muscular dystrophy and survival beyond age 20 is rare. My brother spent his last ten years in a wheelchair with a steady decline in physical capability. At the time of his passing in 1989, the following poem was written in his honor and published in his obituary:

*“Such an amazing mental strength  
What a sunshine in a situation that for most people would be unsustainable  
Such a great belief in life with such limitations  
That is just the way he was our beloved Per until he passed away in his sleep  
It is so empty after you have gone away.”*

This article is therefore dedicated to him, our “sunshine”.

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*Jessica Long of the United States competes in the Women's 400m Freestyle - S8 Final on day 2 of the London 2012 Paralympic Games at Aquatics Centre on August 31, 2012 in London, England. (Photo by Clive Rose/Getty Images)*