

The Impact of Adaptive Sports and Physical Activity for Veterans with Disabilities

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The Impact of Adaptive Sports and Physical Activity for Veterans with Disabilities

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Abstract

Over the years, adaptive sports and physical activity has become more prominent to support individuals with disabilities. Veterans with a disability tend to have a more unique situation while living with a disability because of the demands from being in service. While reviewing existing research, it has shown that adaptive sports and physical activity impact veterans who have a disability in multiple different facets. Three key themes were found in the research: the physical, psychological, and social benefits, the impact of community engagement, and the access veterans have to programs and the conditions within the program. The purpose of this synthesis project was to review the literature on the impact adaptive sports and physical activity has on veterans with physical disabilities.

Chapter 1

Introduction

Once an American turns 18, they are allowed to join the Armed Forces and go to war. But do we, normal civilians, ever stop to think about the sacrifices the veterans have made for us and our country? Following their prime teen years, veterans went to war, and about 27 percent came back with a disability (U.S. Department of Labor, 2022). Their lives have officially changed forever. The disabilities that veterans brought back with them can range from physical to mental, such as amputees or having PTSD (Shirazipour, 2017). Shirazipour (2017) explains how a veteran with a physical disability is unique compared to a civilian. This is because if they are injured during combat or while still serving, they have to deal with the transition to life following deployment, retraining for future deployment, or the transition to civilian life, all while working through their physical capabilities.

Epstein and McFarland (2010) found that both depression and amputation have a negative effect on quality of life. Peacock et al. (2019) also shared that recovery for veterans is often associated with a sense of helplessness, less satisfaction with life, and increased aggression, among other things. However, there are ways to turn around the stigma and negative feelings that come with developing a disability. Proescher et al., (2022) found that high perceived social support was associated with lower levels of PTSD, depression, anxiety, and higher quality of life for veterans. There is a need to determine other sources of increased quality of life for disabled veterans. Shirazipour (2017) finds that oftentimes injured veterans are young and physically fit, which leads to the desire to maintain active lifestyles.

Statement of the Problem

Physical activity has been known to improve mobility, build strength, increase confidence, and enhance quality of life. Goff (2012) mentions how many disability sport organizations recognize the need to serve injured military men and women through sport and recreation as a way to help transition them back into the community. Adaptive sports have been growing over the years, and it's important to understand what type of impact these sports and activities have on veterans once they begin participating in them. Shirazipour (2017) suggests that providing veterans with the opportunity to fully participate in physical activity, that is, having access to programs and opportunities while having quality experiences within the programs, is a beneficial component of rehabilitation and adjusting to post-injury life.

Purpose Statement

The purpose of this synthesis project is to review the literature on the impact adaptive sports and physical activity has on veterans with physical disabilities.

Operational Definitions

1. According to the Children's Hemiplegia and Stroke Association, “adaptive sports” refers to competitive or recreational sports for people with disabilities. These sports usually run parallel to typical sports, but offer modifications when necessary so people with disabilities can participate.
2. The term “physical activity” refers to other health and fitness related activities, such as weight training, cycling, etc. that might not be considered under the term adaptive

“sports.” These activities are also adaptive in nature where the activity is modified so people with disabilities can fully participate.

3. The term “veteran” refers to anyone who has served in the active military, naval, or air service, and has since been discharged or released from their service.
4. “Physical disabilities” are defined as a disability that limits a person's movement, stamina, or overall functioning. Physical disabilities can be caused by injury, illness, or genetics, but in this particular synthesis, physical disabilities are all acquired from an injury sustained by a veteran during service.

Research Question

In this synthesis review the following questions will be studied:

1. In what ways do adapted sports and physical activity impact Veterans who are living with a disability?
2. What are Veterans opinions on participating in adaptive sports and physical activities?
3. Do Veterans have enough access to adaptive sports and physical activity programs?

Delimitations

While reviewing research, articles were selected that fell under the following parameters:

1. Articles needed to be centered around veterans who sustained a physical injury.
2. The articles needed to pertain to either adaptive sports participation or physical activity participation and gain perspectives, insights, and data on the impact sport or physical activity has on a veteran.
3. All articles needed to be current, being published no earlier than 2010.

Chapter 2 - Methods

The purpose of this chapter is to review the methods and procedures used to review the literature on the impact adaptive sports and physical activity has on veterans with physical disabilities.

The studies collected for this synthesis were located using the advanced search database from SUNY Brockport's Drake Library. Within the advanced search database, the following databases were searched: EBSCO, SPORTDiscus, Taylor & Francis Online, ScienceDirect, JMVFH. Thousands of articles were retrieved from these databases. In order to narrow down the search for articles, keywords and specific criteria were used.

While using the advanced search database, different sets of keywords were used to gather appropriate articles for the review. The first keywords used were *disabled veterans*, *sport*, and *impact*, which yielded 19 results. The following keyword combinations were also used: *veterans*, *disabled*, and *sport* (93 results), *disabled veterans*, *physical activity*, and *impact* (21 results), *veterans*, *physical disability*, *sport*, and *impact* (39 results), *veterans*, *disabled*, and *physical activity* (122 results), *veterans*, *disabled*, and *adapted sports* (11 results), *veterans*, *impact*, *wheelchair*, and *adaptive sports* (2 results), and finally, *veterans*, *wheelchair*, and *sports* (69 results). These keywords were selected because they highlight the main purpose of the synthesis review. The target participants are veterans with a physical disability and including the keywords *sport* and *physical activity* helped encompass more than just "team sports" and expanded into fitness-based sports and activities.

To narrow down the search, specific criteria was also used in the advanced search. All articles were peer reviewed, available online, and published between the year 2010 - present.

Peer reviewed articles were selected to ensure validity in the research. All articles published no later than the year 2010 were selected to ensure reliable and recent up-to-date information.

The SUNY Brockport Drake Library search database supplied articles from multiple different sources that were used in this review. Three sources came from EBSCO, two came from Elsevier ScienceDirect, two from Taylor & Francis Online, and one from the Journal of Military, Veteran, and Family Health (JMVFH). Specifically, the articles were obtained from the following journals: *Military Medicine*, *Journal of Leisure research*, *Adapted Physical activity Quarterly*, *JMVFH*, *American Journal of Health Promotion*, *Psychology of Sport and Exercise*, *Qualitative Research in Sport, Exercise, and Health*, and *Disability and Rehabilitation*.

All articles focused on military veterans as their subjects. Eight out of the ten articles collectively included 485 male veterans who were disabled, 84 female veterans who were disabled, and 6 veterans who were disabled that did not wish to specify their gender. In the remaining two articles, percentages were given for the participants in a prevalence estimate. 91.2% of veterans in this study were male and 8.8% were female. Of these participants, 60.7% were veterans without a disability and 39.3% were veterans with a disability.

In a majority of the articles, data were analyzed using questionnaires/surveys or interviews. These interviews and surveys were a variety of one-on-one in person interviews, online through video chat, or over the phone. There were also both phone and online survey questionnaires, as well as specific self-reporting questionnaires/measurement tools (functional mobility assessment and sport participation outcome research tool and comprehensive uniform survey). One unique article collected data from a field study where they were a “participating observer.” The researcher then picked two participants to focus on and analyzed their field notes/journal entries to make up their research.

Chapter 3

The purpose of this chapter is to present a review of literature on the impact adaptive sports and physical activity has on veterans with physical disabilities. The following topics will be reviewed: physical, psychological, and social benefits, community engagement, and program access/conditions. Adaptive sports and physical activity can impact multiple different aspects of life.

Physical, Psychological, and Social Benefits

Based on the research, adaptive sports and recreational activities have quite an impact on the three domains of health, affecting the whole person. The literature has a very positive emphasis relating adaptive sport and physical activity to physical, psychological, and social well-being of veterans with a physical disability. Especially because of the unique experiences they have been through.

Lunberg et al. (2016) explored the influence an all-female outdoor sports and recreation program had on a small group of women who were injured in combat. Researchers interviewed participants twice, while utilizing Flicks Triangulated Design. A constant comparison method was used by the researchers to find patterns. Researchers found that physical skills and emotional capacities could be developed by recreational structures through building social networks, experiencing a sense of freedom from their current situation (relief from their negative psychological symptoms), and by having opportunities to regain their identity as strong women.

Similarly, Yeatts et al. (2019) further found positive attributes in adapted sport and physical activity relating to psychological/emotional well-being after winning a game. Yeatts et al. (2019) investigated the affective changes according to game outcome for athletes with a disability who were participating in a wheelchair basketball tournament. Data were collected

before and after the first round of basketball games in the tournament. A survey instrument was used both before and after the game. The Physical Activity Affect Scale was used to measure their affective state. When analyzing data, repeated-measures analysis of variance was utilized to examine how game outcomes groups changed on different affective states. The results showed that before the game, all participants were in a similar mood state. However, participants who won experienced an increase in feelings of energy, enthusiasm, a state of calm and peacefulness, while showing a decrease in feeling awful and/or discouraged. Participants who lost showed completely flipped results, with increased feelings of discouragement/"crumminess" and a decrease of enthusiasm, energy, relaxation, etc. This showed that competitive sport and winning can help lower levels of depression and anger.

In addition, Carless et al (2014) had a unique way to present research that focused on the experiences of military personnel in a recently developed intervention that used inclusive adapted sport and adventurous training for personal development. One of the researchers conducted fieldwork for 30 days as a "participating observer." Formal life story interviews, a field diary, and notes were used to collect data and two participants were chosen for the researcher to create a life story narrative about them. Participants were actively involved in helping portray their narrative and get it on to paper in a way that they appreciated. The results were portrayed in the form of the two participants' stories. The stories shed a light on the effect participating in sports had on them. Adaptive sports helped them socialize with others which in turn had a positive impact on psychological factors. Participating in sport also helped them realize that they were able to accomplish things again - giving them a sense of determination and hope.

To determine how participation in adaptive sports and recreation can impact physical health, Vasudevan et al. (2019) explored the likelihood of meeting physical activity guidelines in a group of veterans who are obese by disability status. The researchers used the 2017 Behavioral Risk Factor and Surveillance Systems (BRFSS) core data set, which is a set of questions asked to everyone. The BRFSS is an annual random-digit-dial phone survey where data gets self-reported. The two groups being compared were participants who identified themselves as veterans and being obese with and without a disability. The results showed that veterans who were obese with a disability were less likely to meet both the aerobic and strength recommendations compared to those without a disability. This further suggests the importance adaptive sports and physical activity has on the physical health veterans with a disability.

Additionally, Serfioti and Hunt (2021) conducted a study that proved to benefit all three health areas: physical, mental, and social. The study aimed to provide insight into the impact of Competitive Motorsport on disabled veterans' subjective well-being and in turn determine if it improves the quality of their lives. All participants had to be military veterans with a physical injury/disability. Semi structured interviews were used to collect data and then analyzed using thematic analysis. The study found that competitive motorsports provided intervention opportunities and health and personal benefits that were further supported with several sub themes.

Community Engagement

Throughout the literature, community engagement was a theme that veterans with a disability suggested had a positive impact from participation in adapted sports and physical activity. Community engagement includes being able to function and participate with able-bodied community members and having a sense of belongingness within their community.

Lee-Hauser et al. (2021) wanted to establish a baseline of common characteristics for the veteran population that participate in wheelchair sports. The Functional Mobility Assessment (FMA) and the Sports Participation Outcome Resource Tool and Comprehensive Uniform Survey (SPORTACUS) were used to collect data. FMA is a self-reporting assessment that includes 10 items that measures the extent to which a mobility device aids someone in completing mobility related activities of daily living and measures their satisfaction. SPORTACUS is a self-reporting questionnaire on how sports and recreational activities have impacted quality of life through 8 different domains. The results showed that veterans had high scores on both tests, while implying that adaptive sports programs have a positive impact on quality of life, daily function, and community participation.

Additionally, Shirazipour and Latmier-Cheung (2020) examined what outcomes military veterans with physical disabilities link to quality physical activity experiences and determining what contexts may foster these outcomes. Interviews were used to conduct data collection and focused on the participants' experiences in quality physical activity experiences and post-injury quality physical activity experiences and what the positive and negative outcomes were. The results showed three overarching themes which include the importance of social and societal growth and opportunities for advancement. The third theme also coincides with the theme mentioned above; psychological benefits.

Program Access/Conditions

A few of the above articles also suggest that adaptive sport program conditions, and the access veterans have to these programs have an impact on the outcomes from the program on an individual level.

Shirazipour and Latimer-Cheung (2021) used interviews from a previous study of veterans with a physical disability to learn what constitutes successful long-term physical activity pathways, and quality elements that may influence these pathways to promote continual participation. This study used a secondary analysis of interviews that were obtained in a previous research project. Results showed three different physical activity pathways which include two high level/competitive sport pathways, as well as a recreational pathway. It was discussed that veterans see themselves as fit and active so including sport in the recovery process will be beneficial. Most parasport programs, however, are offered through civilian organizations compared to military-based ones. When veterans had an opportunity to be challenged and take their sport to a higher level, participation was also maintained longer.

Additionally, Shirazipour et al. (2017) explored perceptions of a quality physical activity experience among military veterans with a physical disability. This study included participants with combat and non-combat injuries who participated in one-on-one interviews to discuss their physical activity experiences. A thematic analysis was used to find themes throughout the different interviews. Researchers found two overarching themes: elements constituting quality physical activity experiences and conditions enabling access to quality physical activity. Group cohesion, challenge, having a role, and independence and choice all had an impact on these overarching themes.

In another study, Shirazipour et al. (2019) explored the relationship between precursors to quality participation, quality elements, and participation outcomes for veterans with physical disabilities. All participants were engaged in activities with fixed start and end dates and were given questionnaires a week before the event, within a week after the program, and then a third questionnaire three months after the event. Data were screened and multiple imputation was used

for missing data. All succeeding analyses were conducted on each of the imputed data sets, with pooled results. Results showed that physical activity program conditions and elements are linked to physical activity participation outcomes.

Adaptive sport and physical activity have proven to have a positive impact in many different aspects of a veteran's life who is living with a disability. The literature shows that veterans recognize the positive effect participation has on their physical, psychological, and social health/well-being. The literature also shows the importance of community engagement, as well as the conditions of a program they are participating in.

Chapter 4

Results, Discussion and Recommendations for Future Research

The purpose of this chapter is to present the results of the review of literature on the impact adaptive sports and physical activity has on veterans with physical disabilities and how these results align with the purported research questions which guided this synthesis project. In addition, recommendations for future research as it relates to the impact of adaptive sports and recreation on Veterans are presented.

The results of this review of literature revealed that participating in adaptive sports and recreation have a positive impact on veterans with a disability in multiple ways. The following topics have shown to have an impact: physical, psychological, and social well-being, community engagement, and program access and conditions.

Discussion

Interpretations

As part of this literature review, several research questions were posed. The first research question examined ways adapted sports and physical activity impact veterans who are living with a disability. The results showed that participating in adaptive sports and physical activity impact them in a multitude of ways. The biggest impact seen was in the psychological and emotional domain. Research suggests that quality participation in sport and recreation decreases feelings of depression and anger and boosts self-confidence and determination. Social benefits were also seen greatly with results. It was expressed through multiple studies that being able to engage with others, especially people who shared similar disabilities, was a benefit to participating in sports and recreation programs. Along with psychological and social factors, physical factors were also influenced. Research has shown the need to participate in adaptive sports and physical activity to better meet strength and aerobic recommendations. Community involvement also created an impact on veterans' experiences while participating in activity.

They felt like they could be a part of something again and were able to connect with others within their community.

The second research question explored the opinions veterans have on participating in adaptive sports and physical activities. The research has shown that veterans have a lot of positive opinions about participating in adaptive sports and recreational activities which builds on the findings from question one. With the studies being qualitative in nature, the opinions of the participants were always the source of the results. It is important to have opinions and input coming from the veterans who are actually participating and engaging in the programs and activities to better understand what they are feeling and going through.

The third research question explored if veterans have enough access to adaptive sports and physical activity programs. This research question does need to be explored a little further, however, one of the studies noted that most adaptive sport programs are through civilian organizations as opposed to military organizations. There is still access through civilian organizations since anyone can participate, but would there be a bigger benefit and turn out if veterans programs offered more programs? The conditions and quality of programs were also mentioned through out the literature. Research suggests that giving the participants a challenge and the opportunity to advance in the activity resulted in longer lasting participation. Quality participation experiences were also associated with group cohesion, having a role, and independence and choice.

Implications

The conclusions to this synthesis come as no surprise in the world of health and physical fitness. Previous research shows the benefits that participation in regular physical activity and sport has on able-bodied individuals, so it comes to no surprise that there are plenty of benefits for individuals with physical disabilities as well, including veterans who might have more unique situations. This research gives more purpose for veterans with physical disabilities to find something that they enjoy that gets them moving, active, and back on track to a "regular" lifestyle. It also proves the importance of having adaptive

sport and physical activity programs promoted and available to veterans with physical disabilities because we can see the positive impact it has on their quality of life. These results confirm that adaptive physical activity programming can be beneficial in the recovery process as well as throughout life afterwards.

There is still more that can be researched in this area to determine how doctors, therapists, program directors, educators, etc. can best support and provide opportunities for veterans with adaptive sport and physical activity programs. However, this research is part of the beginning steps in recognizing the need and importance for inclusion and adaptation in sports and physical activity for veterans.

Recommendations for Future Research

In reviewing the data, based on the impact adaptive sports and physical activity has on veterans with a disability, the following limitations were noted regarding the studies under review. Most of the participants in the study were male dominant. The studies were also done over a short amount of time, usually the length of one program.

Based on these limitations and other insights related to the literature the following recommendations for future research should be considered:

1. The impact on physical health
2. Female involvement
3. Program access and funding

Summary

The purpose of this literature review was to determine the impact adaptive sports and physical activity has on veterans with a disability. Delimiting variables were used to do an exhaustive data-based search which yielded 10 articles. These articles were then systematically used to determine the impact adaptive sport and physical activity has on veteran with a disability. Research revealed that veterans feel participation in adaptive sports and physical activity have a positive impact on them. Research showed that psychological and social factors were very largely impacted through participation, creating an increase in quality of life. The literature also suggested the importance of participation in physical activity

and sport by positively impacting physical health and helping meet aerobic and strength recommendations. Conditions of the programs play a large role in the outcome's veterans feel they experience through their participation in the different programs. Being challenged and feeling like they have a choice and independence helps motivate them to continue participation. Being involved in a sport or physical activity program helped them connect with others and feel like they were more involved within the community and had the determination to set goals and recognize they can achieve things again. All of this supports how impactful the power of participation in sport and physical activity can change your life for the better and live a healthy lifestyle.

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Appendix A – Article Grid

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
Shirazipour, Celina Latimer-Cheung, Amy	Pathways for Long-Term Physical Activity Participation for Military Veterans with a Physical Disability.	Drake Library EBSCO Adapted Physical Activity Quarterly	To use interviews from a previous study of veterans with a physical disability who are high maintainers to understand and learn what constitutes successful long-term physical activity	This study is a secondary analysis of already existing data. The authors used two previous studies that used thematic analysis. Interviews were used as the main method to collect data. Participants comple	Interviews were recorded and fully transcribed and then a reflexive thematic analysis was conducted. Coding and themes were extracted from the interviews to develop pathways for participation.	Three physical activity pathways were identified. The first two pathways represent high level/competitive sport and differs based on how the individual was introduced (rehab programming or through vicarious experience or	-military and civilian based rehab facilities. -military based was more centered towards sport involvement. -people in the military view themselves as fit and active, so including sport and physical activity in the recovery process will promote physical and psychological healing. -Para sport programs were mostly offered through civilian organizations. - involvement was maintained in para sport programs when there were challenges and opportunities to take their sport to a higher level. -integration between rehabilitation and PA programs are vital.

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
			pathways of veterans with a physical disability, and the quality elements that may influence these pathways at key phases to promote continued participation.	ted two one-on-one interviews.		program invitation). The third pathway represents a recreational physical activity pathway. The two main factors that influenced a chosen pathway was the type and method of injury. Injuries that happened in combat were more	

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
						likely to go through pathway 1 where physical activity was introduced during rehab.	
Shirazipour, Celina Evans, M. Blair Caddick, Nick Smith, Brett Aiken, Alice B. Martin Ginis, Kathleen	Quality participation experiences in the physical activity domain: Perspectives of veterans with a physical disability	Drake Library Elsevier Science Direct Journals Complete Psychology of Sport and Exercise	The purpose of this study is to explore perceptions of a quality PA experience among military veterans with a physical disability.	18 participants with combat and non-combat related physical injuries. Each participant took part in two one-on-one interviews over phone or skype.	The first interview was used to prompt discussion of PA experiences in the second interview. A thematic analysis was used for the second interviews to find themes throughout the participants.	Two overarching themes were present: elements constituting quality PA experiences and conditions enabling access to quality PA experiences.	

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
A. Lati mer- Cheu ng, Amy E.						Within these two themes, four key themes were found: group cohesio n, challen ge, having a role, and indepen dence and choice.	
Serfi oti, Dana i Hunt, Nigel	Extre me sport as an interv ention for physic ally injure d milita ry vetera ns: the exam ple of	Drake Librar y Taylo r & Franci s Onlin e Disabi lity and Rehab ilitatio n	To provid e an in- depth insight into the impact of Comp etitive Motor sport on physic ally	Two sets of semi structur ed intervie ws were conduct ed with 14 male British military veteran s. All had to	All intervieu s were transcrib ed from audio recording s. Data from both intervieu s were analyzed based on the guide for thematic	Two key themes (compe titive motors port as interve ntion and perceiv ed benefits of compet itive motors	

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
	competitive motor sport		injured /disabled veterans' subjective well-being and in turn determine if it improves the quality of their lives.	have a permanent physical injury/disability.	analysis.	port) were found and described by several sub-themes.	
Shirazipour, Celina H. Latimer-Cheung, Amy E.	Understanding quality participation : exploring ideal physical activity outcomes for milita	Drake Library Taylor & Francis Social Science and Humanities Library Qualitative	To fill remaining knowledge gaps by (a) exploring what outcomes military veterans with physical	two interviews via skype or phone. the first interview built a timeline of PA experiences, the second interview was two	Two phases of analysis using NVivo qualitative analysis software. Phase 1 identified ideal outcomes of quality PA experiences, the second phase	Three overarching themes: PA promotes psychological benefits , the importance of social and societal growth, and opportu	highlighting participant voices to identify desirable PA outcomes is important for success. Identifying program conditions and quality elements that can be linked to fostering desirable outcomes is important. These findings help build and support a framework for parasport participation.

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
	ry veterans with a physical disability	Research in Sport, Exercise, and Health	disabilities link to quality PA experiences, and (b) determining what contexts may foster these outcomes.	parts. The first related to elements of a quality PA participation experience. The second part was focused on post-injury PA experiences and the positive and negative outcomes.	aimed to understand contextual features for quality participation.	nities for advancement.	
Carless, David Sparkes, Andrew	Disability, inclusive adventurous training and	Drake Library Elsevier ScienceDirect	To focus on the experiences of military	Ethnographic fieldwork for a total of 30 days.	The researcher kept a field diary of events, and wrote	The findings were presented in the form of stories	*By far my favorite research article I have ever read. It was different but really made you feel like you were getting the true experiences from the veterans.

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
C. Douglas, Kitriana Cooke, Carlton	adapted sport: Two soldiers' stories of involvement	Journals Complete Psychology of Sport and Exercise	personnel in a recently developed intervention that uses inclusive adaptive sport and adventurous training for personal development.	conducted formal life story interviews with 11 men, but focused on one individual each week for an in depth narrative case study. The researcher was a "participating observer." Through this, informal interviews of 6 men were written	down during breaks and at the end of each day significant and insightful interactions. Memorable, verbatim phrases were included, along with expressions. Creative writing techniques were used to represent the story (flashback, metaphor, dramatic evocation).	for two particular participants. They chose these two participants because their stories complement each other, being at different stages of their disability - offers a wider perspective, and their stories are engaging and insightful portrayals of	-both participants seemed to praise meeting other with similar disabilities to gain perspectives and diminish previous stigma - both participants linked the challenges they faced in adventurous sport training to realize that they CAN do things and gave them a sense of will power/determination again.

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				<p>up in a field diary. The researcher created life stories for the individuals based off their interactions and conversations and the participants listened to their drafted story and were able to talk about it to the researcher and engage with the constru</p>		<p>military personnel experience of disability. The stories shed a light on how socialization created a positive impact on psychological factors, and sport helped them realize that they could do things they never thought they would be able to do again -</p>	

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
				ction of the story.		giving them hope and determination again.	
Vasudevan, Vijay Bouldin, Erin, Bloodworth, Shannon ; Rocafort, Lindaa	Likelihood of Meeting Physical Activity Guidelines of Veterans Who Are Obese by Disability Status	Drake Library EBSCO Host American Journal of Health Promotion	To explore the likelihood of meeting the physical activity guidelines in nationally, representative sample of veterans who are obese by disability status.	This study used the 2017 BRFSS (Behavioral Risk Factor and Surveillance System - which is an annual, random-digital telephone survey that collects data from all 50 states, District of Colum	Stata version 14.1 was used for all analyses. The two groups being compared were veterans who were obese with disabilities and without disabilities. All respondents with “don’t know/not sure/refused/missing” were excluded.	Veterans who are obese with a disability were LESS likely to meet both aerobic and strength activity recommendations compared to veterans who are obese without a disability.	<ul style="list-style-type: none"> • programs should take disability status into account when forming programs • Current VA programs to promote physical activity do not examine the PA of veterans by their disability status. • understanding how physical activity changes for veterans who are obese with disabilities = Better program structure to account for their barriers.

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				bia, and 3 US territories) core data set, which are a set of questions asked to everyone. All BRFSS data are self-reported. The study chose a sample of all participants who self reported being a veteran and being obese.			
Shirazipour, Celin	Quality physical	Drake Library	To explore the relation	Participants were veteran	Data was screened for missing	After event participation,	-Physical activity program conditions and elements are linked to physical

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a H. Latimer-Cheung, Amy E. Aiken, Alice B.	activity experiences for military Veterans with a physical disability: Exploring the relationship among program conditions, elements, and outcomes	Journal of Military, Veteran, and Family Health	relationship between precursors to quality participation, quality elements, and participation outcomes for veterans with physical disabilities.	studies with a physical disability that were participating in physical activity events with fixed start and end dates. A questionnaire was sent to participants a week before the event start for anyone who wanted to participate. This included contact	values, outliers, and normality. Multiple imputation was used for missing data. All subsequent analyses were conducted on each of the imputed data sets, with pooled results.	an indicator of the quality element belonging mediated the relationship between coach interpersonal skills and planning and intentions after event participation. The same indicator mediated a relationship between coach interpersonal skills and	activity participation outcomes.

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				info so a second questionnaire could be sent during the week after the event and a third questionnaire 3 months after the event.		family integration after event participation AND the 3 month follow up.	
Yeatts, Paul Davids, Ronald Oh, Jun Hwang, Gwang-Yon	The Impact of Game Outcome on Affect of Military Wheelchair Basketball Players	Drake Library EBSCO Host Adapted Physical Activity Quarterly	To investigate the affective changes according to game outcome among athletes with a disability	Data was collected before and after the first round of basketball games in the tournament. A survey	Used the statistical package for the social science. Repeated - measures analysis of variance were utilized to examine how game	Participants were in similar mood states prior to the start of the game. Participants who won experienced an increase	The magnitude of change in each component was greater for those who experienced the loss. The positive effect of winning may be stronger than the negative effect of losing. Lower levels of depression and anger after a win.

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			ity who were participating in a military wheelchair basketball tournament.	instrument was given to participants within 10 mins prior and post game. The physical activity affect scale was used to measure their affective state.	outcome groups changed on different affective states.	e in PA (energetic, enthusiastic, upbeat) and TR (calm, relaxed, peaceful) and a decrease in TA (awful, crummy, discouraged). Participants who lost decreased in PA and TR and increased in NA.	
Lundberg, Neil ; Taniuchi , Stacy ; McG	Female Veterans' Involvement in Outdoor	Drake Library Taylor & Francis Social	To explore what influence an all-female outdoor	Used classical Grounded Theory's theoretical	Interviews were video recorded. Interviews used Flicks triangulated design	Ways in which recreational structures provide novel	Social support networks and bonding, healthy distractions, “reconnect with a more authentic identity”

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Overn, Rachel; Smith, Shaina	Sports and Recreation: A Theoretical Sample of Recreation Opportunity Structures	Science and Humanities Library Journal of Leisure Research	sports and recreation program had on a small group of women who were injured in either Operation Iraqi Freedom or Operation Enduring Freedom.	sampling approach to collect data and further develop an emerging theory. Female veteran participants with PTSD and over half experienced Military sexual trauma while several also dealt with TBI and visual	by including the following question types: 1 narrative questions, repisodic questions (i.e., repeated evidence or episodes), and examples. Interviews were transcribed and entered into NVivo. Constant comparison method was used by researchers to find	environments where physical skill and emotional capacities could be developed: 1. Through the establishment of social networks; 2. By allowing individuals to experience a sense of freedom from the constraints of their current situatio	

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				<p>impairments.</p> <p>Data was collected via 2 interviews per participant.</p>	patterns.	<p>n, which in this case was a momentary relief of their negative psychological symptoms; and 3. By providing opportunities to redefine or recapture their identity as strong and capable women.</p>	
Lee-Hausler, Cecilia Rose;	Demographic and Functional Characteristics	Drake Library	To establish a baseline of common	Cross-sectional study. Use of the Function	SPORTACUS: self-reporting questionnaire on how	High FMA scores were reported on each of	<p>Sports participation is associated with the ability to function and participate in the community.</p> <p>Adaptive sports programs have a positive impact on</p>

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Schein, Richard M ; Schiappa, Vinc e J ; Pruziner, Alison L ; Tostetrude , Dave ; Goehard, Kristine E ; Nelson, Leif M ; Schmeler, Mark R	ics of National Veterans Wheelchair Games Participants: A Cross-sectional Study	EBSCO O Host Military Medicine	characteristics (demographic information, measures of function, QoL) for the Veteran population that participate in wheelchair sports.	nal Mobility Assessment (FMA) to collect data and the sports participation outcome resource tool and comprehensive uniform survey (SPORTACUS).	sports and recreational activities have impacted quality of life through 8 domains. FMA: Includes 10 items that measure the extent to which a mobility device aids a user in completing Mobility-Related Activities of Daily Living and measures the person's satisfaction.	the 10 items, and SPORTACUS scores scored above 5 on a 1-6 scale.	quality of life, daily function, community participation, and use of higher quality assistive technology.

