

REVIEW ARTICLE

An Overview of Paralympic Sport from a Historical and Psychosocial Perspective

Gözde ERSÖZ^{1*} and Serkan ESEN²

¹Marmara University, Faculty of Sport Sciences, Department of Physical Education and Sports Training, Istanbul / Türkiye

²Fenerbahçe University, Faculty of Sport Sciences, Department of Sport Management, Istanbul / Türkiye

*Corresponding author: gozde.ersoz@marmara.edu.tr

Abstract

The Paralympic Olympic Games initiated within the framework of the Paralympic movement is not well known by the society. Understanding the psychological characteristics of para-athletes and revealing their social position will contribute to coaches, managers and all sports professionals working with these athletes. Based on this idea, in this study, the concept of Paralympics is defined, the history of the Paralympic Olympic Games and statistical information in these games are included, and the psychosocial characteristics of athletes who operate in sports environments as para-athletes are discussed. A narrative based literature review was preferred as a methodology in the study. As a result of the research, it has been seen that para sports have progressed rapidly over the years since the first day of its emergence in the historical process. When the psychological characteristics of para athletes are examined, it is understood that para athletes do sports for reasons such as performing well and winning, looking normal, adapting to injury, defending themselves, fighting against marginalization and encouraging the disabled sports movement. It has been stated that para-athletes who are emotionally stable, have cognitive flexibility and mental endurance, are self-confident, can manage stress and control their emotions are more successful in sports. It has been stated that social support is important for para-athletes when they start sports, but an overprotective structure may negatively affect the psychosocial development of para-athletes. In addition, coaches' communication and leadership skills are important for para-athletes to be successful in sports and persistence in sports.

Keywords

Paralympic, Paralympian, Para-Athlete, Psychosocial

INTRODUCTION

Society consists of healthy individuals as well as individuals with disabilities who continue their lives with different disabilities, either congenital or acquired. Depending on the degree of disabilities of people with disabilities, some disadvantages that may arise due to mobility limitation, limb deficiency, sensory or mental losses may negatively affect their quality of life and social life (Demir and İlhan, 2019). Sport, which strengthens the physical, psychological, mental and social health of individuals, is a social phenomenon that facilitates people to adapt to

society, improves motor skills, and contributes to the personal development of individuals (Ersöz, 2016). These positive effects of sports on individuals with normal development are much higher in individuals with disabilities. Through sports, the disabled person is brought into society and production, as well as physically strengthened and can easily perform physical activities that will facilitate their daily life. Sports also have a tendency to give disabled individuals a sense of confidence, social role, competition and friendship (Kalyon, 1994). In addition to these, sports enable

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¹ORCID: 0000-0002-4848-1929 , ²ORCID: 0000-0001-9839-0390

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disabled individuals to control their negative emotions such as aggression and anger that may arise due to their disability, to be happy individuals, to gain self-confidence, to establish social relationships, to have a pleasant time, to taste the sense of achievement (Gür, 2001; Kınalı, 2003). Individuals find the opportunity to discover themselves through sports, recognize themselves and realize their talents. In addition to this, the disabled individual who does sports learns to establish good relationships with his/her environment, cooperation, tolerance and sharing, expresses his/her feelings comfortably, and thus increases his/her quality of life and motivation for life (Savucu et al. 2006; Demir et al. 2011). Sports can also be considered as a means of rehabilitation for disabled individuals who are included in the society and feel that they are a part of the society (Çevik and Kabasakal, 2013).

Since disabled individuals are seen as consumers and in need of care in the society, they move away from the society and lose their self-confidence. By raising awareness of the society on this issue, various arrangements are made to reinforce the social relations of disabled individuals and to increase their quality of life as in developed countries (Bekçi, 2012). The fact that the issues such as athletes with disabilities, para sports, Paralympic Games, psychosocial characteristics of para-athletes are not conceptualized much in the society and the lack of awareness on this issue may affect athletes who perform in sports environments as para-athletes. In the light of this information, within the scope of this study, the concepts of para-athletes and disabled athletes are defined, the history of the Paralympic Games is discussed, statistical information in the Paralympic Games is given and the psychological characteristics of para-athletes are mentioned.

MATERIALS AND METHODS

In this study, it was aimed to compile the historical and psychosocial research on the subject of "paralympic sport" in national and international arena. In this context, by using the keywords "paralympic", "para-athlete", "disabled athlete", "paralympic", "para-athlete", "disabled athlete", articles published in national and international journals, books written in the field and theses published in the national thesis center were

examined. A review was made by examining the scientific publications gathered through literature review.

Descriptive of Para-Athlete and Disabled Athlete

Disability is part of being human. Everyone may experience functional difficulties at some point in their lives, perhaps after an accident or disaster or as they age. Disability is a term used to describe an individual's health status, the negative interaction between environmental and subjective factors, limitations in physical activity and restrictions in participation in social activities. It is estimated that more than one billion people live with some form of disability (World Health Organization, 2011; Gönener, 2011). Disability can be caused by prenatal and birth-related problems, accidents, infectious diseases and mental disorders (Girgin, 2003).

Paralympic Games are games organized in parallel to the Modern Olympic Games. They represent the peak moment of each four-year sport cycle for Paralympic athletes and the components of the Paralympic movement. The world championships constitute the final goal to which the national and regional competitions lead. Therefore, they are very important for athletes (EYHGM, 2022).

Athletes competing in Para sport (Para athletes) have a health condition that manifests as a disability and leads to a competitive disadvantage in sport. All Para athletes who want to compete in Para sport should have a sport-specific class. Correct classification is an integral part of Para sport so that Para athletes can compete fairly and equally within the "Paralympic Movement". With classification, athletes with disabilities are divided into sport classes according to how much their disability affects their ability to perform the core activities in a particular sport. The purpose of classification in para sports is to determine the disability level of the para athlete and to ensure that the impact of the injury is minimized in each race. Since the ability to perform in each sport varies, classification in para sports is made specific to the sport. As a result, a para-athlete may meet the criteria in one sport but not another (<https://www.paralympic.org>). The terminological information recommended to be considered in para sports is given below (<https://www.paralympic.org>):

Para Athlete:

A general term for professional and amateur disabled athletes who play sport but have not competed at the Paralympic Games. An athlete is a Paralympian only when they participate in the Paralympic Games.

Paralympian/Paralympic Athlete:

An athlete who has participated in the Paralympic Games. A Paralympian is never a former Paralympian. If a Paralympian has participated in the Paralympic Games once, they are a Paralympian "for life". If the person is no longer an athlete, they are a former athlete.

Paralympic sport means any sport recognized by International Federations and the IPC, in which para-athletes participate by meeting various criteria according to the IPC athlete classification code. Not all sports branches are included in the Paralympic Games as para sports. Para sport means any sport in which persons with disabilities participate and which has rules of thumb in accordance with the IPC Athlete Classification Code.

The correct terminology in para sport should be para athlete or athlete with a disability. Para athlete, disabled athlete, visually impaired athlete, physically and/or mentally disabled athlete. Terms such as disabled sport, disabled athlete, disabled person, blind athlete, blind person are incorrect expressions. The IPC chooses first-person language, i.e. addressing the athlete first and the disabled person second. Therefore, it would be more accurate to refer to Para athletes wherever possible. If you feel the need to mention disability, the correct term encouraged is 'athlete/disabled person'. So it is more appropriate to say the athlete identity first.

History of the Paralympic Games

The Olympic Games, the foundations of which were laid in the city of Olympia in the 8th century A.D., were held in Athens in 1896. In these Olympics, 241 athletes from 14 countries participated and competed in 43 races (Güngör, 2009). Unlike the modern Olympic Games, the Paralympic Games, which emerged in the mid-20th century, have the same interest and importance as the Olympic Games today. The name of Paralympic Games, which is defined as the events in which athletes from different countries and different disabled groups participate, is a combination of the Greek words 'para' (besides) and olympic, and means the competition

organized in parallel with the Olympic Games (Ergün, 2011). The history of disabled sports dates back to the 1870s. Its institutional structure was realized when a group of gymnastics, bowling and chess players came together to form a sports community, and consequently, the Berlin Deaf Gymnastics Association (Taubmutme Turnvereinigung Berlin) was established on October 18, 1888. With the development of the Berlin Deaf Gymnastics Association over the years and the increasing number of participants, the realization of the International Silent Games in Paris in 1924 became the basis of the Olympic Games for the Deaf (Deaflympics) (Uslu, 2020). The birth of the Paralympic Games is considered to be the Stoke Mandeville Games organized by Dr. Lutwing Guttman in 1948 (Zengin and Şentürk, 2022). The games, organized for wheelchair veterans, attracted great attention in a short time and became the first international competition of its kind with the participation of a group of disabled athletes from the Netherlands in 1952. The ninth Stoke Mandeville Games were held a few days after the Olympic Games in Rome. Considered as the first Paralympic Games, the games have been organized every 4 years in parallel with the Olympic Games since then. After 16 years of summer sports, the games were organized as the Swedish Winter Games in 1976 with the participation of athletes with different types of disabilities. The Paralympic Games moved to another dimension in 1988 and were held in Seoul in the same facilities immediately after the Olympic Games. Due to the great interest in the Seoul Paralympic Games, the International Paralympic Committee (IPC) was established in 1989 and the games were organized by this committee from that year on. After the Games in 1992, 1996 and 2000 were held in Olympic cities, as in Seoul in 1988, an agreement between the International Paralympic Committee (IPC) and the International Olympic Committee (IOC) in 2001 made it official that the Olympics and Paralympics would be held in the same city. The Winter Olympics and Winter Paralympics were held in the same facilities in 1992. The Summer-Winter Paralympic and Olympic Games, which were held every four years in the same year, were changed in 1992 to have two years between the Summer and Winter Games (Özay, 2019; Zengin and Şentürk, 2022).

The first logo of the Paralympic Games was the Tea-Geuk emblem from Korea. The Three the centre, to bring together para athletes from all over the world to compete. In addition, the Agito symbol highlights the strong will of Paralympic athletes, how they continually inspire

Agitos logo was renewed in 2003. The Paralympic Movement is symbolized by the Agito, united at and excite the world with their performances, and reflects the Paralympic Motto, "Spirit in Motion." ([https:// www.paralympic.org](https://www.paralympic.org)).



Figure 1. The Logo of the Paralympic Olympic Games

The Rome Paralympic Games, the first Paralympic Games, were held in 1960, a few weeks after the 17th Summer Olympic Games were completed. Since the first games, the Paralympic Games have been held every four years without interruption. The year of the

Paralympic Summer Olympic Games, the place where they were held, the disability content, information on how many countries and athletes participated, and interesting events during the period of the Olympics are given in Table 1.

Table 1. Descriptive information for the Paralympic Summer Olympics (<https://www.paralympic.org>).

YEAR	LOCATION	DISABILITIES INCLUDED	COUNTRIES	ATHLETES	HIGHLIGHTS
2020	Tokyo (JPN)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres, Intellectual Disability	162	4,393	Para badminton and Para taekwondo were added to the Paralympic programme for the first time.
2016	Rio (BRA)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres, Intellectual Disability	160	4,328	Para Canoe and Para Triathlon added as sports bringing total number to 22
2012	London (GBR)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres, Intellectual Disability	164	4,237	After an absence of 12 years intellectually disabled athletes competed in athletics, swimming and table tennis
2008	China (CHN)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	146	3,951	Rowing added as sport. Cumulated TV audience of 3.8 billion
2004	Athens (GRE)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	135	3,808	Football 5-a-side added as a sport
2000	Sydney (AUS)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres, Intellectual Disability	123	3,879	Sailing and Wheelchair Rugby added as sports. Record ticket sales
1996	Atlanta (USA)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres, Intellectual Disability	104	3,259	Equestrian added as a sport. Track cycling added as a discipline

Table 1. Continue

1992	Barcelona (ESP)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	83	2,999	Event benchmark in organisational excellence
1988	Seoul (KOR)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	60	3,057	Judo and Wheelchair Tennis added as sports. Co-operation between Olympic and Paralympic Organizing Committees. Shared venues with Olympics which has continued ever since
1984	Stoke Mandeville (GBR) & New York (USA)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	41 (GBR) 45 (USA)	1,100 (GBR) 1,800 (USA)	Football 7-a-side and Boccia added as sports. Cycling added as a discipline. Wheelchair Racing included as demonstration event at Olympic Games
1980	Arnhem (NED)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	43	1,973	Sitting Volleyball added as a discipline. Events for athletes with Cerebral Palsy included
1976	Toronto (CAN)	Spinal injury, Amputee, Vision Impairment, Les Autres	40	1,657	First use of specialised racing wheelchairs. Volleyball (Standing), Goalball and Shooting added as sports
1972	Heidelberg (GER)	Spinal injury	43	984	First quadraplegic competition added. Demonstration events for vision impaired athletes
1968	Tel Aviv (ISR)	Spinal injury	29	750	Lawn Bowls added as a sport
1964	Tokyo (JAP)	Spinal injury	21	375	Weightlifting added as a sport
1960	Rome (ITA)	Spinal injury	23	400	First Games with a disability held in same venues as Olympic Games

The number of athletes participating in the Paralympic Summer Olympics by years is shown in Table 2 and Figure 2 below (<https://www.paralympic.org>).

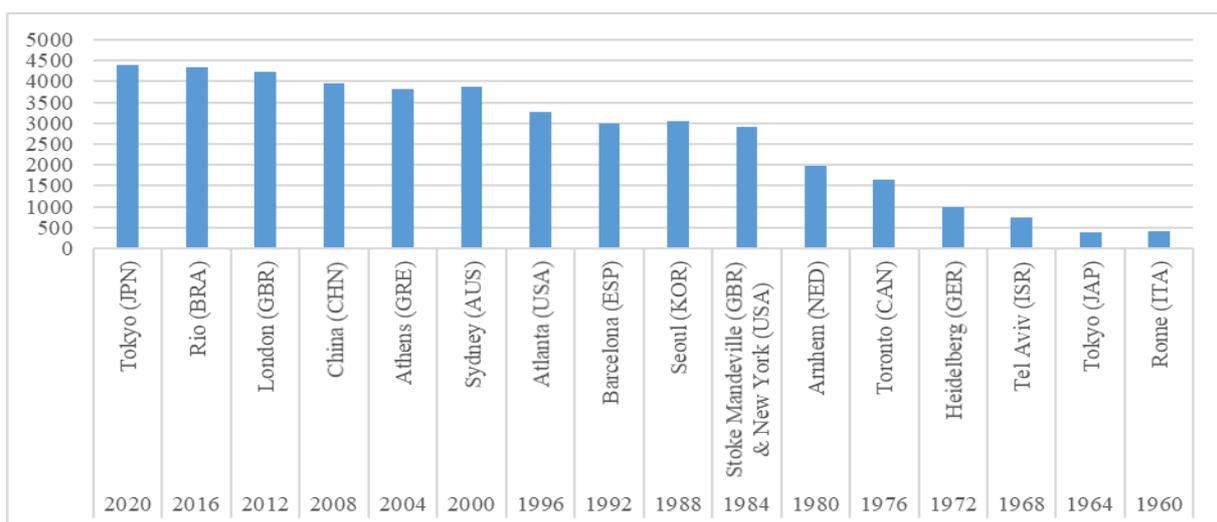


Figure 2: Number of athletes participating in Paralympic Summer Games

The Paralympic Winter Olympic Games were held in Sweden in 1976 as the first Paralympic Winter Games in history in only two sports (Arslan and Sezer, 2020). In the games organized in Örnköldsvik, Sweden, 53 athletes from 16 countries competed in Para mountain skiing and Para cross-country skiing (Ürkmez,

2019). The year of the Paralympic Winter Olympic Games, the place where it was held, disability content, information on how many countries and athletes participated, and interesting events during the period of the Olympics are given in Table 3 (<https://www.paralympic.org>).

Table 2. Descriptive information for the Paralympic Winter Olympics

YEAR	LOCATION	DISABILITIES INCLUDED	COUNTRIES	ATHLETES	HIGHLIGHTS
2022	Beijing (CHN)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	46	558	Record number of female Parathletes (136) took part in the Games.
2018	PyeongChang (KOR)	Spinal injury, Amputee, Vision Impairment, Cerebral	49	567	Record numbers of spectators (343,000), accredited media (629) and international viewers outside of the host nation (1.87bn)
2014	Sochi (RUS)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	45	541	316,200 tickets were sold, the most ever for Paralympic Winter Games. Para snowboard made its Paralympic Winter Games debut as part of IPC Alpine Skiing.
2010	Vancouver (CAN)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	44	502	Ticket sales exceeded 230,000, the most ever.
2006	Torino (ITA)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	38	474	Wheelchair Curling added as a new sport.
2002	Salt Lake City (USA)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	36	415	Number of tickets on sale had to be augmented due to high demand
1998	Nagano (JPN)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	31	562	Demonstrated rising media interest in Paralympic Winter Sport
1994	Lillehammer (NOR)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	31	469	Ice Sledge Hockey added as a sport
1992	Tignes-Albertville (FRA)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	24	365	Biathlon added as a discipline. Demonstration events: Alpine and Cross Country Skiing for athletes with an intellectual disability. First Games to share Olympic venues. Continued ever since
1988	Innsbruck (AUT)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	22	377	Sit-Ski events introduced in the sports of Alpine and Nordic Skiing
1984	Innsbruck (AUT)	Spinal injury, Amputee, Vision Impairment, Cerebral Palsy, Les Autres	21	419	Demonstration event at Olympics in Sarajevo: Giant Slalom.
1980	Geilo (NOR)	Spinal injury, Amputee, Vision Impairment, Les Autres	18	299	Demonstration event: Downhill Sledge Racing
1976	Örnköldsvik, Sweden	Spinal injury	16	198	Demonstration event: Sledge Racing

The number of athletes participating in the Paralympic Winter Olympics by years is shown in

Table 4 and Figure 3 below(<https://www.paralympic.org>)

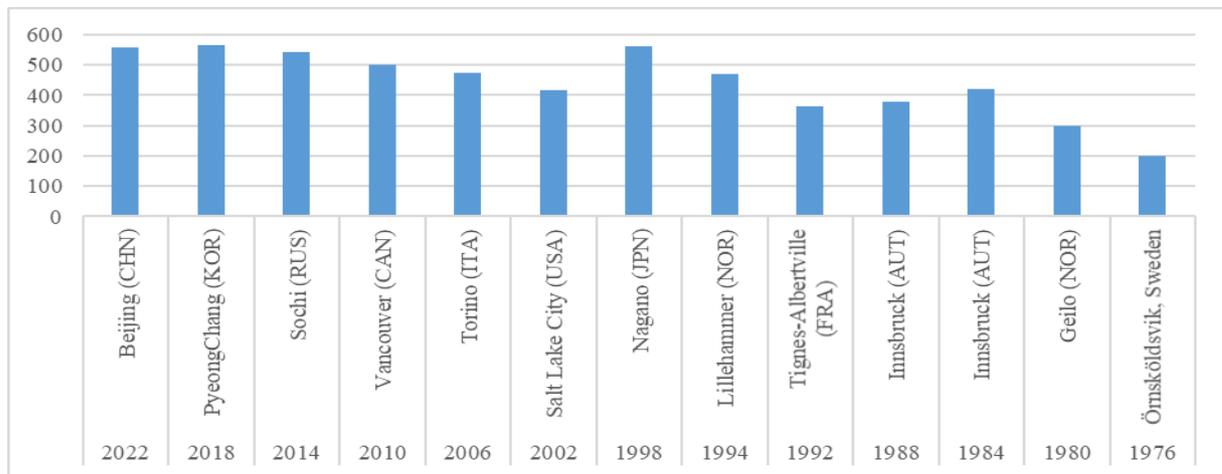


Figure 3: Number of athletes participating in Paralympic Winter Games

Psychology of Paralympic Athletes

British sports psychologist Jonathan Katz said of Paralympic sport: "The Paralympic environment is intense, exciting, with constant emotional ups and downs. It is also unforgiving and taxing" (Katz, 2007). These words help us to understand the importance of psychological preparation in Paralympic sport. In this context, psychological skills training described in the field of sport psychology is thought to be necessary for para-athletes, para coaches, para managers (Martin, 2016).

It is important to be aware of the psychosocial climate of para-athletes. Although there are many similarities between para-athletes and healthy athletes, there are many psychological, social and physiological factors that are different for disabled athletes. One of these differences is that approximately 85% of disabled athletes have an acquired disability (e.g. earthquake, car or work accident). Athletes with disabilities socialize more through sport than healthy athletes, and adults have more opportunities for para sport than children (Sherrill, 1998; Martin, 1999). Para-athletes may experience many difficulties such as transportation difficulties and architectural barriers in coming to the training area and performing daily activities. In addition, people with disabilities are considered a minority and may be subject to discrimination and abuse (Shapiro, 1993).

Para-athletes often deal with chronic pain and injuries. Para-athletes' self-awareness to distinguish between disability-related discomfort and chronic pain from sports injury and fatigue-

related pain is important. Failure to recognize the differences between the intensities can lead to injury or withdrawal from training when trying to train through pain, resulting in loss of fitness. Given that many para-athletes have short careers and limited opportunities to compete at the elite level, it is critical to reduce time lost to injury. In addition, para-athletes' readiness for sport cannot be determined by chronological age, as athletes in Paralympic sport start at different ages depending on the timing of the injury (Radtko and Doll-Tepfer, 2014).

From a holistic perspective, there are many different parameters that affect the sporting performance of para-athletes. These factors are listed below (Erickson and Côté, 2016; Post et al. 2018; Baxter-Jones et al. 2002; Roberts et al. 2019; Ullrich-French and Smith, 2009; Estabrooks et al. 2003; Barker-Ruchti et al. 2018):

- Demographic factors (e.g., socioeconomic status, family status, sports background,
- Physical characteristics (e.g. endurance, flexibility)
- Psychological (e.g. psychological resilience, anxiety level)
- Disability-related factors (e.g. type, timing and nature of disability, potential classification)
- Sport-related factors (e.g., quality coaching, coach-athlete relationship),
- Social factors (e.g. relationships with peers),
- Environmental factors (e.g. access to facilities)
- Political factors (e.g. access to sport policy, funding)

Motivation:

Understanding the psychological processes that initiate and sustain behavior in sport settings is important to reveal the reasons why athletes start, continue and quit sport (Clancy et al. 2016). Being aware of para-athletes' thoughts (e.g., motivation) and emotions (e.g., anger versus frustration), understanding the impact of these emotions and thoughts on behavior, and revealing their reasons for playing sport are important for success and continuity in sport (Martin, 1999). Although the sport motivations of para-athletes and non-disabled athletes are similar, para-athletes are known to have multifaceted and complex motivations. Para-athletes play sport to perform well and win, to appear both normal and beyond normal, to adapt to a recent injury, to defend themselves, to combat marginalization, and to promote the disability sport movement.

Personality:

Personality is a relatively stable trait that is also thought to indirectly help performance. The gold medal winning para women's basketball team at the Paralympic Games in the USA was found to have higher psychological resilience and lower levels of anxiety than other para-athletes (Martin et al. 2011). Research has also suggested that emotional stability (i.e. being less anxious) and cognitive flexibility and mental resilience may contribute to sporting performance in para-athletes (Martin, 2016).

Self-confidence: It refers to athletes' own thoughts and beliefs about the skills they have in sports. It is an important feature required for superior sports performance in athletes (Plakona et al., 2014).

Psychological Resilience:

High performance expectations for athletes in sports environments bring about stress, negative experiences and emotional state. Psychological resilience is a dynamic process expressed as the ability to stand up to different challenges faced by athletes from the sports environment and the ability to cope with difficulties, and the ability to recover easily after negative experiences (Fletcher & Sarkar, 2012).

Self-awareness:

Self-awareness is the recognition of all the characteristics that athletes need to have in order to perform well in sports, in other words, being aware of these characteristics. Individuals with high self-awareness engage in introspection and reflection to understand their own internal processes. These in-

depth self-awareness exercises provide athletes with the opportunity to self-regulate (Faull and Cropley, 2009).

Regulation of emotions and stimulation:

Emotions are primitive, automatic, and unconscious responses to a wide variety of environmental demands. Recognizing emotions is very important for managing emotions. Since para-athletes experience very different emotional processes related to their disability, apart from the stressful environment of sports, it is also important to manage their emotions. It is necessary to have the ability to regulate emotions in order to achieve high performance in para sports and for psychological well-being. With techniques for managing emotions and regulating arousal, athletes can become prepared to perform at a high level (Anderson et al. 2014; Hansen, 2005).

Attention Control:

Another skill required for high performance in sports is attention control. Attention control, also called concentration or focus, is defined as the athlete's intentional directing of his or her attention to a stimulus in order to perform a task (Eysenck and Wilson, 2016).

Stress Management:

Athletes face many challenges to achieve superior performance in sports. Athletes become stressed when they start to think that they cannot cope with these difficulties. These stressful thoughts can harm athletes' performance and mental health. Therefore, stress management is another skill that athletes must have in order to demonstrate high performance in sports. Para-athletes who are aware of their thoughts and emotions and can control them can reduce their stress reactions by changing how they evaluate stress factors (Rumbold et al. 2012; Neil et al. 2011).

Stress Factors in Paralympic Athletes

Factors that cause stress in Paralympic athletes are summarized below:

Competition

The Paralympic Games are considered to be the highest level of competition that para-athletes can aim for. The attention paid to Paralympic athletes and the importance placed on Paralympic performance by governments, media, families and friends can make the Paralympic Games particularly challenging/stressful (Martin, 2012). Feeling responsible for buying tickets for relatives at the Paralympic Games

Studies investigating the factors that create stress in para-athletes have revealed that para-athletes feel responsible for buying tickets for their families and friends at the Paralympic Games and that organizing tickets increases their stress. For this reason, organizing tickets for athletes' relatives will relieve them during the games (Dieffenbach and Statler, 2012).

Travel

Paralympic athletes experience stress when traveling to major international competitions. First or last boarding, transfer from wheelchair to airplane seat, bathroom accessibility and personal care support during the flight are some of the travel concerns of para-athletes (Martin, 2012).

Social support

Research has found that Paralympic athletes being away from home for long periods of time is another source of stress. Social support is very important for Para-athletes. Para-athletes reported that their family and friends supported their training. The lack of social support for an extended period of time (e.g. 7-14 days) at the Paralympics can have negative consequences for para-athletes. In order to cope with this source of stress, it would be beneficial for para-athletes to have face-to-face communication with family and friends through technology (Campbell, and Jones, 2002a; Campbell and Jones, 2002b; Martin and Mushett, 1996; Omar-Fauzee et al. 2010).

Getting used to the Paralympic village

Para-athletes spend a significant amount of time in the Paralympic village. Para-athletes have to sleep in an unfamiliar environment with different mattresses and pillows. A study of Brazilian Paralympic athletes participating in the Beijing Paralympic Games found that the majority of athletes had poor sleep quality during the games (Silva et al. 2012). The decrease in the sleep quality of para-athletes may be due to competition anxiety, as well as the physical difference in the sleeping area and not getting along with the roommate. It should not be forgotten that decreased sleep quality is a factor that increases competition anxiety. In the study conducted by Silva et al. (2012), 72% of para-athletes with poor sleep quality had moderate anxiety, while this rate was only 28% in athletes with good quality sleep. Similarly, members of the British national team reported that sleep was the source of anxiety and stress in para-athletes (Campbell and Jones, 2002). Athletes were generally concerned about lack of

sleep, who they would have to share a room with and having to compete after a bad night's sleep. Therefore, it is useful for para-athletes to carry sleep aids (e.g. earplugs) and familiar bedding (e.g. pillows) with them to the Paralympic Games (Martin, 1999).

Difficulty accessing support staff

While it is easier to access support staff (chiropractor, sports psychologist, physiotherapist) in competitions for a specific sport (e.g. Archery World Championships), support staff are often overworked and tired in Paralympic Games where many sports are competed. Good planning for access to support staff can help to reduce the stress of athletes (Martin, 1999).

Classification

In para sports, athletes are classified according to their disability level, and this allows athletes with different disabilities to compete. For example, an athlete with cerebral palsy can compete with an athlete with missing limbs. Incorrect classification in para sports is a situation that is frequently encountered and causes stress and anger in para sports (Wu & Williams, 2001). Athletes fear being reclassified at a different level than they were before, and when they are reclassified, they may have to compete with athletes whose injuries are less effective (Martin, 1999).

Doping testing

The Paralympics are doping tested in a similar way to the Olympics. For many para-athletes, doping testing can be a stressful experience. Testing at the Paralympics is likely to be more extensive than at the Olympics. Para-athletes often provide urine for doping testing, and they need to apply for exemptions for medicines they take because of their disability. Sometimes para-athletes can make lifestyle changes prior to the Paralympics to avoid substances that could be seen as doping (Nadarajan, 2000; Collier, 2008).

Psychosocial Factors in Para-Athletes

Para-athletes train and compete in a social context, so interpersonal relationships are crucial in sport settings. Such skills are also key to optimize mental health and create safe, productive environments conducive to learning and development (Martin, 2016).

Family Engagement

In the early years of para-athletes' careers, it is vital that the parent or caregiver is there for the athlete (Johnson, Fraser, Ganesh, Skowron, & Ipsos, 2008; Johnson et al. (n.d.); Radtke and Doll-Tepner, 2014). However, this social support may harm the athlete in the context of overprotectiveness. The overprotective nature of the parent undermines the para-athlete's ability to adapt and cope with the demands of sport (e.g., travel to training, travel to camps and competitions, pressure to perform and expectations of consistency). The overprotective attitude of the parent or caregiver may suppress the para-athlete's sense of independence and risk-taking impulses. If parents realize that they cannot always be there for the para-athlete and create an environment where the para-athlete can act on his/her own and meet his/her needs on his/her own, this will have a positive impact on sporting performance (Dehghansai et al. 2021).

Coaches also emphasized the importance of para-athletes' level of independence for successful sporting development in the Paralympic context. Parental/caregiver overprotectiveness can increase pressure on para-athletes by reducing their opportunities to be independent (Tawse et al. 2016). Research findings on Paralympic athletes suggest that children whose parents and siblings are involved in sports are more likely to participate in sports (Hopwood et al. 2015; Papadopoulos et al. 2020) and that parental support plays an important role in para-athletes (Hopwood et al. 2015; Papadopoulos et al. 2020).

Coaches

Coaches are critical to success in sport and can influence para-athletes in many positive and negative ways. Para sport in general tends to be of secondary status to disability sport. Some successful coaches may not want to coach para sport for fear of less fame and status. In countries with limited financial resources, Paralympic athletes may not receive consistent pre-competition coaching because they work with coaches who have not completed para sport-specific training. It is very important to receive field-specific training to coach in Para sport. Coaches who try to coach at the Paralympic Games without training in this field and without prior training and competition experience with the athlete may act more as managers than coaches

because they do not interact with their athletes beforehand (Martin, 2016).

Para coaches face a dual challenge of understanding the sport and disability of para-athletes. In a study examining the roles and responsibilities of coaches of para-athletes in wheelchair rugby, two themes emerged. One is coaching the para-athlete and the other is coaching the individual. In terms of coaching, coaches emphasized that elite disability sport is in a transition period and creating an elite sport environment is very important in para sport. Individual coaching is important to meet with para-athletes individually on a regular basis outside of formal training sessions (Martin, 2016).

The knowledge and experience of coaches has a significant impact on sports performance. In addition to the knowledge and experience of the coach, interpersonal relationships between the coach and the athlete are also of critical importance for sporting success. A study of eight disabled swimmers revealed that the athletes' training in the sport was linked to a personal and close relationship with their coaches (Martin, 2016).

Making para-athletes a partner in the decisions taken in the sport environment and supporting the sense of independence of athletes are important for participation and continuity in para-sports. In sports environments where autonomy is supported, athletes also have more positive relationships with their teammates. In addition, athletes who think that their coaches support their desire to be independent are more intrinsically motivated. It is known that providing social support, positive feedback and democratic behavior of coaches contribute to their success in sports and their continuity in sports. Para-athletes have expressed their satisfaction with coaches who approach them with democratic leadership style. However, coaches who approach their athletes with autocratic leadership that determines what is expected from para-athletes, corrects mistakes and explains what to do to para-athletes are also very valuable for athletes (Martin, 2016).

In the camps of Paralympic teams, athletes come to the camp from different regions and live together for a long period of time. From this perspective, it is critical for coaches to create a spirit of team unity, determine roles and responsibilities in the team and ensure social cohesion in the team (Martin, 2016).

Establishing a trust-based relationship between the coach and the athlete is very important for good sports performance. The relationship network created between the coach and the athlete with the themes of sincerity, commitment, complementarity and joint effort will positively affect sports performance (Poczwadowski et al. 2002; Jowett, 2007).

Leadership:

Leadership, which is expressed as influencing and leading other people to achieve common goals, is an important concept in sports. In sports, the leader's approach to defining roles and developing relationships within the team enables the development of team chemistry, climate, communication, and athletic experience (Duguay et al. 2019; O'Boyle et al. 2015).

Teamwork:

Teamwork is a dynamic process that involves team members striving collaboratively to effectively carry out the independent and at the same time interdependent behaviors necessary to maximize the likelihood of a team achieving its goals. Teamwork significantly affects satisfaction, harmony and performance in sports (Bloom et al. 2003; Collins and Durand-Bush, 2019; McEwan and Beauchamp, 2014).

Communication:

Communication, which expresses the message exchange of information and ideas through verbal and non-verbal means, is the basis of effective teamwork. Communication, which is affected by different factors such as age, gender, religion, language and culture, affects team interaction, conflict resolution and stress management. In teams, the ability to communicate openly and reliably is essential for carrying out a range of team processes such as goal setting, leadership, support, decision making and conflict resolution (Beauchamp et al. 2005; Carron et al. 2005; Collins and Durand-Bush, 2019).

Conclusion

The aim of this study is to define the Paralympic concept, to reveal the history of the Paralympic Olympic Games and to examine the psychological and psychosocial characteristics of para-athletes in order to increase knowledge and awareness about the concept of para sport.

As a result of the literature review, the change and development that para sport has shown over the years since the first day it emerged has been revealed. Para sport, which started with the

realization of the positive effects of physical activity and sports on the treatment of disabled individuals, has shown positive developments in terms of both the number of athletes and the sports branch every year and the Paralympic Games have taken its place in the international arena in a short time. The increase in the number of athletes participating in the games has enabled different branches and different disability groups to take part in the competitions. With the first winter games held in 1976, the games, which were divided into two formats as summer and winter, started to be held in the same venues after the Olympic Games and turned into organizations as big as the Olympics. In 1989, with the establishment of the International Paralympic Committee, the organization of the games and disabled sports branches with many disabled federations were gathered under a single roof and took the form of today's Paralympic Games. Considering the problems experienced by disabled individuals in terms of physical activity and participation in sports even today, the developments that the Paralympic Games have shown from the date of its emergence to the present day cannot be underestimated. Paralympic Games not only proved to the whole world that disabled individuals can also be elite level athletes, but also increased the motivation of individuals to participate in physical activity and sports regardless of their disability group.

In this study, in addition to the history of para sport, the psychological characteristics of para-athletes were discussed and psychosocial factors in para sport were examined. An in-depth understanding of psychological and psychosocial factors in Paralympic sport is very important for para coaches and managers, sport scientists and students in this field to better understand para-athletes. After the review, personal characteristics, motivational factors, self-confidence, psychological resilience, self-awareness, stress management, regulation of emotions and stimulation, attention control and factors that cause stress in para-athletes were revealed. Family, coach, leadership, team unity and communication issues among psychosocial factors in para sports were also examined within the scope of the study.

When the psychological characteristics of para athletes are examined, it is stated that para athletes have a versatile and complex psychology. It has been understood that para athletes do sports

for reasons such as performing well and winning, looking normal, adapting to injury, defending themselves, fighting against marginalization and encouraging the disabled sports movement. It has been stated that para-athletes who are emotionally stable, have cognitive flexibility and mental endurance, are self-confident, can manage stress and control their emotions are more successful in sports. As a result of the literature review, it has been revealed that issues such as competition, feeling responsible for buying tickets for relatives at the Paralympic Games, travel, social support, getting used to the Paralympic village, difficulty accessing support staff, classification and doping testing increase stress in para-athletes.

It is very important for a parent or caregiver to be with the athlete when para-athletes begin their sport, but if this social support continues as overprotectiveness, it harms the para-athlete's ability to adapt and cope with the demands of the sport. self-thought coaches, who are quite limited in numbers, are very crucial for success in the sport and can influence para-athletes in many positive and negative ways. In parasport, apart from sport-specific knowledge, relationships with athletes, communication, leadership skills and an environment that provides team cohesion are also important.

Based on this research, some field-specific suggestions are given below:

- Although studies to raise awareness about para-athletes have increased, there is still a need for awareness studies on this subject.
- Para-athletes should be trained on how to behave. An approach that prioritizes being an athlete, not being disabled in para-sports, needs to be taught to all sports personnel who work in the field, receive training, and are in contact with para-athletes.
- It is recommended that research on the psychosocial characteristics of para athletes be increased in the field.
- Specific research to the sports branch should be increased in para sports.
- Projects should be produced on how disabled individuals who do not participate in sports can be included in sports.

Conflict of Interest

There are no conflicts of interest for the contributing author.

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Author Contributions

The entire research plan was performed by the author (Study Design; Data Collection; Data Interpretation; Manuscript Preparation; Literature Search).

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