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The Impact of COVID-19 on Para-Athletes: A Case Study on Motivation and Psychological Training for the 2020 Paralympic Games

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A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

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Abstract

In the 61-year history of the Paralympic Games, the Games have never been canceled for any public health reasons. In order to participate in the Paralympic Games, the preparation process for professional athletes is planned at least four years in advance. Interruptions to this schedule can present significant challenges for elite athletes. Such was the case in 2020 with widespread cancellations of many athletic events due to the COVID-19 pandemic. The impact of in-home isolation can potentially cause athletes to experience different psychological conditions, including depression and anxiety as well as losing motivation. The purpose of this study was to investigate the impact of the COVID-19 pandemic on the motivation of elite para-athletes who were preparing to participate in the 2020 Summer Paralympic Games in Tokyo. Semi-structured interviews were conducted to explore the experiences of 13 professional para-athletes with physical disabilities from the United States and Russia (8 females and 5 males). The following themes were identified: 1) the number of Paralympic competitions; 2) establishing new routines; 3) mentor support; and 4) motivational sources. These constructed themes explained how COVID-19 impacted motivation of professional athletes during one of the most unique periods of human history, with government restrictions and global lockdown.

Keywords: disability sport, Paralympic Games, motivation, COVID-19, adaptive sports, elite athletes.

L.Introduction

The Summer Olympic and Paralympic Games are held every four years in tribute to their Greek origins (International Paralympic Committee, n.d.). In order to participate in the Paralympic Games, the preparation process for professional athletes is planned at least four years in advance (Robson-Ansley et al., 2009). Moreover, the performance date for each Olympic and Paralympic discipline is predetermined as well (International Olympic Committee, n.d.). All athletic training leading up to the Games is designed based on the date of the competition (Gould et al., 2009). Changing the date of competition changes all aspects of the performance preparation process including mental preparation (Stambulova et al., 2012). Therefore, interruptions to this schedule can present significant challenges for athletes. Such was the case in 2020 with widespread cancellations of many athletics events due to the COVID-19 pandemic.

Following international and national health recommendations of the World Health Organization, athletic facilities were closed during the initial spread of the pandemic, including high-performance venues for elite athletes and sports medical centers, public and private gyms, as well as outdoor and indoor sports facilities. Athletes, coaches, physicians, physiotherapists, psychologists, and many other staff members were directed to stay at home (WHO, n.d.). Furthermore, the governments of more than 90 countries placed restrictions on domestic and international traveling, sports, and cultural mass events because of the fast spread of coronavirus (Organization for Economic Cooperation and Development, n.d.).

In the 61-year history of the Paralympic Games, the Games have never been canceled for any public health reasons (Patatas & Winckler, 2022). However, the decision to postpone the 2020 Tokyo Summer Paralympic Games due to COVID-19 for

one year was made in March 2020, only five months before 4,400 athletes from more than 60 countries were scheduled to start competition on August 24, 2020 (International Paralympic Committee, n.d.). In the early stages of the global pandemic, the International Paralympic Committee (IPC) announced that it would continue to brand the Summer Paralympic Games in Tokyo as "Tokyo 2020" regardless of the date the Games were held.

In March 2020, the Tokyo 2020 Paralympic Games were officially rescheduled to take place between August 24 and September 5, 2021 (International Paralympic Committee, n.d.). On July 8, 2021, the Government of Japan announced a state of emergency in Tokyo due to the widespread coronavirus and a high number of confirmed COVID-19 cases (Sayeed et al., 2020). As the pandemic continued to disrupt national and international sporting events, many studies began to explore the potential impacts of the postponement of the Olympic Games (e.g., Gallego et al., 2020; Dergaa et al., 2022; Taku & Arai, 2020). In contrast, research published to address postponement of the Paralympic Games was significantly less than the Olympic Games, including news reports and media coverage (Schipman et al., 2022).

Due to deprivation of media coverage, Paralympians started claiming not enough consideration was given to para-athletes. For example, Theo Curin, a French swimmer, emphasized the sacrifices that athletes make in order to perform at the Games regardless of their disability. He stated: "We practice as much as Olympians do, we make the same sacrifices, yet you still think we are different". Lack of social and media coverage had a direct impact on the athletes' preparation process which was divided into two phases:

before the postponement announcement ("the unknown period") and after the rescheduled date of the Games was published (Yanagawa, 2022).

Statement of Problem

Despite the fact that a state of emergency was declared in Tokyo, the Summer Paralympic Games were held during the rescheduled dates. Rescheduling the mega-event caused enormous negative economic, social, and security impacts on the global community, but the psychological impact it had on elite athletes with disabilities is hardly recognized (Uroh & Adewunmi, 2021). This is important because changing the date of competition changes all elements of aspects of the performance preparation process that consists of physical, tactical, technic, and psychological/mental preparation (Stambulova et al., 2012).

The year 2020 is more associated with the shifts in the mental health of professional athletes as a result of the COVID-19 pandemic rather than the examples of outstanding athletic performances (Kawanishi, 2022). Elite athletes from all over the world have decided to speak out about their mental health challenges. For instance, American professional basketball player Kyrie Irving mentioned that he found it extremely hard to keep a balance between maintaining mental health stability at games and being able to perform under pressure while the COVID-19 pandemic was still happening. Moreover, Leyla Adjametova, a Ukrainian para-athlete in track and field, told BBC Today:

... the 2020 pandemic had become a real challenge for elite athletes, but we survived. I would like to take this opportunity to thank everyone who

helped in the preparation process for the Summer Paralympic Games.

Your support is our victory (BBC News Ukraine, para. 6).

Adjametova finished the interview by acknowledging fans and their support. Russian professional track cyclist Denis Dmitriev mentioned the importance of mental health during his interview at Olympics.ru. He commented the rescheduling of the Olympic Games for one year might seem like a long period for most, but 12 months of preparation for an Olympic athlete is equal to one week of a non-athlete life. By comparison, Dmitriev emphasized the value of time and its underestimated framework when it comes to a mega-sport event such as the Olympic Games. Elite athletes have been suffering from finding motivation and some mental health issues for several decades, but only a few of them decided to publicly discuss the issues (Henriksen et al., 2019). For instance, American swimmer and seven-time Olympic champion Amanda Beard published a book where she revealed her struggles with depression and shared several coping mechanisms in terms of dealing with stress as an elite athlete (Beard, 2013).

One year postponement of the Olympic and Paralympic Games caused by the COVID-19 pandemic impacted elite athletes worldwide. However, there are only a few research studies that address psychological training of elite para-athletes (Hu et al., 2021; Urbanski et al., 2021).

Significance of the Study

A qualitative study conducted among elite-level goalball players indicated that athletes with disabilities receive limited training in psychological skills to increase their athletic performance (Eddy & Mellalieu, 2003). More recent studies have also shown the need and importance of psychological preparation (Bastos et al., 2020). In this study, the

authors interviewed 14 elite para-athletes in Portugal and found that, while few participants had received psychological skills training through their sports organizations or coaches, the majority of participants still mentioned lack of psychological skills training necessary for athletic performance. Although there was an evident need for psychological training, it was determined that there were little possibilities for these capabilities to be developed in competitive para-sport programs (Bastos et al., 2020).

The extant literature has addressed the mental challenges that athletes faced during the COVID-19 pandemic. For example, Makarowski et al. (2022) examined stress and coping strategies in the preparation process of professional athletes during the pandemic from the countries of Hungary, Indonesia, Iran, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, and Spain. The athletes reported that, unexpectedly, stress levels were higher before the pandemic than during its peak. The lowest levels of emotional tension and external stress were reported by athletes in Romania, and the highest were from athletes in Lithuania and Spain. On the other hand, the lowest levels of intrapsychic stress were reported by athletes in Poland, and the highest from Lithuania. Furthermore, athletes' gender played a key role in coping strategies. Male and female martial arts athletes mostly were in the denial stage, focusing on and venting emotions. Additionally, male athletes used self-blame while female athletes used behavioral disengagement (Makarowski et al., 2020).

The impact of in-home isolation can potentially cause athletes to experience different psychological symptoms, including depression and anxiety as well as loss in motivation. Anxiety and motivation are two psychological variables highly associated

with the risk of injury and lower performance at the competitions (Mehrsafar et al., 2021).

Statement of Purpose

Changing the date of competition, lack of media coverage of Paralympians, and in-home isolations caused by the pandemic directly impacted one of the most important components of athletic performance: motivation. Therefore, the purpose of this study was to investigate the impact of the COVID-19 pandemic on the motivation of elite para-athletes who were preparing to participate in the 2020 Summer Paralympic Games in Tokyo.

Research Questions

The following research questions guided this study:

RQ1: How did COVID-19 impact the training schedule of Paralympic athletes?

RQ2: How did COVID-19 impact the motivation of Paralympic athletes?

RQ3: Is there a difference in psychological preparation between Paralympic athletes from different countries?

Definition of Terms

It is important to define the terms that are key for this research study. One consistent term is used throughout the study – elite professional para-athlete which is defined as an athlete that is classified by the International Paralympic Committee and competes for the National Team of the country. The athlete may or may not have sponsorship deals. Other terms are used in the study interchangeably such as elite para-athlete and professional para-athlete.

Adaptive Sports - Competitive or recreational sports for people with disabilities.

Adaptive sports often run parallel to typical sport activities. However, they allow modifications necessary for people with disabilities to participate, and many sports use a classification system that puts athletes with physical impairments on an even playing field with each other (Greer, 2019).

Classification - Determines which athletes are eligible to compete in a sport and how those athletes are then grouped together for competition in order to minimize the impact of the athletes' impairments on sport performance. This is done to safeguard the integrity of fair competition (IPC, n.d.)

Disability – A physical, mental, cognitive, or developmental condition that impairs, interferes with, or limits a person's ability to engage in certain tasks or actions or participate in typical daily activities and interactions (Milner & Kelly, 2009)

International Ranking Score - Rankings are dynamically calculated from the IPC Sport

Data Management System (SDMS) with the most current data. In order to be ranked,

athletes must collect a sufficient number of Performance Scores and some of them must

come from Main Events. Athletes who do not collect enough performances cannot have a

valid Ranking Score, and are thus ineligible for ranking (IPC, n.d.)

Motivation - The impetus that gives purpose or direction to behavior and operates in humans at a conscious or unconscious level (Frederick & Ryan, 1993).

Move United Junior Nationals - The largest, long-standing annual multi-sport event in the United States for youth with a physical, visual, and/or intellectual impairment who are classifiable under the International Paralympic Committee's classification system (Move United Sport, n.d.)

Para-athlete – An athlete that has a disability or impairment that makes them eligible to compete in para-sport (IPC, n.d.).

Paralympian - A para-athlete who becomes a Paralympian once they have represented their country at the Paralympic Games; a title they carry with them for the rest of their lives (IPC, n.d.).

Para-sport - A sport for people who have a disability (Evans et al., 2018).

"The Accessible Environment" program - Russian state program that was introduced by the Ministry of Labor and Social Protection of the Russian Federation in 2013. The program aimed to ensure free access to public facilities and services for people with disabilities (Russian State Social Program, n.d.).

II. Literature Review

Disability

The National Institute of Health (n.d.) highlights several groups that are underrepresented in society, which include but are not limited to people with disabilities, people of color, sexual minorities, people with a nondominant religion, and elderly people. However, despite modern trends toward the development of diversity and inclusion as well as engaging underrepresented populations participating in research, people with disabilities still continue to be excluded from the literature (Rios et al., 2016). One possibility is due to the multiple layers within the disability demographic. Some people are born with an impairment (e.g., Down syndrome, cerebral palsy, epilepsy) or demonstrate a condition early in their childhood (e.g., autism, deafness, bipolar disorder), while others acquire impairment through an injury (e.g., spinal cord injury) or a chronic condition (e.g., limb loss because of diabetes). Still, others may develop age-related disability as they get older (e.g., dementia, age-related mobility impairment; Krahn et al., 2015).

Disability in the United States

Over 1 billion people live with disabilities as of 2022, which is equivalent to 15% of the global population (WHO, n.d.). According to official statistics regarding disabilities in the United States, ongoing and persistent inequalities exist between people with and without disabilities across various aspects of life, including professional opportunities, transportation and recreation accessibility, income level, and social services (IOD, 2019). In the United States alone, there are more than 61 million people with varying degrees of disability, which makes up about 26% of the American

population (CDCP, n.d.). This large percentage led to the trailblazing development and implementation of the Americans with Disabilities Act (ADA) into law in 1990. The ADA is a civil rights law that forbids discrimination against individuals with disabilities in all areas of public life (U.S. Department of Labor, n.d.). Moreover, the United Nations has recommended disability rights for its member nations including the European Union and Eastern European region. The ADA was the first comprehensive legislation by a nation and is now considered the standard for others to follow (U.S. Department of Labor, n.d). However, despite the public policies, people with disabilities still confront stigma and discrimination in their daily lives across all fifty states (Brucker & Houtenville, 2015).

Disability in Russia

In contrast, other countries like Russia, as of the 2020 Paralympic Games, did not have legislation prohibiting discrimination of underrepresented populations like people with disabilities. In Russia, the official reported number of people with disabilities has been declining in recent years from 12,111 million people in 2018 to 11,631 million in 2021, thus representing 8.7% of Russian citizens (Russian Federal Register of Disabled, n.d.). Recent research on disability studies in Russia reveals that, although the official number of people with disabilities is, on average, level in comparison to other countries, people with disabilities still face discrimination and challenges in daily life (Migranova, 2015; Nikonova, 2016).

"The Accessible Environment" is a social program that has appeared in the Russian Federation since 2011 to provide equal opportunities for people with disabilities.

The program involved federal funding and advisory support to make the environment

more accessible for people with disabilities seeking education, healthcare, information, transportation, and other public services in several large cities in Russia (Russian Federal Register of Disabled (n.d). However, in 2015 the program was found ineffective by Russian National Political Association (RNPA) due to small changes, and multiple research studies done to evaluate "The Accessible Environment" program showed a low level of public satisfaction where the participants of the research were people with disabilities (Battalova, 2019; Afonina et al., 2017).

A decade later, on December 8, 2021, the Russian government announced the concept for the development of a system for comprehensive rehabilitation for people with disabilities for the period up to 2025 (Russian Federal Register of Disabled, n.d). The main goal of the Concept was to improve the quality and accessibility of necessary goods and services for people with disabilities, as well as financial independence, level of socialization, and standards of living. Attitudes towards people with disabilities in Russia are still significantly different compared to attitudes of American citizens toward people with disabilities (Battalova, 2019; Hartblay, 2012; Holleman, 2019; Stuhldreher, 2020). The issue exists on a federal level, where there is no legislation in the Russian Federation that provides an effective mechanism of implementing procedures to adapt social infrastructure facilities, residential buildings, or access to the transportation system for people with disabilities (Battalova, 2019).

Barriers People with Disabilities Face

Despite the initiatives and slight changes made by the Russian government, basic activities of daily life, such as going to school or work, meeting with friends or family members, buying groceries, attending cultural and social events, or attending doctor

appointments, can be extremely difficult or even impossible for most people with disabilities in Russia due to a wide range of different types of barriers they encounter (Battalova, 2019). According to the English International Federation of Disability (EIFD), those barriers can be physical and psychological.

Physical Barriers

Rimmer et al. (2004) found that access to public areas has limited the opportunity for people with disabilities to be involved in social community events as well as in recreational activities. Several studies on access to environmental public settings among adults with physical disabilities showed that more than 5,000 people who use wheelchairs were unable to gain access to recreational and leisure facilities because of such barriers as bad weather or climate, no curb cuts or blocked curb cuts, limited strength or fitness, inaccessible entrances and exits, no parking or distant parking, poor travel surfaces, physical obstacles on the way to the entrance, personal illness, no ramps or too steep ramps, and technical wheelchair problems. Other barriers included lack of transportation, inability to pay for a fitness membership, lack of knowledge on where or how to exercise, and lack of understanding of the importance of exercise in improving their condition or health (Rimmer et al., 2004). As a result of the stigma associated with disability, people with disabilities are commonly excluded from a higher level of education, employment, and community life which deprives them of opportunities essential to their social life, health, and well-being (United Nations, n.d.).

Engagement in sport can help reduce the stigma and discrimination that is generally associated with disability because it can transform social attitudes towards people with disabilities by highlighting their skills and reducing the tendency to see the

disability instead of the person (United Nations, n.d.). It is critically important to investigate this exclusive underrepresented group of society because of physiological and psychological barriers, lack of opportunities, historical stigma, and discrimination people with disabilities experience on a daily basis. Furthermore, one area particularly interesting to investigate is the intersection between engagement in sport and disability since sports provide unique opportunities to transcend social, cultural, physical, and psychological barriers regardless of nationality, age, gender, sexuality, and disability (Rimmer, 2002).

Overcoming Physical Barriers through Sports

Implementing physical activity into one's daily life routine can be beneficial for all individuals, including people with disabilities (Rimmer, 2002). According to the United Nations (n.d.), sport can transform lives in a radical way by empowering people with disabilities to realize their full potential and change historically established public opinions towards disability.

The Centers for Disease Control and Prevention (CDCP) reports major differences between physical fitness among people with disabilities and people without disabilities:

- 38.2% of adults with a disability are diagnosed with obesity compared to 26.2% of adults without a disability;
- 28.2% of adults with a disability smoke compared to 13.4% of adults without a disability;
- 11.5% of adults with a disability have heart disease compared to 3.8% of adults without a disability;

• 16.3% of adults with a disability have diabetes compared to 7.2% of adults without a disability.

Therefore, it is critically important to include physical activities into a regular routine to prevent chronic disease in the future.

Social Barriers

Sport can also help people to overcome social barriers by learning how to communicate more effectively, learning the significance of teamwork, and learning cooperation and respect for others through playing team sports (Cappe, 2016; CDCP, n.d.). However, being a part of the sports community is even more important for people with disabilities because it can provide a positive outlet and the opportunity to integrate into society (Weston, 2017). Competing at the elite level such as the Paralympic Games and Special Olympics has long provided athletes with physical and intellectual disabilities the invaluable opportunity to break social assumptions towards disability as well as develop personal growth (Weston, 2017).

Jeffress (2015) argues that the power of sport is crucial in gaining an athletic identity, especially for people with physical disabilities. According to Jeffress (2015), athletic identity has the potential to make a positive impact on overall physical health and well-being. Furthermore, strong athletic identity is critical for better health (i.e., improved nutrition, improved sleep habits) and physical fitness, global self-esteem, improved social relationships, enhanced confidence, and increased participation in physical activity and exercise (Edison et al., 2021).

Cappe (2016) stands that sport and recreation activities are becoming a powerful tool to not only make a better social relationship but also make a transformation in

physical and mental health. Sport's adaptation and development for people with disabilities has resulted in more options for recreation and competition, just like other disability services. Therefore, it is critically important to engage people with disabilities in sport and recreation. In view of Kohe and Peters (2016), consistent physical activities help create a positive, healthy, and inclusive social environment where vital social and life skills can be fostered and improved. Moreover, these activities can help people of all abilities to be socially active and more involved in their communities, creating a positive outlook and well-being.

In 2018, the U.S. Department of Health and Human Services published a guideline to maintain physical fitness and stay healthy for people of all ages and abilities. Studies have shown evidence that physical activity fosters normal growth and development and can make people feel better, function better, sleep better, and reduce the risk of a large number of chronic diseases (Brown et al., 2014; Piercy et al., 2018; Pfohl, 1990). Health benefits begin immediately after exercising, and even short episodes of physical activity are beneficial (Piercy et al., 2018). Therefore, it is essential for people with disabilities to lead a physically active lifestyle—potentially through sport and recreation—in order to capitalize on these benefits. The current study focuses on physical activity through competitive sport.

Recreational and Elite Sports

Sport is divided into two categories: recreational and competitive physical activities (Belley-Ranger et al., 2016). Recreational sport is defined as those activities where the primary purpose is participation, with the goals of improved overall physical fitness, emotional satisfaction, and increased social involvement. In general, recreational

sport is often perceived as a less stressful activity, both physically and mentally, for the participants (Belley-Ranger et al., 2016). Performance expectations for recreational sport have lower standards compared to competitive (elite) sport. Recreation activities do not require strict commitment and may be adjusted depending on other aspects of life (Spaaij et al., 2020).

Participation in recreational sports usually defines the first step for athletes with disabilities to be involved in sports (Rodriguez Macias et al., 2022). The opportunities are typically provided by local non-profit organizations that commit their mission toward the development of diversity and inclusion in sports (Karman et al., 2022).

On the contrary, the purpose of elite sports is the achievement of success, the attainment of physical skills through rigorous training, and building an athletic career (Zhang & Liu, 2008). Competitive sport is considered a more complex and competitive environment aimed at high performance and leads to a professional career, a way of living for elite athletes (Ericsson, 2013).

Professional para-athletes dedicate at minimum four years of training to perform at the major sporting event, the Paralympic Games (Fengyu et al., 2022). The preparation process involves high-intensity training, willpower, motivation, and consistency (Matveev, 1981). Professional, international, national, and regional championships are exclusively competitive activities (Belley-Ranger et al., 2016). The Paralympic Games involve not only competitions, but it also advances as a central principle of sport as the athlete or team continually seeks progress and advancement to a higher level to set a new record (Febgyu et al., 2022). Also, professional athletes usually have endorsement deals to promote different products (Hyman, 2008). The products may include apparel, food,

drinks, or participation in commercials (Hyman, 2008). Research shows that endorsement deals form a major part of an athlete's revenue, as well as a higher recall for exposure and awareness of the organization (Feitelberg, 2022).

An example of endorsement deals for para-athletes is Toyota Motor Corporation (Toyota) that signed a contract as a Worldwide Paralympic Partner that provides the company with global rights from the 2017 to 2024 Paralympic Games. It was the first partnership in the history of the Paralympic Movement to combine the IPC, all National Paralympic Committees, and future Paralympics Games under one agreement in the mobility category. Toyota has shown widespread support of the Paralympic Movement through sponsorship and global promotional connections (International Paralympic Committee, n.d.).

However, despite Toyota's sponsorship contract with the IPC, including Paralympic athletes, global corporations keep investing in pre-elite athletes rather than elite athletes because of their marketing strategies (Lohneiss & Hill, 2014). Furthermore, the amount invested in Olympic athletes is significantly bigger than the amount invested in Paralympic athletes (Carlin, 2021). For example, Russian American wheelchair racer Tatyana McFadden, a 17-time Paralympic medalist, mentioned during her interview to the Washington Post (2021) that, despite her tremendous athletic achievements, she has never been financially compensated the amounts that Olympic athletes have. She elaborated that her only way to gain financial stability is through corporate sponsorships which are also not equal in comparison to the Olympians.

Another American Paralympian, Allysa Seely, who competes in para-triathlon in PTS2 category (for amputee triathletes), stated that a prosthetic leg used for the

competitions in triathlon can cost up to \$20,000 which is "a big financial barrier to entry into the sport...". Typically, sport prosthetics are not covered by the insurance companies and need to be updated and replaced as often as every other year because of weight gain or loss, or just general wear (Sepp, 2019).

Overcoming Psychological Barriers through Sports

To date, there are few studies that explore psychological barriers associated with participation in sports and recreation activities among people with disabilities. Those studies that do address these barriers have focused primarily on the impact of sports on quality of life (Diaz et al., 2019), social awareness of minor society groups (Stevens et al., 2020), and low esteem of people with disabilities (Kim & Yi, 2017).

Hungarian researchers made an attempt to evaluate psychological profiles of elite athletes from the Olympic team (swimming) and compare the results with the Paralympic team (swimming). The athletes' profiles included 10 sports-related psychological constructs: cognitive anxiety, self-confidence, somatic anxiety, coping with adversity, behavior under pressure, mental preparation, concentration, freedom from worry, self-confidence, and motivation. The findings indicated that Olympic athletes scored lower at the level of anxiety and higher at the level of self-confidence in comparison to Paralympic athletes (Szajer et al., 2019). The authors concluded that athletes with disabilities experienced significant psychological challenges that further impacted their motivation and eventually athletic performance (Szajer et al., 2019).

Most recent studies on motivation of elite para-athletes emphasized motivation as one of the psychological barriers as well (Rodriguez Macias et al., 2022). The study was focused on the preparation process. The findings indicate that para-athletes lack financial

support, lack media coverage as well as visibility on social online platforms, and experience dependence on other people. The above-mentioned factors had a negative impact on athletes' mental readiness for the competitions (Rodriguez Macias et al., 2022). Therefore, better understanding of psychological challenges and motivation of elite athletes can increase athletic performance.

Motivation

Motivation is one of the driving forces behind the cost of an athlete's effort and their dedication to their sport (Clancy et al., 2016). It has been a subject of research for many decades and considered to be the most crucial factor that influences athletic success (Vallerand, 2007). According to Hagger (2007), motivated athletes tend to apply themselves and persist at tasks that further their performance, whereas unmotivated athletes might make poor choices and often fail to persist in competition. Bill Beswick, the most recognized sports psychologist in the UK who works with elite athletes, stated in his interview to World Football Index that mental preparation takes up to 80% and the rest is split between physical, tactical, and technical training. Motivation is one of crucial components of mental preparation (Sheehan et al., 2018).

Motivation has been the subject of research studies and book chapters in sport psychology literature, whereas motivation of elite para-athletes has received limited attention (Deci, 1985; Hagger & Chatzisarans, 2007; Roberts & Treasures, 2012). However, taking into consideration the recent changes in the sports industry due to COVID-19, only a few studies have examined the topic from an athlete's perspective (Da Silva et al., 2020; Urbanski et al., 2021).

In order to understand motivation as a mental preparation component, it is critically important to differentiate the type of motivation. There are two main types of motivation: extrinsic and intrinsic motivation (Sansone, 2000). People are motivated to participate in sport and recreation activities because of internal factors such as enjoyment, skill development, and mastery and external factors such as rewards, improved health conditions, and athletic appearance (Barkoukis et al., 2013).

A number of studies have shown that the most important reasons for sports participation motivation are developing skills, recreation, learning new skills, competitions, and physical fitness (Filo et al., 2011; Urbanski et al., 2021; Snelgrove et al., 2022). Sport psychologists mainly focused on understanding the initial reasons and motives that drive people to get involved in physical activities and their commitment to participation (Deci & Ryan, 1985). Frederick and Ryan (1993) found significant differences in the motivation levels between participants that are involved in recreational activities and competitive sports. In the study, the authors examined the relations between motivation for physical activity, level of participation, and psychological outcomes for 376 adults. According to the results, the subjects that were involved in individual sport and were doing it competitively had higher interest and motivation than subjects that were a part of a fitness group, while the fitness group scored higher on body-related motivation. It was also found that the motivation for competitive sports was correlated with self-esteem whereas, the fitness group motivation was corrected with depression and anxiety (Frederick and Ryan, 1993).

This study is focused on the changes in motivation that elite para-athletes were experiencing during the time period from January 2020 until September 2021.

One of the most impactful frustrating outcomes came in March 2020, when the World Health Organization declared the COVID-19 outbreak a pandemic. Not long before, total reported cases had passed over 100,000; by 2022, reported cases passed 100 million people worldwide (WHO, n.d.). The rapid spread of coronavirus forced the International Olympic Committee (IOC) and the IPC to postpone the mega-events of the 2020 Summer Olympic and Paralympic Games in Tokyo, Japan (International Olympic Committee, n.d.).

The pandemic and its subsequent impacts triggered a wave of mental health issues (Hood et al., 2021). Moreover, the news regarding postponing and possible cancellation of global competitions risked impacting the motivation of elite athletes that were going to participate in the Paralympic Games. Therefore, it is important to investigate the motivational aspect of these athletes.

Determinants of Motivation

Social-environmental factors are collectively called the motivational climate (Ames, 1992), and there are numerous factors in the sport context including but not limited to teammates, sports structures, and the relationship between the team and a coach. The coach is considered to be one of the most influential "figures" of the motivational climate in sports because his or her emphasis on training, performance, and self-comparison fosters a task-motivational climate, whereas the emphasis on results and normative comparison after the competitions foster an ego-motivational climate (Keegan et al., 2014).

The motivational climate influences motivation through its impact on the basic psychological needs of competence and autonomy (Vallerand, 2007). These needs are

"innate psychological nutrients essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229). Competence determines whether an individual can successfully accomplish a task, and autonomy involves freely choosing an action that aligns with an individual's values. In a task-motivational climate, the coach tends to convey trust in athletes' abilities (competence support), offer choices (autonomy support), and consider the athletes' opinions (relatedness support), which facilitates need satisfaction and leads to self-determined motivation and other adaptive experiences. In contrast, in an ego-motivational climate, a coach mainly uses control and pressure to influence athletes' behavior, which does not support basic psychological needs or self-determined motivation (Keegan et al., 2014).

Creating and maintaining a positive motivational climate in the team requires physical presence of the team members and their coach at minimum (Sarto et al., 2020). However, during the widespread of COVID-19, the federal and international governments declared a state of emergency in different countries affecting one of the basic values of humans - safety.

Motivational Theory

According to Maslow's motivational theory, safety (security) is considered as one of five human needs including physiological, belonging, esteem, and self-actualization needs (Taormina & Gao, 2013). In the original theory, Maslow (1943) stated that individuals must satisfy the lower-level needs before starting to progress higher level growth needs. The five-level model (see Figure 1) presents the following order of the needs: 1) physiological needs; 2) safety needs; 3) love and belonging; 4) esteem; and 5) self-actualization (Maslow, 1954). The theory has received empirical support in a large

number of countries and cultures including Russian, American, Armenian, British, Italian, Indian, Australian, Polish, Indian, Mexican, and Portuguese and still valued by modern researchers (Taormina & Gao, 2013; Stoyanov, 2017; Pereira et al., 2012; Acevedo, 2018).

The first four levels of Maslow's model are often classified as deficiency needs and the top level is known as growth needs (McLeod, 2007). Deficiency needs develop as a result of deprivation and are said to motivate individuals when unmet. Additionally, the longer these needs remain unsatisfied, the greater the motivation to satisfy them will be. For instance, a person will become hungrier the longer they go without food (McLeod, 2007). Growth needs do not stem from a lack of something, but rather from a desire to grow as a person. Once these growth needs have been reasonably satisfied, one may be able to reach the highest level of the hierarchy: self-actualization. Every individual is capable and has the desire to move up the hierarchy toward the highest level. However, most of the time, the progress is disrupted by a failure to meet lower-level needs (Stoyanov, 2017).

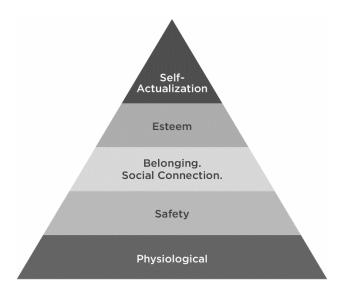


Figure 1. The 5-level model of Maslow's motivational theory

Maslow continued to refine his theory based on the concept of a hierarchy of needs over several decades (Maslow, 1943, 1954, 1987). As mentioned earlier, the author claims that people are motivated to achieve certain needs and that some needs take precedence over the others (Maslow, 1954). Below is the description of each need (Pereira et al., 2017):

- 1. Physiological needs biological requirements for human survival. Maslow (1954) considered physiological needs the most important as all the other needs become secondary until these needs are satisfied. *Examples*: air, food, drink, shelter, clothing, warmth, sex, sleep.
- 2. Safety (security) needs once an individual's physiological needs are satisfied, the needs for security and safety become primary. People tend to desire order, predictability and control in their lives. *Examples:* emotional security, social stability, health and well-being, financial security (e.g. employment, social welfare).
- 3. Love and belonging needs after physiological and safety needs have been fulfilled, the third level of human needs is social and involves feelings of belongingness. Belongingness refers to a human emotional need for interpersonal relationships, affiliating, finding connections with other people, and being part of a social group. *Examples:* friendship, intimacy, trust, acceptance, and love.
- 4. Esteem needs include self-worth, accomplishment and respect. Maslow classified esteem needs into two categories:
 - a. esteem for oneself. Examples: achievement, mastery, independence
 - b. the desire for reputation or respect from others. *Examples:* status, prestige.

5. Self-actualization needs represent realization of a person's potential, self-fulfillment, seeking personal growth and peak experiences. Maslow (1943) explains this level as the desire to accomplish everything that one can, to become the most that one can be.

Individuals may perceive or focus on self-actualization very differently. For example, one individual may have a strong desire to become an ideal parent. In another, the desire may be expressed academically or athletically. For others, it may be expressed creatively, in paintings or inventions. Competing at the high-level competition represents the fifth level of Maslow theory. As stated earlier, the need can be met after all the lower-level needs are satisfied (McLeod, 2007).

Halting Motivation: Before, During, After

The COVID-19 pandemic has had negative implications on professional athletes because of the following restrictions such as access to the training venues, cancellation of sporting events, loss of contracts and earnings, and limited information regarding future performance dates (Waddington, 2020). During the COVID-19 outbreak in 2020, governments, employers, workers, and their organizations (including sport organizations) faced enormous challenges as they tried to find a solution to protect society and ensure public safety and well-being (International Labor Organization, n.d.).

In the United States, elite athletes typically need to have other careers besides sports, to maintain their financial stability (Keegan et al., 2014). While in the Russian Federation, reaching an elite level of competitiveness allows athletes to focus on their athletic career (Stambulova et al., 2012).

Winning a medal at the Olympic and Paralympic Games is a long-awaited goal for many athletes; however, the most prestigious sporting award is not limited by a medal (Urbanski et al., 2021). The diligent efforts, including countless hours of training and preparing, that para-athletes put towards the dream cannot be measured. Competing at the Paralympics not only requires high amounts of energy, determination, and years of training but also keeping a competitive mindset and staying motivated while the whole world is impacted by the COVID-19 pandemic (Urbanski et al., 2021).

The Japanese government announced on July 8, 2021, restrictions that did not allow spectators to attend competitions at the Paralympic Games, and the IPC restricted travel parties to accompany athletes at the Paralympics. Those para-athletes who mentally and physically managed to compete at the Paralympics in Tokyo had to travel and perform without any support which often includes the presence of friends, family members, cheering fans, and a lively atmosphere at the stadiums with spectators (Waddington, 2020). After the competition was over, they spent their time largely confined to their rooms, transporting in specially arranged buses, and restricted which sports venues they could visit and particular times and days.

Due to the lockdown, Urbanski et al. (2021) found that the COVID-19 had an extremely negative impact on elite athletes with disabilities. Most participants of the study reported that they had to practice at home (88.6%), whereas 60.2% of para-athletes trained outdoors, and 12% suspended their training sessions altogether. Only 5.4% of athletes had some access to sports venues. The athletes reduced their weekly training time by almost half (9.4 hours per week before compared to 5.3 hours per week during COVID-19), a statistically significant difference (t = 16.261, p < 0.001). These findings

demonstrate significant changes that professional para-athletes had to implement in their preparation process. Yet, the research mainly focused on physical aspects of the preparation process rather than psychological aspects. The scheduled preparation process of elite athletes was interrupted due to the coronavirus pandemic.

III. Methods

Research Design

This study employed a qualitative research design. The primary reason for conducting a qualitative study was to empower people to share their stories which will further help the researchers to understand the specifics of contexts or settings in which the participants were placed, as well as the experiences they faced. Those will further lead to a call for action for similar issues in the future (Creswell, 2007).

According to Creswell (2007), the qualitative research method is used to inquire non-numerical data of groups or individuals to address the social or human problem. First, this design was chosen because the purpose of the research was to investigate opinions, views, and psychological changes in the motivation of professional athletes. The motivation of elite athletes is a sensitive topic and conducting a qualitative study provides a detailed understanding of the issue, specifically the impact of motivation due to the COVID-19 pandemic. The detailed responses can only be established by talking directly to the participants and allowing them to tell their stories (Creswell, 2007).

A Case Study Approach

The current study employs a case study approach. Creswell (2007) defines a case study as a qualitative approach where a researcher explores a bounded system (a case) or multiple bounded systems over time, gathering detailed, in-depth data that involves multiple sources of information such as observations, interviews, audiovisual materials, and documents to report a case description and case-based themes. Merriam (2009) states that "the case study is an in-depth description and analysis of a bounded system" (p. 40). Moreover, Merriam (2009) provides examples that can be used in a case study such as a

single person who is a case example of a phenomenon, a program, a group, a school, an event, a community, or even a specific policy. In turn, the case study approach to research consists of explanatory, exploratory, and descriptive types of case studies. The list can also include intrinsic, instrumental, and collective types of a case study (Yin, 2003). The current study is classified as an exploratory case study.

In order to perform at the Olympic and Paralympic levels, athletes must have an international ranking score to pass the official qualification of the Games (International Olympic Committee, n.d.). The potential number of participants in the study is limited due to the high rank of the competitions and elite-level of para-athletes., investigating motivation and psychological aspects of elite athletes with physical disabilities is a unique and understudied population of elite athletes. Thus, taking into consideration the small population and specifics of the research topic, a case study approach was selected.

Participation Qualifications

Several criteria were identified to recruit the participants. To be eligible to take part in the study, an athlete should be a member of the National Team; be older than 18 years old; have a physical disability; have an international ranking score in para-sporting events; and their physical disability should fall into one of the standards of Paralympics categories of impairment for qualification. The standards of Paralympics categories of impairment include the following - impaired muscle power; impaired range of movement; limb deficiency; leg length difference; short stature; hypertonia; ataxia (affecting muscle coordination); athetosis (such as cerebral palsy); or vision impairment (International Paralympic Committee, n.d.).

Sample

Participants of the study were 13 professional athletes (8 females and 5 males) with physical disabilities who prepared to compete in the Paralympic Games in Tokyo 2020. Some participants competed for Team USA (6) in track and field, wheelchair basketball, paratriathlon, and shooting para-sport while the others (7) competed for the Russian Paralympic Committee (RPC) in track and field, para-triathlon, and para-cycling. The average age of the participants was 34.3 years old. See Table 1 for full demographic information of participants.

Table 1. Participant Demographics

№ Participant	Age	Country	Sport	Years in Sport
1	30	Russia	Russia Paratriathlon	
2	25	Russia	ssia Paratriathlon	
3	36	USA	Track	28
4	30	Russia	Track	16
5	42	USA	Paratriathlon	15
6	24	USA	Track	20
7	28	Russia	Paratriathlon	8
8	40	USA	Wheelchair-Basketball	32
9	34	Russia	Para-cycling	10
10	36	USA	Track	26
11	33	USA	Track	9
12	55	USA	Para-shooting	10
13	33	Russia	Track	23

Convenience Sampling

Since the chosen population was limited due to the high level of competition and elite-level of para-athletes, convenience sampling was used first. Convenience sampling (also known as availability sampling) is a particular type of non-probability sampling method that anticipates data collection from population members who are conveniently available to participate in a study (Creswell, 2007).

Participants were recruited using convenience sampling from National Governing Bodies (NGBs) and Olympic and Paralympic Committees affiliates. Move United in the United States and Moscow Department of Sports in Russia were contacted in order to request a list of elite para-athletes that participated in the Summer Paralympic Games in Tokyo 2020. The gatekeeper of the teams was contacted and asked to assist in identifying valid contact methods of the potential participants. Each eligible athlete received an email introducing the study and an invitation for them to participate, directly from the researcher.

Snowball Sampling

The participants were selected also by using snowball sampling. This type of sampling implies that several initial participants were located first, and then these initial participants identified further potential participants (Creswell, 2007). Once access was granted to a potential participant, the researcher invited the participant to share other names of potential participants.

After the official approval of the study was received from James Madison

University Internal Review Board (IRB), the informed consent was obtained from those who decided to participate.

Data Collection

Participants were invited to take part in semi-structured interviews via Zoom to discuss their experiences about the preparation process for the Summer Paralympic Games in 2020 during the global pandemic. The interviews lasted from 22-73 minutes, with the average length of 39.3 minutes.

The interviews followed a guided in-depth, semi-structured interview schedule that included questions such as the following: How many years have you been doing sports? Were you qualified to participate in the Paralympic Games in Tokyo 2020? How did COVID-19 impact your training schedule for the Games? What support did you receive regarding your mental health? See Appendix F for the full interview protocol. The interview questions derived from previous studies on motivation (Huebner & Rieger, 2021; Jordalen et al., 2020).

The interviews were conducted in both languages (Russian and English) depending on the athlete's nationality. Further, the interviews were digitally recorded on a cellphone (LG A300) using the voice recorder application with the participant's permission as well as through the Zoom software recording technology for backup purposes. No incentive was given for interview participation. After that, the recorded interviews were transcribed in English (because the researcher is fluent and certified in both languages) to a Word Document and saved on a secured computer. Once transcribed and saved to a password-protected computer, the original audio recording was deleted.

Data Analysis

This study used the constant-comparative approach to data analysis. According to the American Psychological Association (2017), the constant-comparative approach is a

procedure that is used to evaluate qualitative data. The data included coded information and further compared across categories. As a result, patterns were identified and refined as new data were gathered.

The current study employed three stages of data analysis. Once the qualitative data were collected from interview transcriptions, the first stage of analysis followed an open-coding method to separate different responses and to create codes to mark common answers. However, open coding in qualitative research is rarely the only stage of coding and is followed by one or more coding methods, such as axial coding (Kendall, 1999). The second stage followed the axial coding analysis method. Axial coding is a qualitative research technique that involves relating data together in order to reveal codes, categories, and subcategories ground within participants' responses (Allen, 2017). After the codes were identified, the third stage was finding common themes. Thematic analysis in qualitative research is a powerful technique to distinguish trends and patterns of the data (Braun & Clarke, 2006). Conducting a three-stage data analysis process following open coding, axial coding, and themes helped to address the research question and further interpret the final results.

Trustworthiness

In qualitative studies, validity and reliability are constructed by "techniques such as prolonged engagement in the field and the triangulation of the sources, methods, and investigators to establish credibility" (Creswell, 2007, pp. 203-204). The researcher is responsible to conduct adequate procedures to ensure that the data is thorough and accurately represented and that there is a thorough description of what the participant is telling the researcher (Creswell, 2007).

Data were triangulated through a data triangulation method. Triangulation is the process of using several techniques or data sources in qualitative research to develop a thorough understanding of a phenomenon or a case (Patton, 1999). In this study, data were collected on motivation from various sources (elite para-athletes from Russia and the United States). Collecting data from multiple sources worked to ensure that various perspectives were shared from multiple lenses (e.g., athletes from two countries) while focusing on the same topic (e.g., motivation).

Additionally, to ensure high quality interviews, reliable applications were installed on the researcher's mobile device. A proper interview environment as well as a reliable and secured computer for further transcription of data were obtained to ensure the high quality of the interviews.

Researcher Positionality

The researcher's positionality statement is important in order to remain transparent and confirm that none of her personal points of view were reflected in the research other than those opinions recorded and analyzed after the interviews were conducted. The researcher attempted to establish trustworthiness through her work during Move United Junior Nationals. She was an intern with the organization, furthering her education while also embedding herself within the elite training environment for athletes with disabilities. Furthermore, she was formerly an undergraduate physical education student; therefore, she had credibility and understanding of the present-day physical training and competitions curriculum. Finally, she was a former para-cycling guide for blind athletes competing in para-cycling, adding to her familiarity, credibility, and understanding of the Paralympic level of competition.

Reporting Procedures

Upon completion, the study findings were shared with the thesis committee of the researcher. Additionally, this research was presented to the research thesis committee.

The goal was to share the findings of this research at an academic research conference as well as submit a manuscript for publication in a peer-reviewed journal within the sport management academic field.

Human Participant and Ethics Precautions

The James Madison University Institutional Review Board (IRB) approved the procedures for the study participant recruitment and research design. Upon IRB approval, participants were recruited through in-person invitations, email distribution to local chapters of the U.S. Olympic and Paralympic affiliate Move United (Appendix B) in the United States. Participants from Russia were recruited by e-mail distribution from head coaches of adaptive sports organizations (Appendix D). Athletes that were interested in participating in the study completed a consent form. Those athletes who completed the consent form were contacted by e-mail to meet with the researcher; participants were encouraged to ask any questions for clarification.

The participants were informed that they could withdraw from the study at any time. There were no direct benefits or risks for the participants. The research aimed to ensure participants' anonymity through the use of pseudonyms. Pseudonyms were assigned using a random number. Each person received an assigned number based on their interview order.

IV. Findings

The one-year postponement of the Paralympic Games had a mixed impact on elite athletes. Participant 1 stated that lockdown along with isolation were beneficial because it provided extra time to prepare for the Games: "I had more recovery days. During my regular training schedule, practices were very intense. I felt like I was not resting enough. Isolation gave me that missing rest." On the other hand, Participant 2 did not consider the one-year postponement factor as an opportunity to be in a better shape. Furthermore, Participant 2 mentioned that their motivation was higher during 2019 rather than in 2020: "If the Paralympics were in 2020, I would compete better because I was mentally ready."

Participants 3, 4, 5, 8, 10, and 11 mentioned that their performance would have been better if the Paralympic Games were held in 2020 as they were originally scheduled. However, Participants 1 and 6 acknowledged that having extra time in the preparation process was valuable. Participant 1 said, "One more year gave me one huge training block that improved my performance," while Participant 3 explained, "I was just following my new routine. Training comes first. If you want to be the best athlete you have got to show up and practice." Two others, Participants 6 and 7, offered more specific detail on their routine:

I built a routine; I think it's very important having that routine and sticking to it. It certainly helped me. I woke up at 6 am, then two sessions a day, a road workout and a lifting session. There were a lot of adaptations for the lifting session. I did not have access to a full gym. We usually do a lot of body weight instead of free weights. - Participant 6

Due to the pandemic restrictions, Participant 7 significantly reduced the time of getting to the athletic facility which had a positive impact on her time management.

Further, she elaborated that her coach was able to attend training using online platform 'Zoom' which she considered as a benefit.

It looked like we were on an endless (three months) training camp. I could wake up, go to another room, and hop on a bike roller. Usually, I would spend three hours each way to get to the velodrome since I live outside of Moscow. We had some dry swimming to replace swimming practice. For bike practice, we would have a Zoom call with a coach so he could point out some mistakes and pedaling techniques. - Participant 7

Themes

Four themes were constructed that impacted motivation of elite para-athletes that were preparing for the Paralympic Games in Tokyo: number of Paralympic competitions, establishing new routines, mentor support (included three mentor roles: a coach, a family member, a teammate/friend), and motivation sources (internal and external).

The majority of the elite para-athletes (10) indicated that preparing for the Paralympic Games in Tokyo was their top priority during the pandemic year. The pandemic year 2020 was described as the most challenging year that involved creativity to find new ways of training at home. Seven participants of the thirteen [1, 4, 5, 6, 7, 11, 12] mentioned that it was the toughest time in their athletic career both physically and mentally. The training schedule for each participant was flexible; all athletes stated that it was their responsibility to find time and motivation to maintain their physical fitness level.

In addition, age was claimed as one of the biggest concerns by almost every athlete regarding the postponement of the Paralympic Games in Tokyo 2020, with the average age of the participants 34.3 years old. Nine athletes indicated that maintaining a high athletic performance level for one more year (due to the postponement) would be extremely hard. For example, Participant 5 stated: "I am 42, my life is very different from my teammates. I was not sure if my body would allow me to do that".

Moreover, a few athletes mentioned that they planned to retire from professional sports and prioritize family over competing in 2020. Participant 8 mentioned:

I had thoughts about retirement. I still go back and forth. Because, you know, my age. I am 40. It is hard. I am in a different place in my life. I am not sure if I want to do that much training and I want to travel but travel to actually see things not just dorm to dorm and the gym. However, when the International Paralympic Committee (IPC) announced the one-year postponement, those athletes had a psychological dilemma regarding their future.

Number of Paralympic Competitions

The number of Paralympic Games in which participants had competed had a direct impact on their motivation to compete in the 2020 Tokyo Games. Participant 10 was preparing to compete in their fourth Games and struggled to find motivation due to planning to retire and start a family.

I was thinking about retiring a lot. I had a lot of long conversations with friends of mine. I knew that regardless of when Tokyo is going to happen, if I accept that position I was not going to be at my best in Tokyo, Adam – the coach – told me the Paralympics is not the end goal. The end goal is to

be a successful contributing individual. The Paralympic sounds great but you are not going to retire and be a millionaire as a Paralympic athlete. It is just a step on a journey. - Participant 10

Since Participant 10 was competing in professional sports for 26 years, she had clear expectations of preparation for the highest levels of the competitions, including psychological training before and during the races. She elaborated that even though it was less stressful to overcome psychological challenges to prepare for the Games, she did not feel the motivation to do that during the preparation process because she has already done it many times before. The excitement level was significantly less compared to less-experienced athletes.

Participants 5, 6, 8, and 13 were preparing to compete at their second and third Games and felt more psychologically prepared, but also were hesitant about their physical abilities due to their age. After the announcement of postponement, those participants mentioned psychological difficulties when it came to regular practices. Therefore, their training schedules were less consistent due to lower motivation.

My life is very different from my teammates. I am 42. I was not sure if my body would allow me to compete at another Paralympics. - Participant 5

I have thoughts about retirement. I still go back and forth. Because you know my age. It is hard. I am in a different place in my life. I am not sure if I want to do that much training and I want to travel but travel to actually see things not just dorm to dorm and the gym. - Participant 8

In contrast, Participants 1, 2, 4, 7, and 9 were preparing to compete in their first Paralympic Games and had less difficulty finding motivation because competing in Tokyo was their long-awaited dream for the past 6-13 years (average 10.8). However, since it was their first experience at the top-level competitions, they felt more nervous and did not know what to expect. Those athletes described their feelings as "I have to compete in Tokyo. I will do whatever it takes".

Despite external factors [COVID-19], nothing can stop me if I really want something. I did not lose my faith for a second. I wanted to work on my weakness and I felt like I was given extra time to do so. Staying positive was a key component of the year of 2020. - Participant 1

Participant 7 described her feelings as a mix of anxiety and excitement. She further elaborated that competing at the Paralympic level is much more significant and more stressful than competing at other international competitions such as World Cups and World Championships. Participant 2 mentioned that there was a lot of uncertainty from the management team which also impacted motivation; the athlete stated:

It has been my dream since I was 9 years old. I had to do my best. But there was a lack of information on what to expect at the Games. They [the management team] did not tell us anything about the training camps before the Games ... It was hard to motivate myself when you do not know what is expected from you. - Participant 2

In summary, the first theme, the number of Paralympic competitions, demonstrated that elite para-athletes that were more experienced in competing at the Paralympic Games had less motivation to maintain their training during the COVID-19 pandemic as they prioritized personal life over the 'one more competition'. While

athletes that had the 2020 Tokyo Games as their first Paralympic debut showed higher levels of motivation and excitement because they were waiting for that specific event since the beginning of their athletic career (up to 16 years) and performing at the Games was their top priority even after the postponement announcement was made.

Establishing New Routines

Limited access to athletic venues resulted in developing new routines for athletes in order to stay disciplined and keep their training for the Games. It is critically important to notice that all participants from both Russia and the United States did not have access to athletic facilities for the average period of three months. However, Paralympians competing for the Russian Paralympic Committee (RPC) had more government restrictions compared to American athletes. Participant 1 (Russia) stated, "I live outside of the city so I had to practice at 4 am for a run so the police did not catch me. The COVID-19 restrictions were very strict." Another athlete from Russia (Participant 4) emphasized the government regulations regarding COVID-19 as well: "We were not allowed to go outside. I felt scared. I was doing some home workouts; I lived in a 24-floor apartment building so I was running up and down."

In contrast, participants from the United States mentioned that the U.S. government did not prohibit them from going outside. Participant 6 (USA) said, "I had to adapt to road racing instead of track racing. My dad helped me to feel comfortable in my racing chair while racing around the neighborhood." Participant 10 (USA) also stated that starting April 2022, she was pushing the racing chair around the neighborhood to adapt her training to the new circumstances.

It is important to mention that athletes' location had a direct impact on local regulations regarding COVID-19. Athletes from the Russian Federation shared that COVID-19 restrictions applied to all districts and republics across Russia regardless of the size of the city. In America, larger cities had more restrictions in comparison to small towns and country areas. Four out of five athletes from Russia lived in big cities during the pandemic. The Russian government not only limited access to the athletic venues but also prohibited people from leaving their private properties in suburban areas. Therefore, outside training was illegal for Russian athletes. Participants 1, 4, and 7 elaborated that in order to leave their apartment, they had to obtain a special card from the government official website. The card would state the purpose of going outside, whether it is a medical emergency, grocery, or work-related trips. Participant 2 lived in a small town in Russia and supported the statement that if a person went outside without obtaining the card, the police had the right to arrest that individual. Participant 12 stated, "I had to hide from the government because I did not want to pay the fine." The athlete further elaborated that obtaining "the access card" was somewhat difficult. The Russian government put a limit on providing the cards.

On the contrary, para-athletes from Team USA lived in suburban areas and the American government did not place restrictions that would prohibit access to the outside areas. The only restrictions athletes faced were related to access to public and athletic venues such as local parks, restaurants, concert halls, gyms, swimming pools, and tracks. However, a few athletes mentioned a supply shortage of personal gym equipment across the States. Participant 3 stated that he had to redesign his parents' garage into a gym to maintain the training, "... after I developed a gym at the garage, there was another

challenge of finding free weights and equipment. Everybody was purchasing it at that time."

In summary, the second theme, establishing new routines, showed that all paraathletes regardless of their nationality were forced to follow government restrictions to
prevent the spread of COVID-19. However, it is important to mention that Russian
athletes interviewed in this study resided in big cities while American athletes stayed in
suburban areas which had an impact on the severity of the pandemic restrictions.

Moreover, all athletes mentioned that developing new routines and adopting them into
pandemic reality was extremely challenging mostly due to the lack of sports equipment
and necessary training at the facilities (ex. track, swimming pool, velodrome, long jump
pits).

Mentor Support

Several athletes [3, 5, 6, 7, 9, 10, 12, 13] indicated mentorship as the key component to stay motivated while they were isolated at home. Eight participants mentioned that they had one or multiple mentors that helped them to stay motivated during the preparation process. However, the mentor roles were divided between a coach, a family member, a teammate, and/or a friend. While some athletes emphasized that having a mentor of any kind was beneficial to them, others stated that they did not feel the need of having a mentor. Participant 9 considered his coach as a primary source of mental support.

When they announced the Games postponement on TV, my first thoughts were like - well, I guess it is not going to happen but my coach immediately changed my mindset; he was like: "What are you talking about? They never canceled the Games

during the World Wars in the past. The Games will happen and we need to keep training for them." He motivated me so much that I did not even question what he said. I responded alright; we keep training. And eventually, he was right. I trust him 100%.

Participant 12 did not compete at the Paralympics; however, he was actively preparing during 2020 and relied mostly on his friend as a mentor. "... I called him one or two times a month. When I lost my national team status and mental health service benefits were taken away, my friend was there for me."

Participant 2 emphasized the importance of having their family member's encouragement in order to continue training at home. "My mentor is my mom. I wanted to give up so many times but she encouraged me and I kept fighting. Personally, I need a person that would tell me - you can still do it."

However, the other participants did not feel the need in mentors and found coping mechanisms internally. For instance, Participant 4 did not have neither mentors nor family support but still competed at the Paralympics. "I have a difficult character and it's hard to find people that will tell you the right words. Like my family, my mom would compare pro sports with cashiers and she would say well you gotta deal with what you chose. And it was not what I wanted to hear."

Participant 1 stated that having a mentor is not beneficial for her because, in her opinion, a mentor can only provide one opinion of the issue: "I did not have a mentor but I like getting advice from many people because I believe by gathering many sources it is easier to make a choice. I like to make decisions by myself".

Participant 11 also experienced lack of mentorship but unlike Participant 1, she was willing to receive the support, however, there were several challenges of finding affordable resources.

I spent two years training by myself in Texas. I was not doing well. I knew my dad is going to be my coach, so during covid isolation was not a surprise to me because of Texas. I knew I had gone through it before...I started working with a sports psychologist, but it was not through USOPC [United States Olympic & Paralympic Committee]. They provided me with some links [with counseling contact information] but like I am getting a master's degree in sports psychology and I looked at what they were offering. It was non-clinical, and the USA did not pay for them. We talk about mental health a lot but that's about it, talking does not solve the problem.

In summary, eight athletes mentioned that having a mentor helped them to stay motivated during the preparation process for the Games. Mentorship roles were split between a coach, a teammate/friend, and a family member. Para-athletes that had mentorship support demonstrated a stronger commitment to the training while athletes that faced a lack of mentorship were less consistent during the pandemic year.

Motivation Sources

Athletes were split on how COVID-19 impacted their motivation for the Paralympic Games in Tokyo. However, self-motivation was predominant in comparison to external motivational factors. Self-driven athletes showed strong determination to practice even when the date of the Paralympics was unknown. Participant 1 stated that: "Despite all of the challenges, we felt strongly motivated. I think what helped us to perform well is that we kept believing that we would go even when they put us on a

reserve team. And look at us – we were chosen to go! I would like to tell everybody – do not stop believing. Faith is halfway to success".

Participant 5 also mentioned that in order to perform successfully at the Paralympics, top priority in life should be preparation for the competitions: "It was tough but my life is divided into four-year-cycles like every four years to have the Games. And you know you plan your life around it. We tackled it and competed." Participant 6 consistently followed his new training routine and described that he felt "the inner power." He stated:

I did everything he said (coach). I established that routine, it was never a question if I go to practice or not, I always go. I am the type of person that did not feel any reason for not following the routine.

Participant 9 supported the importance of consistency and also relied on internal motivation sources: "Some people need support or a kick in the butt. I am the type of person that does not need that kick. My coach gives me a plan and I go to the basement and practice."

While some participants demonstrated strong reliance on self-motivation, other athletes struggled to motivate themselves to keep daily training which resulted in skipping approximately 20 training sessions over the course of six months. Those athletes that were not consistent with the training process eventually did not go to the Paralympic Games (Participants 11 and 12). Despite the fact that they were qualified, the final decision was made in favor of other athletes. Participant 3 stated: "I went home because all my teammates went home and I was the last one there so I decided to leave as well. It was hard for me to train when there was nobody else around".

Participant 11 elaborated that the very first months of COVID-19 pandemic impacted her motivation the most. She also mentioned that she had weekly Zoom meetings with other teammates and other elite para-athletes. During those Zoom meetings, athletes shared their adapted training routines which were seen as something not normal.

March and April were the worst months. It was hard to motivate myself to practice. There was a swimming athlete, he was like. "Well I can't swim in the pool right now so I am swimming in the ocean and the lake." I was like, "That is so crazy."

Participant 12 shared that during the stage of uncertainty, he struggled being alone and even questioned the importance of sports ([in comparison to public health) "I was not sure what my end goal was. There were a few weeks when I woke up and did not want to do anything. So, I stayed in bed those days."

In summary, the COVID-19 pandemic impacted the motivation of each paraathlete differently because of personal and professional challenges they faced during the
preparation process for the 2020 Tokyo Paralympics, however, two patterns were found.

Self-motivation was predominant in comparison to external motivational factors. All
athletes stated that parasport is self-driven in both countries (Russia and the United
States). Athletes that had stronger internal motivational sources showed determination
and resilience to the training even when the date of the Paralympics was unknown.

Elite para-athlete profile was discovered by analyzing the official results (placement of each athlete) of the Paralympic Games in Tokyo 2020 and further

comparison with four common themes such as the number of Paralympic competitions, establishing new routines, mentor support and motivation sources (See Table 2).

Table 2. Model of Success. Profile of two Paralympic Champions

P №	Place at the Games	Country	Number of Paralympi c competiti ons	New Routines (Established) Yes + No -	New Routines (Followed) Yes + No -	Mentor Support	Motivation Sources
6	1st place	United States	3rd time	+ Established new routines 'I woke up at 6 am, then 2 sessions a day, a road workout and a lifting session. I was sticking to it [the routine] during the entire preparation process'.	+	Had mental support systems from a coach and a family member	Internal sources. Strong self- motivation
9	1st place	Russia	1st time	+ Established new routines 'I woke at 6 am, 7 days a week. I had 2 training sessions a day. I did not miss a session'.	+	Had mental support from a coach and a family member	Internal sources. Strong self- motivation

Participants 6 (from the United States) and 9 (from Russia) took first place at the Paralympics in Tokyo. Both athletes mentioned the importance of having a mentor. Mentorship roles were identical for both athletes - a coach and a family member. They also stated that waking up early (6 am) was one of the habits they adapted to their new schedules, and mainly relied on internal motivation sources. Based on the interview responses, the athletes did not have access to the athletic facilities; however, they were able to find alternative ways to keep training for the Paralympic Games. The alternative ways included change of a location and adaptation of the sports equipment. After establishing those routines, athletes consistently followed them until the facilities were re-opened.

In contrast, the other athletes [1, 2, 3, 4, 5, 7, 10, 12, 13] performed between 5th and 14th places at the Paralympic Games. All athletes were forced to change their daily routines and establish new routines; however, it was not enough to successfully perform at the Games. Those athletes mentioned that even though they established new routines, they were not consistently following them due to lack of motivation.

Table 3. Profiles of elite para-athletes from 5th to 14th places at the Paralympic Games

P №	Place at the Games	Country	Number of Paralympic Competitio ns	New Routines (Establish ed) yes + no -	New Routines (Followed) yes + no -	Mentor support	Motivatio n Sources
1	9th	Russia (RPC)	1	+	+	-	Internal
2	7th	Russia (RPC)	1	+	-	a family member	External
3	14th	USA	3	+	+	a coach	Internal
4	6th	Russia (RPC)	1	+	-	-	External
5	5th	USA	3	+	+	a family member and a teamma te	External
7	9th	Russia (RPC)	1	+	+	a family member and a teamma te	External
10	6th	USA	4	+	+	a coach and a friend	Internal
11	N/A	USA	N/A	+	-	-	External
12	N/A	USA	N/A	+	-	a friend	External
13	5th	Russia (RPC)	2	+	+	a coach	Internal

V. Discussion

As previously stated, competing at the Paralympic Games represents the top-level need of Maslow's motivational theory - self-actualization (McLeod, 2022). The current study suggests that the lower-level needs were also met; however, only two participants were able to meet all four levels of the hierarchy [participants 6 and 9]. Other participants were unable to meet lower-level needs due to a variety of reasons (see Table 3). However, those participants were able to achieve different levels of the hierarchy.

This study was focused on the four levels of the hierarchy of human needs starting with second-level needs which are safety needs and moving to the top - self-actualization needs. Therefore, the current study suggests that physiological needs of the participants were met. It may seem that COVID-19 created a risk for safety; however, governments ensured safety needs were met by developing regulations through public restrictions and postponing the Paralympic Games for one year. Limiting fans at the athletic venues was a means to prevent the spread of the virus during the Paralympic events (Dergraa et al., 2022). The current study indicated that participants' safety needs were met.

The third level of human needs is love and belonging. Some athletes [1, 4, 11] broke down at this stage of motivational theory because of a lack of mentor support. Those participants indicated that they did not have a mentor (as mentioned before, mentor's roles can be split between a coach, a teammate, a family member, or a friend) and felt isolated from everybody which negatively affected their motivation. However, some athletes [1, 3, 5, 6, 7, 9, 10, 13] met this need for safety because they had mentors or family/friend support.

The fourth level of the human hierarchy is self-esteem. The athletes who stopped progressing here did so because of poor external motivational sources. The participants that were relying mostly on external motivational sources [2, 4, 5, 7, 11, and 12] were lacking motivation and stopped training. A few athletes surpassed this stage because (a) mentorship was present and (b) status and recognition was met due to success. However, those athletes may not have advanced to self-actualization because relying on external motivational sources was not a strategy for success (Carpentier & Mageau, 2016). Self-actualization is the highest level of human needs and was reached only by gold medal winners who had mentorship and were supported with internal motivational sources [participants 6 and 9]. These participants separated themselves from the others because of their internal motivation, consistent support through mentorship, consistent routine during COVID-19, and subsequent success. While all athletes were forced to establish new routines, these self-actualization athletes maintained their new routine amid the chaos of a changing world due to COVID-19.

In this study, it was found that elite para-athletes from Russia and the United States that were preparing to participate in the Paralympic Games in Tokyo in 2020 reported experiencing different levels of motivation during the pandemic year. Some athletes stated that the pandemic year had a positive impact on the preparation process due to the postponement, athletes had extra time to prepare for the Games. However, others indicated having age concern, and inability to perform at their best training shape because of unexpected time. Those athletes elaborated that instilling one more training block in a training schedule would not be beneficial for their performance since the Paralympic cycle was planned for four years (starting in 2016), not five. Canceling major

tournaments and larger athletic events caused uncertainty for the future of competitive sports (Mehrsafar et al., 2021).

Research Question 1

The findings from Research Question 1 (How did COVID-19 impact the training schedule of Paralympic athletes?) indicate that elite para-athletes had to establish new routines and adapt their training sessions from the gym to home and outside areas.

However, the majority of the participants mentioned that discovering alternative ways of training equipment was relatively easy because gym equipment (e.g., dumbbells, barbells) was available on online sports market platforms while replacing athletic venues was nearly impossible. For example, track para-athletes had to adapt to the road surface (asphalt); paratriathlon athletes had to incorporate dry swimming training into their routines along with running on the treadmill and biking on a stationary bike; wheelchair basketball athletes focused on free weights and bodyweight training; para shooting athlete had to switch to para-cycling for some time to maintain necessary level of physical training. Mehrsafar et al. (2021) also stated that COVID-19 restrictions for home isolation resulted in psychological challenges and motivation of elite athletes in 2020.

The most recent studies found that athletes experienced extreme stress caused by the global pandemic, specifically sudden increase of anxiety was reported by 94 Paralympic athletes that participated in swimming, track and field, sitting volleyball and fencing (Urbanski et al., 2021). Athletes that took first place at the Games said that they started their days at 6 a.m. and followed their training routine during the entire lockdown.

Research Question 2

The findings from Research Question 2 (How did COVID-19 impact the motivation of Paralympic athletes) indicated that the athletes that demonstrated the highest performance at the Paralympic Games (won the gold medal) mostly relied on internal motivation sources (self-motivation), whereas athletes that did not place at the competition relied on external motivation sources. Self-determined athletes tend to adapt to external changes more easily than athletes who seek motivation from external sources (Carpentier et al., 2016).

Moreover, professional athletes who seek motivation based on extrinsic factors are more likely to experience psychological barriers during challenging times in their careers compared to athletes that have intrinsic-based motivation (Mallett & Hanrahan, 2004).

According to McLeod (2007), the top level of the human hierarchy of needs (Maslow, 1954) is defined as the need for personal and professional growth and includes the following levels of needs: self-esteem and self-actualization. Competing at the Paralympic Games can fall into both categories of growth needs. However, it is important to note that those level needs can only be achieved when the lower levels are satisfied (Stoyanov, 2017). Therefore, it can be concluded that athletes that demonstrated psychological readiness to participate in the Games were sufficiently satisfied with their belongingness, safety, and basic physiological needs. According to the Centers for Disease Control and Prevention (n.d.), during the pandemic year, people were forced to follow legal regulations that vary by state and country (including vaccination procedures, face masks/gloves, and social distance in public spaces). Findings from the current study

showed that despite the fact the safety needs were compromised due to spread of the virus, along with the lack of opportunities for professional athletes (cancellation of tournaments and races), the athletes were still able to achieve self-actualization needs.

Moreover, most participants reported that having mentors helped them to maintain their motivation. The mentorship roles were divided into a family member, a friend/a teammate, and a coach. Several participants in the study stated that their mentors were primarily a coach and a family member. Coaches play a major role in athlete development and can be great mentors; however, there is a slight difference between these terms. Coaches usually work with athletes to achieve a specific goal, while mentors guide athletes through their life development (Grant et al., 2014). According to Chambers (2018), mentoring has been suggested as a development tool in different contexts of sports including recreational, collegiate, amateur, and elite levels. Some participants of the study [2, 7, 9, 11, and 12] indicated that if they did not have mentorship support, they might not have been able to even qualify to participate in the Paralympics.

Research Question 3

Research Question 3 focused on differences among countries (Is there a difference in psychological preparation between Paralympic athletes from different countries). No statistical measures were taken; however, findings indicated that there was anecdotal differences between athletes from Russia and the United States in psychological preparation and motivation, based upon their comments related to government restrictions (e.g., Maslow's safety needs) and training routines. The only differences that were found mainly derived from COVID-19 regulations and did not result in impacting motivation. These government restrictions served to satisfy athletes'

safety needs; therefore, it was not an issue that was consistently addressed by participants during the study. Athletes from Russia mentioned that the high level of security by the local government resulted in complete isolation, whereas American athletes did not have severe restrictions in the areas where they resided during the pandemic year.

Limitations

This study was limited due to the high level of the competition and small number of the population. Paralympic Games are considered to be the highest level of competitive sports for people with physical disabilities. Seventeen (17) elite athletes from two countries (Russia and the United States) were contacted and further received the invitation to participate in the research; however, only 13 agreed to participate in the study. Additionally, most of the participants were female athletes. In total, there were eight female participants (62%) and five male participants (38%). Having a smaller number of male athletes not only limits the findings but also contrasts with the nature of the elite athletic profile. According to the Paralympic Committee, male athletes outnumber female athletes. For example, the total number of male athletes at the Paralympic Games in Beijing in 2008 was 2,584 while the official count for women was 1,367.

Despite the gender gap during the earlier Games, the number of female athletes keeps growing every Paralympic cycle. For instance, the 2012 London Paralympic Games hosted 2,736 men and 1,501 women which demonstrates the increase of female (152) and male athletes accordingly (134). In 2016, Rio de Janeiro had 2,657 men and 1,671 women participating at the Games which also showed the rise of the total number of the para-athletes as well as gender-based participation. Finally, the Tokyo Paralympics

in 2020 is considered to be the most gender-balanced Games in the Paralympic history with a total number of 4,403 athletes (2,550 male and 1,853 female) which displayed an increase of female participation by 182 and decrease in male participation by 107 as well compared to the 2016 Summer Paralympic Games in Brazil.

Another limitation of the study was social acceptance bias. The nature of qualitative study is to examine thoughts, opinions, and experiences through different methods such as observations, focus groups, interviews, surveys with open-ended questions, and secondary research (Creswell, 2007). Due to the nature of the qualitative study, participants might have felt restricted in sharing their experiences with the researcher during the interview which reflects social acceptance bias. Professional para-athletes from both Russia and the United States may have desired to answer the question in a certain way that they felt comfortable in, taking into consideration the current political situation between these two countries.

Additionally, athletes were asked to recall their thoughts and feelings that they experienced from January 2020 to September 2021. However, the interviews were conducted between July 2022 and November 2022 which had a gap of more than one year. Therefore, participants' responses derived from their memories of the preparation process but not from "being in the moment" time period.

Conclusion

The purpose of this study was to investigate the impact of the COVID-19 pandemic on the motivation of elite para-athletes who were preparing to participate in the 2020 Summer Paralympic Games in Tokyo. Four themes were constructed that impacted motivation of elite para-athletes that were preparing for the Paralympic Games in Tokyo:

number of Paralympic competitions, establishing new routines, mentor support (included three mentor roles: a coach, a family member, a teammate/friend), and motivation sources (internal and external). In addition, it was found that the one-year postponement of the Paralympic Games had a mixed impact on elite athletes. While for athletes it was beneficial news because it provided extra time to prepare for the Games, others had thoughts about retirement from parasport due to their age and high-intensity training.

Despite the fact that athletes' motivation was violated by government restrictions and global lockdown, professional athletes were able to find their motivation to overcome challenges and compete at the 2020 Paralympic Games in Tokyo. However, based on the current findings, specifically the Model of Success of two Paralympians (Table 2), the parasport industry needs to have more mentorship resources available for athletes with disabilities because it can significantly improve athletic performance.

Recommendations for Future Research and Practice

Future research should seek to enhance the present study's generalizability of motivation among elite para-athletes and expand upon the current findings by including data collection from elite para-athletes from different countries (not limited to Russia and the U.S.). This has the potential to provide models for infusing learning opportunities on psychological training and motivation within competitive sports for professional athletes with physical disabilities.

Based on the current study, mentorship was found to impact athletes' success at the Paralympic Games in Tokyo. Training interruptions may happen unexpectedly, and it is important to prepare athletes for those challenges. Therefore, sports psychologists and other athletic personnel that work with elite athletes in different kinds of sports, including parasport, can be trained and aware of ways to help the athletes by knowing the specifics of maintaining motivation during uncertain periods of athletes' lives. Thus, future research should focus on identifying techniques that can be used by athletic coaches, sport managers, team personnel, or event managers who have the authority and capability to better assist athletes during these interruptions.

Appendix A

VERBAL CONSENT DOCUMENTATION FOR PARTICIPATION.

SUBJECT: The Impact of COVID-19 on Para-Athletes: A Case Study on Motivation and Psychological Training for the 2020 Paralympic Games.

Oral consent serves as an assurance that the required elements of informed consent have been presented orally to the participant or the participant's legally authorized representative.

Verbal consent to participate in this telephone survey has been obtained by the participant's willingness to continue with the telephone survey by providing answers to a series of questions related to what the participant has experienced during their preparation process for the Paralympics in 2020.

*Phone Script: You are being asked to participate in a research study conducted by Irina Perfilova and Dr. Joshua Pate from James Madison University. The purpose of this study is to investigate the impact of the COVID-19 pandemic on the motivation of elite paraathletes who were preparing to participate in the Summer Paralympic Games in Tokyo 2020. This study consists of an interview that will be administered to individual participants through a web-based platform (ZOOM). You will be asked to provide answers to a series of questions related to your experience during the preparation process for the Paralympic Games in Tokyo 2020. Participation in this study will require 30-60 minutes of your time. We do not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life). There are no benefits for participation in this study.

The results of this research will be presented at an academic conference and published at an academic journal. Your responses are confidential. All information that matches up with your answers including audio recordings will be destroyed. Do you have any questions about the study, your participation, or your rights as a participant? Do you give consent to be audio recorded during your interview?

I attest that the aforementioned written consent has been orally presented to the human subject and the human subject provided me with an oral assurance of their willingness to participate in the research.

Surveyor's Name (Printed)	Surveyor

Federal requirements mandate that informed consent shall be documented by the use of a written consent form and in the case of oral presentation must also be witnessed in circumstances where human subjects are blind or illiterate.

Appendix B

Letter of Invitation to Participate in Research

Identification of Investigators & Purpose of Study

My name is Irina Perfilova, I am conducting a qualitative research study for the master's thesis at James Madison University on The Impact of COVID-19 on Para-Athletes: A Case Study on Motivation and Psychological Training for the 2020 Paralympic Games. The purpose of this study is to investigate the impact of the COVID-19 pandemic on the motivation of elite para-athletes who were preparing to participate in the Summer Paralympic Games in Tokyo 2020. This study will contribute to the researcher's completion of her master's thesis.

Research Procedures

You are eligible to participate in this study if you are a para-athlete that was preparing to participate in the Summer Paralympic Games in Tokyo 2020. We will ask you to set an interview using an online platform (Zoom Meetings) to answer several questions regarding the impact of COVID-19 on your mental approach to competing at the Summer Paralympic Games in Tokyo in 2020.

Time Required

The interview takes around 30-60 minutes. Our goal is to learn more about your training experience and the changes that occurred due to the COVID-19 pandemic as you were preparing for the Summer Paralympics in Tokyo and how did COVID-19 make an impact on your mental approach to competing. Your responses to the questions will be kept confidential. Each interview will be assigned a number code to help ensure that personal identifiers are not revealed during the analysis and write-up of findings.

Risks

We do not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

There may be no direct benefits to participating except bringing attention to your psychological training and motivation and having you be more open to talking about your preparation process during the pandemic year. The overall benefits of the study are bringing attention to the body of knowledge and the prevalence of psychological challenges (among elite para-athletes) during the lockdown.

Confidentiality

The results of this research will be presented at an academic conference and published at an academic journal. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. We retain the right to use and publish non-identifiable data. While individual responses are confidential, data will be presented in aggregate form. All data will be stored in a secure location accessible only to us, the researchers. Upon completion of the study, all information that matches up with your answers including audio recordings will be destroyed. Your responses are confidential. All information that matches up with your answers including audio recordings will be destroyed.

Participation & Withdrawal

There is no compensation for participating in this study. However, your participation will be a valuable addition to our research and your findings could lead to a greater public understanding of the mental approaches of elite para-athletes to the competitions. If you are willing to participate, please suggest a day and time that suits you and I'll do my best to be available. If you have any questions please do not hesitate to ask.

This study was approved by the IRB, protocol # 22-3459.

Questions about the Study

Irina Perfilova Hart School James Madison University perfilia@dukes.jmu.edu

Julia Wallace Carr, Ed.D. (Adviser)
Professor, Sport & Recreation Management
Senior Associate Director, University Recreation
James Madison University
wallacje@jmu.edu

Questions about Your Rights as a Research Subject:

Dr. Lindsey Harvell-Bowman Chair, Institutional Review Board James Madison University (540) 568-2611 harve2la@jmu.edu

Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

•	I give consent to be (audio) recorded during my interview (ini	tials)
	Name of Participant (Printed)	
	Name of Participant (Signed)	Date
	Name of Researcher (Signed)	Date

Appendix C

VERBAL CONSENT DOCUMENTATION FOR PARTICIPATION (in Russian).

Тема исследования: Влияние Пандемии КОВИД-19 на Пара-Атлетов: Исследование Мотивации и Психологической Подготовки к Паралимпийским Играм в Токио в 2020.

Устное согласие служит гарантией того, что необходимые элементы информированного согласия были представлены в устной форме участнику или его законному представителю.

Устное согласие на участие в этом телефонном опросе было получено в результате готовности участника продолжить телефонный опрос, ответив на ряд вопросов, связанных с тем, что участник испытал в процессе подготовки к Паралимпийским играм в 2020 году.

*Телефонный сценарий: Вам предлагается принять участие в исследовании, проведенном Ириной Перфиловой и доктором Джошуа Пейтом из Университета Джеймса Мэдисона. Цель этого исследования — изучить влияние пандемии КОВИД-19 на мотивацию элитных пара-спортсменов, которые готовились к участию в Летних Паралимпийских играх в Токио в 2020 году. Это исследование состоит из интервью, которое будет проводиться с отдельными участников через веб-платформу (ZOOM). Вам будет предложено ответить на ряд вопросов, связанных с вашим опытом в процессе подготовки к Паралимпийским играм в Токио в 2020 году. Участие в этом исследовании потребует 30-60 минут вашего времени. Мы не воспринимаем более чем минимальные риски от вашего участия в этом исследовании (то есть никаких рисков, кроме рисков, связанных с повседневной жизнью). Нет никаких преимуществ для участия в этом исследовании.

Результаты этого исследования будут представлены на научной конференции и опубликованы в научном журнале. Все данные будут храниться в безопасном месте, доступном только нам, исследователям.

По завершении исследования вся информация, совпадающая с вашими ответами, включая аудиозаписи, будет уничтожена. Ваши ответы конфиденциальны. Вся информация, совпадающая с вашими ответами, включая аудиозаписи, будет уничтожена.

У вас есть какие-либо вопросы об исследовании, вашем участии или ваших правах в качестве участника? Даете ли вы согласие на аудиозапись вашего интервью?

своей готовности участвовать в исследовании.				
Имя и Фамилия Участника	Подпись о Согласии			

представлено субъекту-человеку, и субъект-человек дал мне устное заверение в

Я подтверждаю, что вышеупомянутое письменное согласие было устно

Согласно федеральным требованиям, информированное согласие должно быть задокументировано с использованием письменной формы согласия, а в случае устного представления также должно быть засвидетельствовано в обстоятельствах, когда люди слепы или неграмотны.

Appendix D

Letter of Invitation to Participate in Research (in Russian)

Идентификация Исследователей и Цель Исследования

Меня зовут Ирина Перфилова, я провожу качественное исследование для магистерской диссертации в Университете Джеймса Мэдисона на тему «Влияние COVID-19 на пара-спортсменов: тематическое исследование мотивации и психологической подготовки к Паралимпийским играм 2020 года». Целью данного исследования является изучение влияния пандемии COVID-19 на мотивацию элитных пара-спортсменов, которые готовились к участию в Летних Паралимпийских играх в Токио в 2020 году. Это исследование будет способствовать завершению исследовательской работы над магистерской диссертацией.

Процедуры исследования

Вы имеете право участвовать в этом исследовании, если вы пара-спортсмен, который готовился к участию в Летних Паралимпийских играх в Токио в 2020 году. Мы попросим вас назначить интервью с использованием онлайн-платформы (Zoom Meetings), чтобы ответить на несколько вопросов, касающихся влияние КОВИД-19 на ваш психологический подход и уровень мотивации к участию в Летних Паралимпийских играх в Токио в 2020 году.

Необходимое Время

Интервью занимает около 30-60 минут. Цель нашего исследования — узнать больше о вашем тренировочном опыте и изменениях, которые произошли из-за пандемии COVID-19, когда вы готовились к летним Паралимпийским играм в Токио, и о том, как COVID-19 повлиял на ваш психологический подход к соревнованиям. Ваши ответы на вопросы останутся конфиденциальными. Каждому интервью будет присвоен цифровой код, чтобы гарантировать, что личные идентификаторы не будут раскрыты во время анализа и описания результатов.

Риски

Мы не воспринимаем более чем минимальные риски от вашего участия в этом исследовании (то есть никаких рисков, кроме рисков, связанных с повседневной жизнью)

Преимущества

Участие может не иметь прямых преимуществ, за исключением привлечения внимания к вашей психологической подготовке и мотивации, а также того, что вы будете более открыты для разговоров о процессе подготовки в год пандемии. Общие преимущества исследования заключаются в привлечении внимания к

совокупности знаний и распространенности психологических проблем (среди элитных пара-спортсменов) во время изоляции.

Конфиденциальность

Результаты этого исследования будут представлены на научной конференции и опубликованы в научном журнале. Результаты этого проекта будут закодированы таким образом, что личность респондента не будет привязана к окончательной форме этого исследования. Мы сохраняем за собой право использовать и публиковать неидентифицируемые данные. Хотя отдельные ответы являются конфиденциальными, данные будут представлены в обобщенном виде. Все данные будут храниться в безопасном месте, доступном только нам, исследователям. По завершении исследования вся информация, совпадающая с вашими ответами, включая аудиозаписи, будет уничтожена. Ваши ответы конфиденциальны. Вся информация, совпадающая с вашими ответами, включая аудиозаписи, будет уничтожена.

Участие в Исследовании

Оплата за участие в этом исследовании не предусмотрена. Тем не менее, ваше участие станет ценным дополнением к нашему исследованию, и ваши выводы могут привести к лучшему пониманию общественностью ментального подхода элитных пара-спортсменов к соревнованиям. Если вы готовы принять участие, пожалуйста, предложите день и время, которые вам подходят, и я сделаю все возможное, чтобы быть доступным. Если у вас есть какие-либо вопросы, пожалуйста, не стесняйтесь спрашивать.

Это исследование было одобрено IRB, протокол № 22-3459.

Вопросы об исследовании

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Вопросы о Ваших Правах как Участника Исследования:

Dr. Lindsey Harvell-Bowman Chair, Institutional Review Board James Madison University (540) 568-2611 harve2la@jmu.edu

Предоставление согласия

Я прочитал эту форму согласия и понимаю, что требуется от меня как от участника этого исследования. Я добровольно соглашаюсь на участие. Мне были даны удовлетворительные ответы на мои вопросы. Следователь предоставил мне копию этой формы. Я подтверждаю, что мне исполнилось 18 лет.

•	Я даю согласие на (аудио) запись моего интервью.	(инициалы)
	Имя и Фамилия Участника	
	Подпись Участника	Дата
	Имя и Подпись Исследователя	Дата

Appendix E

Interview Questions

- 1. How old are you?
- 2. What kind of sport do you do?
- 3. How many years have you been participating in your sport for—both recreationally and competitively?
- 4. Did you participate in the Tokyo 2020 Paralympics?

If yes, how was your performance?

If not, did you plan to participate? (Were you qualified by the International Committee?)

- 5. What were your goals in 2020?
- 6. How did your training schedule change during 2020?
- 7. How did your relationships with teammates change during the pandemic?
- 8. Describe your thoughts when you were told that the Paralympics were rescheduled due to the COVID-19 pandemic?
- 9. Tell me what did you feel when you were preparing for the competition?
- 10. Tell me about your regular training day between March 2020 and August 2021.
- 11. Have you thought about retiring from your athletic career when you realized the Paralympic Games would be postponed? If so, what stopped you from retiring?
- 12. How would you describe the 2020 year from a professional athlete's perspective?
- 13. Is there anything you would like to share that related to your psychological training and motivation for the Paralympic Games?

Appendix F

Interview Questions (in Russian)

- 1. Сколько Вам лет?
- 2. Каким видом спорта Вы занимаетесь?
- Сколько лет вы занимаетесь своим видом спорта любительски и профессионально?
- 4. Вы участвовали в Паралимпийских играх 2020 года в Токио?
 - а. Если да, то как ваше выступление?
 - b. Если нет, то планировали участвовать? (Были ли вы квалифицированы Международным комитетом?)
- 5. Каковы были ваши цели в 2020 году?
- 6. Как изменился ваш график тренировок в 2020 году?
- 7. Как изменились ваши отношения с товарищами по команде во время пандемии?
- 8. Опишите свои мысли, когда вам сказали, что Паралимпийские игры перенесены из-за пандемии COVID-19?
- 9. Расскажите, что вы чувствовали, когда готовились к соревнованиям?
- 10. Расскажите мне о вашем обычном тренировочном дне с марта 2020 года по август 2021 года.
- 11. Думали ли вы о завершении спортивной карьеры, когда поняли, что Паралимпийские игры будут перенесены? Если да, то что помешало вам уйти на пенсию?
- 12. Как бы вы описали 2020 год с точки зрения профессионального спортсмена?
- 13. Есть ли что-то, что вы хотели бы добавить о вашей психологической подготовке и мотивации к Паралимпийским играм в Токио?

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