SEATED ATHLETES' MOTIVATION FOR PARTICIPATION IN WHEELCHAIR SPORTS:

A QUALITATIVE STUDY

By

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Abstract

The purpose for this phenomenological design qualitative analysis was to gain an understanding of the perspectives of seated athletes' motivation for participation in adapted athletics and argues that there is a component of seating that affects motivation. Occupational therapists build client interventions using meaningful occupations. This study aimed to increase awareness of adapted athletics impact on occupational performance. There was a gap in the literature for qualitative research exploring the lens of adapted sports participation through the perspective of seated athletes. This study utilized one-time individual semi-structured interviews with five participants that currently participate on a wheelchair court sports team to gain an understanding of perspectives on motivation for adapted sports participation. Semi-structured interviews were transcribed, and thematic analysis was used to discover emerging themes.

The results of this study included the discovery of four themes: identity, community, sport chair and classification, and health and self-improvement. Findings suggest that participation in adapted athletics may lead to improvements in self-perceived identity and independence, development of supportive communities, and improved motivation for optimizing wheelchair use.

Results of this study suggest that adapted sports participation may improve occupational performance for wheelchair users. The results from this study may support the use of adapted sports participation in occupational therapy practice for wheelchair bound individuals.

Keywords: Adapted Athletics, Wheelchair Sports, Seating and Positioning, Motivation, Sports Participation

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Chapter I: Introduction

Rates of individuals that participate in sports regularly are significantly lower for individuals with physical disabilities (Jaarsma et al., 2014). A participation discrepancy exists between athletes with disabilities and individuals without disability, with only one third of individuals with a disability participating in sports (Jaarsma et al., 2014). Barriers of participation for individuals with physical disabilities include not only their disability, but their current health status, injury induced low energy levels and fatigue, limited sports opportunities including accessibility issues, and transportation to practice and games. Individuals with physical disabilities describe that their participation in sports is related to having fun, for relaxation, health and fitness, and may depend upon their intrinsic motivation, self-efficacy, and preinjury participation in sports or athletics (Jaarsma et al., 2014).

Adapted sports serve to facilitate participation for individuals with disabilities. Adapted sports include any modifications to sporting events that allow the participation of individuals with disabilities (Côté-Leclerc et al., 2017). Wheelchair sports exist as a form of adapted athletics that provide the opportunity for participation of seated athletes. While motivation has been noted as a facilitator to participation in adapted sports, there is a lack of qualitative analysis literature that explores motivation for sports participation from the perspective of wheelchair bound athletes.

Wheelchair court sports identified by the Paralympics include rugby, basketball, and tennis (Janssen et al., 2023). Wheelchair athletes include individuals with disabilities that are wheelchair bound from trauma or disease, resulting in varying athletic capacities. (Janssen et al., 2023). Wheelchair rugby has a primary participation of individuals with spinal cord injury, as the game was designed for individuals with tetraplegia (Silveira et al., 2017). However, wheelchair

sports include individuals with various disabilities that lead to impairments in muscle power and limb deficiencies (Haydon et al., 2022). To account for individual differences in athlete ability level, classification scores are used in sporting events. For example, individuals participating in wheelchair rugby are assigned a classification score within a range of 0.5 - 3.5, the score increasing with ability level (Haydon et al., 2022). Each team must then arrange players so that during game play there are no more than eight total points on the court at a time (Haydon et al., 2022). Classifications scores are assigned after the individual undergoes strength, range of motion, and coordination tests of the upper extremities and trunk. As athlete classification varies, the seating and positioning set up of each athlete varies. Athlete classification will influence the setup of the chair used for sports participation (Haydon et al., 2022). Chair alterations may include changes to seating and wheel positioning. Wheelchair set-up and configuration for athletes is therefore an ongoing process and relies on experience from fellow players or adaptive sport coaches (Haydon et al., 2022). Optimal chair fit of wheelchair sport athletes can be difficult when striving for optimal game performance. Current literature on wheelchair seating and positioning focuses on quantifiable data for optimizing performance, however, there is a gap in the literature for exploring how motivation for participation in adapted athletics is impacted by seating and positioning for wheelchair bound athletes.

Historically, sports and rehabilitation have had dual roles due to the physical and psychological benefits that individuals with disabilities report (Hanson et al., 2001). Silveira and colleagues (2017) found that adult males with tetraplegia had lower levels of psychological distress when they practiced wheelchair rugby two or more times per week. And, sports participation has also been shown to lead to improved cardiovascular function, increased social interaction and self-esteem, increased perception of one's health status, and decreased symptoms

of depression (Costalonga et al., 2020). Therefore, sports participation may function as a meaningful occupation for individuals with a disability. Occupational therapy scope of practice includes health promotion, habilitation, and rehabilitation through enabling or enhancing participation in occupations that are meaningful to individual clients (AOTA, 2020). Health promotion is focused on empowering clients through increased independence and control over their own health. Occupational therapists use habilitation to improve daily functioning through skill acquisition or improvement. And rehabilitation is focused on improving independence of individuals experiencing limitations or deficits to physical, mental, social, or sensory systems. (AOTA, 2020). Occupational therapists are therefore qualified to use adaptive sports as a form of rehabilitation as it combines their knowledge and experience of adaptive equipment, activity analysis, and psychosocial issues (Hanson et al., 2001). More research is needed within the field of occupational therapy to understand motivation and adapted sports participation from the perspective of wheelchair bound athletes. Through understanding the motivation behind seated athletic participation, occupational therapists may be able to utilize adapted sports as a form of rehabilitation. The following capstone project will focus on the PIO question: What is the motivation behind participation in adapted athletics from the perspective of seated athletes?

Although motivation has been noted as both a facilitator and barrier to adapted sport participation, there continues to be lower sports participation for individuals with disability. Nevertheless, this study seeks to understand motivation for participation in adapted sports from the perspective of seated athletes and secondly argues that there's a component of seating that may affect participation. Because of the high variability in athlete seating, limited knowledge on optimal seating and positioning, decreased access to sport specific chairs, and limited literature to explore motivation from the perspective of seated athletes.

Statement of the Problem

The reported level of depression and psychological trauma are higher while level of life satisfaction is lower for individuals with physical disabilities (Silveira et al., 2017). Clinical depressive symptoms were significantly higher at 50% for individuals with physical disabilities and only 7% for those without disability (Silveira et al., 2017). Individuals with spinal cord injuries that participate in sporting or physical activity have improved mental health, social interactions, community involvement, and rates of employment (Silveira et al., 2017). And, individuals with disabilities that participate in adapted sports have similar positive outcomes to individuals without disability when engaging in sports (Silveira et al., 2017).

Due to the benefits associated with participation in sports and physical activity, individuals with disabilities that are wheelchair bound may benefit from participation in adapted athletics. Increased understanding of the motivation behind participation in adapted sports for wheelchair bound individuals may lead to improved evidence supporting the use of sports participation in occupational therapy intervention. Emerging is an understanding of the lived experience of wheelchair bound athletes and their perspectives on motivation for sports participation.

The intent of this study is to contribute to current literature on the meaning of becoming a wheelchair bound athlete and the motivation that contributes to their successful engagement in this leisure occupation. While the current research studies focus on quantifiable data regarding wheelchair adapted athletes, this study seeks to understand the experiences of wheelchair bound athletes and motivation for participating in wheelchair court sports, such as rugby, basketball, and tennis. The purpose of this study is to discover the motivation for participation in adapted athletes that engage in adapted sports.

Definition of Terms

Classification (conceptual): Sport specific grouping that determines the impact of each impairment on the ability to perform various sports related activities and determines an athlete's ability to participate in a paralympic sport. (World Para Athletics, n.d.).

Seated Athlete (operational): An athlete that uses a wheelchair to participate in their chosen sport.

Wheelchair court sports (conceptual): Hand rim wheelchair sport performed on a court, including basketball, tennis, and rugby (Janssen et al., 2023).

Chapter II: Literature Review

Sports as an Occupation

Occupations are composed of meaningful activities that individuals intentionally participate in to occupy their time and bring meaning to their lives, improving health and wellbeing (AOTA, 2020). Leisure occupations differ from obligatory occupations such as self-care due to their intrinsic motivation and use of discretionary time (Costalonga et al., 2020). Participation in leisure occupations is associated with enjoyment of the activity, increased satisfaction and self-esteem, and improved feelings of well-being (Côté-Leclerc et al., 2017). Due to the mental and physical benefits associated participation, leisure occupations may lead to improvements in quality of life. Some individuals with disabilities engage in adapted sports as a leisure activity (Côté-Leclerc et al., 2017).

As a leisure time activity, sports participation incorporates physical activity, social interactions, recreation, and personal enjoyment (Eime et al., 2013). Due to the social context, sports participation has been acknowledged to have improved psychosocial benefits compared to other forms of physical activity (Eime et al., 2012). Individuals are often intrinsically motivated for participation in their sport of choosing because it is an enjoyable activity (Eime et al., 2013). Sports participation can also lead to positive physical, mental, and social wellbeing for individuals who participate (Costalonga et al., 2020). With limited available sporting opportunities, there are only around thirty percent of adults with disability that participate regularly in sports-based activities. (Mcloughlin et al., 2017).

Adapted sports are a form of adapted physical activity and encompass a variety of individualized adjustments to facilitate participation (Mcloughlin et al., 2017). Due to the engaging aspects of sporting activities, utilizing sports as an occupation during rehabilitation for

individuals with disability may serve as an alternative to traditional rehabilitation methods (Hanson et al., 2001). The benefits of participation in sporting activities should be explored.

Benefits of Sports Participation

The benefits of participation in sporting activities for individuals with physical disabilities has similar effects on mental health to the participation of those without disability (Silveira et al., 2017). For individuals with a spinal cord injury, participation in sports and physical activity, such as structured movement, have led to improvements in mental health and quality of life, increased independence, integration within the community, employment status, and improvements to social life (Silveira et al, 2017). Due to the positive impact of sports participation for individuals with spinal cord injury, sports may lead to enhanced quality of life for those that engage. Male athletes who participated in wheelchair rugby had lower rates of depression and perceived stress on a self-report scale, when they took part in the sport a minimum of twice per week when compared with to individuals that participated a maximum of once per week (Silveira et al, 2017). In conclusion, participation in sports function as a form of physical activity and exercise. At the neuronal level, exercise elevates brain derived neurotropic factor in the hippocampus (Bathina & Das, 2015). Increased levels of brain derived neurotropic factor leads to improved neural plasticity and neurotransmitter modulation, which boosts learning and memory formation (Bathina & Das, 2015).

Sports participation may also be associated with increased level of community integration for individuals with physical disabilities. Comparisons between athlete and non-athlete groups showed that individuals involved in sports as an occupation scored higher in levels of community integration on the Craig Handicap Assessment and Reporting Technique (CHART) (Hanson et al., 2001). Individuals classified as athletes regularly engaged in a minimum of four hours of

wheelchair sports per week prior to the study or participated in aerobic exercise at a minimum of 30 minutes a day for at least three days out of the week (Hanson et al., 2001). The CHART is a standardized instrument that assesses physical independence, mobility, occupation, social integration, and economic self-sufficiency to determine level of community integration (Hanson et al., 2001). Since low levels of community integration have been associated with low life satisfaction, it is important to consider the impact sports participation may have on community integration (Hanson et al., 2001). Due to the association between community integration and life satisfaction, participation in sports may lead to improved quality of life. For adapted athletes, aspects that facilitate participation should be explored, such as the importance of seating for adapted sports participation.

Seating Importance

For wheelchair bound athletes, wheelchair configuration and setup are important aspects of their participation in sports. Due to the individual athletes' impairment type, severity of disability, activity demands and team role, and even individual preferences for optimal performance wheelchair configurations can be subjective (Haydon et al., 2022). Aspects of wheelchair configuration that could affect performance include height, depth, and angle of the wheelchair seat, wheel diameter and camber angle (Haydon et al., 2022). A cambered angle is often used on sport specific wheelchairs and positions the wheels of the chair at an angle so that the wheels are slanted inwards at the top of the chair (Tsai et al., 2012). Utilization of a cambered wheel improves sport performance through improved turning speed, increased chair stability, and improved comfort and protection of the hands for propulsion (Tsai et al., 2012).

Athletes use strapping techniques and alter their seating position to increase stability while in the wheelchair to account for instability from impairment (Vanlandewijck et al., 2011).

While athletes have used this adaptation to their seating for increased stability performance and seating safety, it can also lead to a posterior tilt of the pelvis, which creates decreased abdominal muscle power and poor shoulder positioning for wheelchair propulsion. This posterior pelvic tilt can restrict trunk mobility decreasing ability to initiate wheelchair acceleration from a standstill (Vanlandewijck et al., 2011). Since wheelchair seating and configuration can be impacted by the extent of impairment, the athlete classification score needs to be considered.

Classification scales for wheelchair court sports were created to increase participation and inclusion of individuals with various disabilities into paralympic sporting activities (Vanlandewijck et al., 2011). Development of a classification system decreased the degree that an individual's impairment level would have on the competition outcome (Vanlandewijck et al., 2011). Wheelchair court sport athletes are assigned a classification score or point system based on their activity limitations. (Haydon et al., 2022). For wheelchair rugby, classification scores of all players may not exceed eight points on the court at a time (International Paralympic Committee, n.d.-a). Athletes can be ranked on a scale between 0.5 and 3.5 points. Classification scores are based on available movement at both the arms and trunk that would impact an athletes' ability to handle the ball or maneuver their wheelchair around the court. Ball handling skills include the ability to dribble, pass, catch, and carry the ball while wheelchair maneuverability impact the ability to start and stop movement, block and tackle opponents, propel the wheelchair, and make quick turns (International Paralympic Committee, n.d.-a). The classification system for wheelchair basketball applies similar principles, with athletes scored between 1 and 4.5 (International Paralympic Committee, n.d.-b). Individuals who participate in wheelchair basketball do not typically have upper extremity impairments, so their classification scores are focused on trunk control and sitting balance (International Paralympic Committee,

n.d.-b). Unlike wheelchair rugby and basketball, classification scores of wheelchair tennis are divided into two classes. Wheelchair tennis consists of both an open and quad classification system (International Paralympic Committee, n.d.-c). Individuals that are consider for the open class have normal function in their upper extremity and a permanent impairment in one or both of their lower extremities. Individuals considered for the quad classification must have upper extremity impairments that cause limitations to racquet handling skills and wheelchair maneuverability (International Paralympic Committee, n.d.-c).

While current literature focuses on the impact wheelchair configuration has on athlete performance, there is a gap in research to explore how being a seating athlete affects the motivation for one to participate in wheelchair court sports. Wheelchair court sports consist of individuals of varying ability levels and a variety of seating needs. Since setup and configuration of sport wheelchairs for seated athletes requires individualized alterations and has a high impact of optimal performance, the perspectives of motivation for seated athletic participation should be further explored.

Motivation

Motivation has been listed as both a barrier and facilitator to sports participation for individuals that participate in adapted athletics, with lack of motivation considered a barrier to participation and intrinsic motivation listed as a facilitator (Jaarsma et al., 2014). There are three main types of motivation: amotivation, intrinsic motivation, and extrinsic motivation (Mcloughlin et al., 2017). A lack of motivation to engage in activities is considered amotivation. Intrinsic motivation is the internal drive to participate in an activity. And extrinsic motivation is the drive to participate in an activity for gratification from an external reward (McLoughlin et al., 2017).

Mcloughlin and colleagues (2017) utilized semi-structed interviews with elite athletes with physical disabilities to understand the motivators, facilitators, and barriers associated with sports participation at the elite level. Common themes for motivation for participation in elite level sports focused on supportive networks, physical and mental motivators, and achievement of goals (Mcloughlin et al., 2017). Some elite athletes have attributed recreational participation, preinjury sports participation, and early exposure to sporting activities as initial motivation for participation in competitive sports. Elite athletes experienced improvements to both their physical and mental health, that contributed to both intrinsic and extrinsic motivation for sports participation. Elite athletes have also attributed the love of competition and internal drive to compete as a form of intrinsic motivation for athletic participation (Mcloughlin et al., 2017).

Athletic participation fostered goal formation as a form of both intrinsic and extrinsic motivation as athletes expressed breaking personal records and participating in the Paralympics as form of motivation (Mcloughlin et al., 2017). The access to a supportive network were identified as a facilitator and continual source of motivation to participate at the elite level for athletes with physical disabilities. Support networks were considered a form of intrinsic motivation and included support from teammates, coaches, friends, and family (McLoughlin et al., 2017). Elite athletes identified a lack of awareness or recognition of adapted athletics, lack of time, high-cost barriers, and overuse injuries as barriers to participation in athletics (McLoughlin et al., 2017).

While motivation for sports participation has been explored in elite level athletes with physical disabilities, there continues to exist a gap to understand the perspectives of motivation for sports participation in seated athletes. Due to the impact of seating and positioning on athletic

performance, there is a need to explore the motivation for participation, and more specifically sports participation, in seated athletes, otherwise known as wheelchair bound non-elite athletes.

Statement of Purpose

The primary purpose of this study was to gain an understanding of the how being a seated athlete affects the motivation for one to participate in adapted athletics, as informed by semistructured interviews with those that participate. The secondary outcome of this study is to discover if there is a component of seating that affects participation in wheelchair sports.

Objectives

- Increased understanding of the motivation for participation in adapted athletics from the perspective of wheelchair athletes
- Discover if seating has an impact on participation in wheelchair sports
- Increase awareness of adapted athletics impact on occupational performance

Theoretical Framework

The Person Environment Occupation (PEO) framework was utilized as the occupational therapy model for understanding motivation for participation in adapted athletics for seated athletes. This model highlights the effect on occupational performance through the influence of the interactions of the person, their environment, and chosen occupation (Law et al., 1996). The PEO model guided the understanding of motivation in the context of the person, their environment, and occupation for athletes that participate in seated athletics. Motivation for adapted sports participation was explored through the person and their identify as an adapted athlete. The athletes' interactions with their environment were also explored to understand any barriers or facilitators to participation. Finally, the occupation of seated athletics was explored to understand a holistic

view of the athlete, their environment, and their occupation to better understand the impact of motivation on participation in adapted athletics.

Chapter III: Methodology

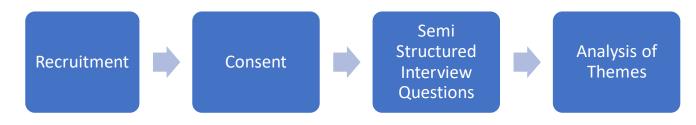
Agency

The agency supporting this project was the High Rollers Adaptive Sports Foundation. The High Rollers Adaptive Sports Foundation was selected due to their support of Wheelchair Sports in the Las Vegas area. The High Rollers Foundation supports the Las Vegas High Rollers Wheelchair Rugby Team, a nationally ranked adaptive sports team in Las Vegas (High Rollers Adaptive Sports Foundation, n.d). The High Rollers Adaptive Sports Foundation provided the opportunity to work with individuals that currently participate in wheelchair rugby and participate in adapted athletics. The High Rollers Adaptive Sports Foundation is a volunteer run organization and adaptive athletic events rely on volunteer participation to create an inclusive space for adapted athletes (High Rollers Adaptive Sports Foundation, n.d.).

Study Design

To gain an understanding of the motivation for participation in seated athletics, the study utilized a qualitative phenomenological research design. A phenomenological research design was selected as it seeks to understand the lived experience of participants (Law & MacDermid., 2014). Utilizing a phenomenological research design required that the researcher engaged with the participants life to analyze and understand the experience of an individual or group (Law & MacDermid., 2014). To increase understanding of the motivation for participation in seated athletics, the study utilized convenience and snowball sampling to recruit participants for semi-structured interviews. After completion of interviews, data was analyzed for emerging themes. See figure 1 for study flow. This study was granted IRB exemption status on January 19th, 2024, the identification number is IRB UNLV-2023-425.

Figure 1: Study Flow



Target Population and Recruitment

This study focused on individuals that were current active members on a wheelchair court sport team. Participants were selected based on inclusion criteria of (1) 18 years old or older, (2) English speaking, (3) consent to audio recording, (4) participation on wheelchair court sport team for more than six months, (5) participation in at least one wheelchair court sport officiated game. Participants were excluded from the study due to (1) lacking access to a video conferencing device, (2) not being a seated athlete, and (3) lacking the mental capacity to meaningfully participate in semi-structured interview. Individuals that were eligible for participation but were unable to participate due to time conflicts or issues with communication devices were classified as "screen failures" and not enrolled as participants of the study.

Sampling and Recruitment

Five participants were recruited for individually conducted semi-structured interviews through electronic e-mailed flyers and word of mouth via convenience sampling and snowball sampling through Las Vegas High Rollers and United States Wheelchair Rugby Association. See appendix A for electronic flyer and see appendix B for recruitment e-mail. Recruitment of

participants were through capstone placement site, High Rollers Adaptive Sports Foundation. Participants were able to sign up for the study via e-mail. Verbal informed consent was be guided and obtained by the doctoral student on a zoom call prior to the beginning of interview questions.

There was a total of five participants enrolled in this study. Participants were all active players on a wheelchair rugby team. Of the five participants, four participants had a spinal cord injury, and one had a diagnosis of multiple sclerosis. All five participants were male, and no females were recruited.

Once participant eligibility was confirmed, zoom interviews were scheduled via email. Informed consent forms were sent to participants to review prior to the scheduled interview. See appendix C for a copy of the informed consent form. The student researcher began each scheduled zoom call with an overview of the study and interview process. The student researcher then read informed consent forms verbatim and obtained verbal consent. Once verbal consent was obtained, the student researcher proceeded with the semi-structured interviews. Interviews followed a list of semi-structed interviews and allowed up to 120 minutes for each participant. See appendix D for list of semi-structured interview questions. Semi-structured interview questions were developed by the student researcher and used as a guide during interviews to provide structure. Developed questions were opened ended and allowed each participant to answer to the full extent they desire. When needed, follow up questions were asked. Participants were informed of their right to refrain from answering any question.-At the conclusion of the study, participants were given a \$50 gift certificate to Target for their time.

Data Collection

The student researcher conducted recorded semi-structured interviews with five participants via individual zoom calls to better understand the perspectives of seated athlete motivation for participation in adapted wheelchair athletics. Interview times averaged 44 minutes and 33 seconds in length, with a range of 25 minutes and four seconds to 55 minutes and 30 seconds. To maintain participant confidentiality, participants were asked to turn off their cameras and utilize an alias on the video conferencing platform before the recording begins.

Data Analysis

Qualitative analysis via semi-structed interviews were used to understand the perspectives of seated athletes' motivation for participation in adapted athletics. Semi-structured interviews were recorded and transcribed verbatim by the student researcher. Recordings were first transcribed utilizing artificial intelligence (AI) technology via the dictate feature on Microsoft Word for Mac (Version 16.60). To ensure accuracy, the student researcher then reviewed the recording while reading along with the AI transcriptions. The student researcher then made manual corrections to the transcriptions to account for AI inaccuracies. Both recordings and transcriptions were stored with password protections.

Transcriptions were then uploaded to Atlas.ti (Version 24), for analysis of the data. The transcriptions from the interviews were then studied by two researchers independently to find emerging trends. The two researchers utilized thematic analysis to agree on a code and develop a code book. The two researchers then met to develop emerging themes from the codebook. The two researchers reviewed transcriptions separately to increase the validity of the themes through triangulation. Triangulation was used to increase the trustworthiness of the discovered themes (Taylor, 2017). After initial development of the themes, a third researcher reviewed the transcriptions and developed themes to provided neutral feedback. To increase trustworthiness,

all researchers independently reviewed the data for codes and themes prior to meeting discuss results as a form or peer debriefing (Taylor, 2017).

Withdrawal

Participants were informed that their participation in the study was completely voluntary. While reviewing the informed consent, the student researcher informed participants of their right to decline to answer any of the question(s). Participants were informed that they may withdrawal from the study at any point and data collected from them will not be used. All five participants completed the study and there were no dropouts.

Ethical and Legal Considerations

Participants were free to decline any questions, ask for a break during the interview, or drop out of the study at any time. Semi-structured interviews were conducted on an online video conferencing platform and there was a risk of a breach in participant confidentiality. To decrease the risk of a breach in confidentiality, the student researcher instructed participants to conduct the interview in a private location. To maintain confidentiality, the student researcher instructed participants to utilize an alias on the video conferencing call and turn off their camera prior to the start of the recording. Participants were informed that their participants were able decline to answer any question(s). Participants were informed of their right to withdrawal from the study at any point and data collected from them would not be used.

Chapter IV: Results

The study consisted of a total of n = 5 participants. Of the five participants n = 4 had a spinal cord injury and n = 1 had a diagnosis of multiple sclerosis. All participants n = 5, were current participants of the same wheelchair rugby team. Of the participants, n = 5 were males and n = 0 were female. See table 1 for sampling characteristics.

Sample Characteristics	
Injury	
Spinal Cord Injury	4
Multiple Sclerosis	1
Gender	
Male	5
Female	0
Sport	
Wheelchair Rugby	5
Other Wheelchair Court Sport	0

Table 1: Sampling Characteristics

Four themes were developed from the transcribed and coded semi-structured interviews that focused on motivation for participation in seated adapted athletics from those that participate. Discovered themes included identity, community, sport chair and classification, and health and self-improvement. See table 2 for developed themes and codes. The data demonstrated that participation in seated athletics had a role in identity formation post injury. Participants spoke about the sense of community with participation in wheelchair sports and the ability to learn from other wheelchair users in a judgement free space. The data also showed the importance of correct seating and positioning and classification scores for those that participate in wheelchair sports. Participants also acknowledged wheelchair athletics as an outlet for maintaining good health and self-improvement.

Themes	Codes	Quotes
Driving Athlete identify Competition Paralympic team	Identification formation Driving	I don't know what I would be doing without it
	Competition	It got me back to being able to be strong enough to live independently.
	Paralympic team Increased independence	But after I played rugby and like had that mentality, I was like well I could figure it out, And now I drive a Tundra all the time
Community Camaraderie Judgment free space Tips and Tricks Supportive environment Motivating Others	very motivational, just to know that I'm becoming an important part of the team	
	Supportive environment	really good for camaraderie and realizing that you're not alone in this situation.
		getting new guys in and playing, who you know maybe they've kind of lost some motivation in general in their life and tha really sparks like -wow there is a possibility to be independent.
1	Classification and Seating Setup Improved Seating Motivation	every time I got in the chair that it actually gave me confidence
	Seating Importance Seating Posture	I made an adjustment I got better in the seat and was able to push better, throw better, catch better
		I just didn't have the strength really to do anything in it. So then the next time they put me in a low point chair. And that was sort oj when I realized, you know I have to be classified as a low pointer.
Health and Self Improvement Health Benefits Improved Strength Previous Participation Increased Importance for S Participation		so being able to strengthen what I have was really attractive to me
	Increased Importance for Sports	the sport itself and the exercise, keeping me healthy and all that.
	r atucipation	first and foremost, I do it for the exercise

Table 2: Themes and Codes From Interview Data

Theme one: Identity

Theme one emerged from the following codes: identity formation, driving, athlete identity, competition, paralympic team, and increased independence. Participants described the impact that adapted sports had on their identity post injury or diagnosis. Participant five stated that his initial motivation for participating in adapted sports was increasing independence and, *....getting more comfortable in my body*. Participants also spoke of shifting their view to a more positive self-identity. Participant one stated, *....if I hadn't done rugby, I still would be crippled in a lot of ways if that makes sense*.

Participants discussed the impact sports participation had on their motivation to build up their independence and be viewed as independent by others. Participant four spoke of identifying independence in the realm of developing and maintaining romantic relationships. Participant four explained that, *Seeing a large number of guys that met, not just a one-off thing, that met their girlfriends, wives, whatever after their injury. That's pretty motivating too, and you kind of want to be a little more independent. Because when you see something like that. You really don't want your girlfriend or wife doing as much for you as you have to. It's kind of a downer on a first date.*

Participants spoke on the impact sports participation had on their independence level, and their identity changed from seeing themselves as dependent on others to realizing they were able to maintain their independence. All participants spoke of driving and seeing other rugby players drive despite their function level made them realize that they could also become more independent. Participant one described the impact playing rugby had on his ability to view himself as someone that could be independent. Participant one stated,*I wouldn't have got a*

job, I wouldn't be driving again, I wouldn't be doing, I wouldn't be getting on planes and things like that if I..... if I didn't see other rugby players doing so. It was very inspirational for my life.

Participants also spoke of the impact that competition from adapted sports had on their ability to identify as an athlete. Participant one stated, *....it's a really good thing to still have competition and people still treat you like an athlete.* It was important to the participants that their sport still provided the opportunity to be competitive in their sports. Participant five highlighted the importance of finding a wheelchair sport that provided a level of competition and stated, *....nothing in a wheelchair sounded like interesting to me and then I found out about wheelchair rugby and it was all this contact and it seemed super competitive.* Additionally, multiple participants spoke on their sport being included in the paralympic games, stating that they aspired to compete at that level one day.

All participants spoke on their independence level, attributing participation in wheelchair sports to have significantly improved their ability to become and view themselves as independent. Participant five recounted his experiencing with gaining independence, stating, so probably three months after I had seen rugby, I started playing and from that time I was very dependent with everything. And playing the sport helped with you know that strength, but then also the community helped me see other ways to do things, and others things I can use to be more independent, like quad tools or active hands. And then just realize that, realizing that it's okay to fall. You don't have to be so scared to you know.... be in a situation because you're always gonna be able to to find somebody to help and then also get strong enough to be able to to get yourself like back up off the floor you know stuff like that.

Theme two: Community

Theme two emerged from the following codes: camaraderie, judgment free space, tips and tricks, and supportive environment. All five participants spoke highly of the community they gained through participation in adaptive sports. When discussing the wheelchair athlete community, participants described the importance of being around other individuals that were in wheelchairs. Participants expressed motivation to participate in wheelchair sports for the sense of camaraderie they gained from their participation. Participant one shared, *.....that you're never gonna get the camaraderie anywhere else unless you join a sport like this.*

Additionally, participants spoke of the creation of judgment free space within the adapted sports community. Participant one explained the importance of finding a judgment free space through the adapted sports community to connect with individuals that share a similar experience. Participant one stated,But these guys on the court like we have a camaraderie, like you don't understand, like everybody knows that when you know...... if something happened like with a recent accident or you know bathroom or bowel bladder incident - we all been there so you know it's not like.... It's no judgment, it's just you know we gotta do whatever we can do to help.

All participants explained different tips and tricks that they learned through the adapted sports community on living with their disability. Participants referred to the adapted sports community as a place to learn various tips and tricks for independent living skills. Since participation in adapted sports does not require insurance reimbursement, the community gained through sports participation serves as a place to learn skills beyond therapy. Participant four added that, *....this is something you could do just about the rest of your life and you're not necessarily gonna be in therapy the rest of your life.*

All participants spoke of the support that they gained from the adapted sports community. When questioned on the perspectives from a wheelchair athlete, participant two stated, ...well I would share that it can be an emotional roller coaster sometimes, it can frustrate, it can frustrate you, it can you know make you lose your mind sometimes, but when you get to a good group of people you know it'll, it'll change your life.

Theme three: Sport Chair and Classification

Theme three emerged from the following codes: classification and seating setup, improved seating motivation, seating guidance, seating importance, seating posture, and hard work. Participants spoke on the athlete classification system and the impact is had on their seating setup and motivation to participate in adapted sports. It was discovered that seating setup is associated with classification and therefore it is common to reach out to others with similar classification scores for advice on seating and positioning. Additionally, the type of sport specific chair is impacted by athlete classification and being unsure of athlete classification may impact the ability of an individual to find a sports chair and begin optimizing seating setup. Participant four stated, ...*the other thing too is, you wanna get a chair early on, but you might not know your class either, so that kind of holds you up.*

While participants spoke of the difficulty associated with finding an optimal seating setup, it was also noted to have an impact on motivation for sports participation. Participants noted that when making alterations to seating and positioning, it increased motivation to participate in adapted sports when seating improvements were made. Participant one stated, *you feel it. You know when you push if you're pushing fast enough, you know if it's harder pushing in this position.* However, another participant described having decreased motivation to participate

in sports when his seating setup felt off. Participant three stated, ...umm but it just feels like the chair doesn't fit and it makes me less excited to, to get out there.

Participants also spoke of the impact their sports chair had on their motivation to propel their everyday wheelchair. Participant four stated, *....it's kind of surprising how quick you can go and propel them relative to your everyday chair. So that was fun. I think they gave me a little more motivation to propel my everyday chair too*. Another participant spoke about trying to replicate the seating setup he got in his sports chair to his everyday chair due to the impact it had on his posture.

One participant went into detail about the impact that participating in wheelchair sports had on his seating posture for both his sports chair and his everyday chair. Participant five described sitting in the sports chair, stating, ... you're more upright, you can push the chair with like full control and it, it actually changed the way that I built my manual chair, cause before I was sitting super high, and it was hard to push and maneuver. Participant five went on to explain that he when building his manual chair, he wanted to replicate good posture as if he was walking. Participant five added,I'm not generally chilling in my everyday chair. Like when I go to somebody's house or I'm at home, I'm like hopping out of it and I'm sitting on a couch, or you know something more comfortable.

It was also discovered that the sports chair provided the opportunity for wheelchair users to work hard. One participant spoke on his experience getting in the rugby chair and described rugby as form of hard work that helped him get a good night's rest post injury. Participant one stated, *but when you get in that chair and you work or you do you do things that make, when you make yourself tired, and you get a good night's rest, like it's nothing like that.*

Theme four: Health and Self Improvement

Theme four emerged from the following codes: health benefits, improved strength, previous participation, and increased importance for sports participation. All participants spoke on the health benefits acquired through adapted sports participation as a form of motivation to participate. Participants noted that some of the initial appeal to wheelchair sports was focused on the health benefits. Participant two stated that, *…in the beginning it was just, you know a way to exercise and do fitness, uhm it has morphed into the …. because for me a lot of it is the camaraderie.*

One of the health benefits that the participants touched on was the ability to improve their own strength through wheelchair sports. Participant five stated, ...you know I don't have full use of all my limbs. So being able to strengthen what I have was really attractive to me. Participants attributed the increased strength from participating in wheelchair sports to increasing their independence level. Participant one stated, ...I felt how strong I was getting. My transfers got better, I started being able to do this, get dressed on my own and things like that.

All participants spoke of their previous participation in sports prior to becoming a wheelchair user. Participants stated that their prior participation in sports had an impact on their motivation to participate in adapted sports. Participant two spoke of his love of basketball, stating that, *....realized oh wow, I could do wheelchair basketball, you know it's a little harder obviously, but let me, let me give it a shot.*

Some participants stated that while they were involved in sports prior to becoming a wheelchair user, their motivation for sports participation was different post injury. Participant one spoke on the increased importance for sports participation in his life to maintain his strength to be independent. When talking about maintaining his physical health, participant one stated,

it was because every pound that I gained is a pound that I have to lift, and for me to be independent I have to be this size.

Chapter V: Discussion

Physical activity has been shown to have positive impact on the physical, mental, and social health of individuals with disability (Ramsden et al., 2023). However, there is a lack of literature to explore to perspectives of seated athletes and their motivation to participate in adapted sports and the impacted seating may have on motivation. The purpose of this study was to discover the motivation for participation in adapted athletics from the perspectives of seated athletes that engaged in wheelchair court sports. The study also argued that seating may have an impact on motivation to participate in adapted athletics. The aim of this study was to increase awareness of the impact participation in adapted athletics may have on occupational performance for wheelchair users. Through semi-structured interviews with individuals that participate in wheelchair rugby, it was discovered that identity, a sense of community, the sports chair and classification, and health and self-improvement all impacted the motivation to participate in adapted sports. Participants included wheelchair rugby players (n = 5) that were current active players on a wheelchair rugby team. The population in this sample is representative of wheelchair rugby players that all participate on the same rugby team. While this sample provides perspectives of seated athletes, further research needs to be conducted to determine if athletes participating in different wheelchair court sports or athletes located in different geographical areas share a similar experience to those in this study.

Identity

A major theme that emerged from interviews with seated athletes participating in wheelchair rugby was the impact adapted sport had on their identity post injury or diagnosis. This positive impact on an individual's identity post injury or diagnosis can be utilized to support adapted sports as an occupation for individuals with disability to engage in. Participants spoke of

the independence they gained through participation in wheelchair rugby. One participant explained how wheelchair rugby got him *back to being able to be strong enough to live independently*. Sports participation can be used in occupational therapy practice to promote health and wellbeing (Costalonga et al., 2020). While sports participation can improve health and wellbeing, participation in wheelchair sports provides an opportunity to maintain physical activity while being surrounded by individuals that share a similar life experience. Wheelchair rugby can therefore function as form of adapted physical activity while providing knowledge on independent living skills from teammates with similar injuries and function levels. The independence gained through adapted sports participation may attribute to a positive self-identity post injury or diagnosis.

Automobile driving is classified as an instrumental activity of daily living that may improve self-perceived health and well-being due to increased independence in community mobility (Di Stefano et al., 2019). Multiple participants in the study spoke of the role wheelchair rugby had in their driving independence. Participants spoke on seeing teammates with less function than them driving as a motivating factor to pursue driving again. Additionally, participant five spoke about wheelchair rugby developing his *figure it out mentality* that eventually led him to driving his Toyota Tundra truck, despite it being a difficult to vehicle to transfer into. This finding suggests that adapted sports participation may encourage athletes to pursue goals or life desires that may have initially felt unattainable post injury or diagnosis. Adapted wheelchair sports can function to give individuals coping with new injury or diagnosis the motivation to become independent, leading to a positive self-identity. Occupational therapist and other allied health professionals can use these findings to encourage sports participation as a

positive leisure occupation for patients struggling with their identity after a life changing injury or diagnosis.

Community

Another major theme emerging from the interviews focused on the community gained from participation in wheelchair rugby. The discovery of this theme supports the use of adapted sports participation as a potential community resource for wheelchair bound individuals. Individuals with spinal cord injuries that participate in sports post injury score higher than their non athlete counterparts with spinal cord injuries on community integration scores (Hanson et al, 2001). Occupational therapist and other allied health professionals can use adapted sports communities as a resource to provide patients with supportive networks throughout recovery and after discharge.

All participants spoke of the positive impact the adapted sports community had on their lives post injury of diagnosis. Participant one explained *if something happened like with a recent accident of you know bathroom or bowel bladder incident – we all been there so you know it's not like....It's no judgement, it just you know we gotta do whatever we can do to help. This finding suggests that participation on an adapted sports team can help individuals feel a sense of acceptance through interactions with team members. The ability to exist in a judgement free environment can therefore help patients feel a sense of confidence and normalcy in novel activities of daily living post injury or diagnosis.*

As noted by participant four, *you're not necessarily gonna be in therapy for the rest of your life*. Participant four explained that while he felt therapists could teach some of the skills he learned through sports participation, rehabilitation therapy does not last forever. As pointed out by participant four, adapted sports is *something you could do just about the rest of your life*.

Occupational therapist and other allied health professionals can use this information to support adapted sports communities as positive resources for their patients throughout rehabilitation and throughout the lifespan.

Seating

While participants touched on optimizing the seating setup of their sports chair as increased motivation for participation in adapted sports, the biggest takeaway was the impact that the sports chair had on utilization of an everyday chair. Improvements in wheelchair skills such as propulsion and turning can improve accessibility and independence of wheelchair users (Best et al., 2015). Participants talked about the sports chair increasing their motivation to self-propel their own manual chair. Another participant spoke of changing his manual chair to mimic his rugby chair and improve his seating posture. Therefore, participation in adapted wheelchair use. This finding suggests the use of adapted sports participation by occupational therapist and other allied health professionals may improve comfortability and confidence in a manual chair for new wheelchair users.

In conclusion, participation in adapted athletics may lead to improvements in selfperceived identity and independence, development of supportive communities, and improved motivation for optimizing wheelchair use. As an occupation, adapted sports may impact clients throughout the various contexts of their life. Therefore, participation in adapted athletics may be used by occupational therapist and allied health professionals to improve occupational performance in wheelchair users.

Limitations

The primary limitation of this study is the sampling characteristics, with all participants belonging to the same wheelchair rugby team. Team members may share a similar experience and therefore perspectives shared by participants may not be a true representation of all seated athletes. Additionally, since all participants included in the study played rugby, the results from this study may not apply to wheelchair athletes that participate in other seated sports.

Conclusion

In conclusion, the purpose of this qualitative phenomenological research study was to gain an understanding of the perspectives of seated athletes' motivation for participation in adapted athletics and argue that there is a component of seating that affects participation. Through semi-structured interviews with five participants that currently participate in wheelchair rugby, four main themes emerged. Themes included identity, community, sports chair and classification, and health and self-improvement. The results from this study should inform allied health professionals, including occupational therapists of the impact sports participation may have on occupational performance of wheelchair users. In practice, clinicians should encourage the occupation of sports participation for the positive impact on individual identity, connections to supportive communities, and potential motivation for improved wheelchair seating. The next step in research is to discover if similar results are true for wheelchair rugby participants in different geographical locations. Additional research should also be conducted to determine if participation in other adapted sports have similar impacts on occupational performance for those that participate. Further research should be conducted to determine if participation in the occupation of adapted sports can be implemented in the clinical setting for improved rehabilitation and occupational performance outcomes for those that participate.

Appendix



Do you participate in wheelchair sports?

Interested in sharing what motivates you?

Who can participate?

- 18 years or older
- · English Speaking
- Consent to audio recording
- Participation on wheelchair court sport team for >6 months
 Participation in at least one wheelchair court sport officiated game

The purpose of this study is to gain an understanding of how being a seated athlete affects the motivation for one to participate in adapted athletics and to increase awareness within the OT community of the impact of adapted athletics on occupational performance

What do you have to do?

Participate in a one-on-one recorded interview lasting between 60-120 minutes that focuses on the perspectives behind motivation for participation in wheelchair adapted athletics.

If eligible, you will receive a 50\$ Target gift card for completing this study

Please Contact Us:

Donnamarie Krause, PhD, OTR/L donnamarie.krause@unlv.edu and Audrey Miller OTD/s millea39@unlv.nevada.edu 702-895-1844

Appendix B Recruitment Email Script:

To whom this may concern,

My name is Audrey Miller and I am an occupational therapy doctoral student completing my capstone research project with a focus on motivation and adaptive sports participation. We are looking for 2-6 participants to be a part of our study to gain an understanding of how being a seated athlete affects the motivation for one to participate in adapted athletics. This study will require no more than 2 hours of your time, requiring only 1 recorded interview conducted via zoom or google meet between January 2024- March 2024. Informed Consent will be reviewed by the doctoral student prior to the interview. Verbal consent will be obtained prior to the start of the interview and consent forms will be sent via e-mail or mail for signatures thereafter. There will be a \$50 gift card to target as compensation for your time at the conclusion of the study. Please see attached flyer for more information.

If you are interested in signing up or learning more about the study, please reach out via email at <u>millea39@unlv.nevada.edu</u> or 561-307-4344.

You may also sign up for the study using the google forms link here

Thank you for your time.

Audrey Miller OTD/S, NSCA-CSCS, NSCA-CPT University of Nevada, Las Vegas Department of Brain Health School of Integrated Health Sciences Occupational Therapy Doctorate Program



TITLE OF STUDY: UNDERSTANDING THE PERSPECTIVES OF SEATED ATHLETES' MOTIVATION FOR PARTICIPATION IN ADAPTED ATHLETICS **INVESTIGATOR(S):** DONNAMARIE KRAUSE, PHD, OTR/L; AUDREY MILLER OTD/S For questions or concerns about the study, you may contact Donnamarie Krause or at **702-895-1837**

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact **the UNLV Office of Research Integrity – Human Subjects at 702-895-0020 or via email at IRB@unlv.edu.**

It is unknown as to the level of risk of transmission of COVID-19 if you decide to participate in this research study. The research activities will utilize accepted guidance standards for mitigating the risks of COVID-19 transmission: however, the chance of transmission cannot be eliminated.

PURPOSE OF THE STUDY

You are invited to participate in a research study. The purpose of this study is to gain an understanding of the how being a seated athlete affects the motivation for one to participate in adapted athletics

PARTICIPANTS

You are being asked to participate in this study because you fit the following criteria

- 18 years or older
- English Speaking
- Consent to audio recording
- Participation on wheelchair court sport team for >6 months
- Participation in at least one wheelchair court sport officiated game

You will not being able to participate if you:

• Lack of access to video conferencing device

- Individuals who are not seated athletes
- Seated athletes without mental capacity to meaningful participate

PROCEDURES

If you volunteer to participate in this study, you will be asked to do the following: Participate in a one-on-one recorded interview lasting between 60-120 minutes that focuses on the perspectives behind motivation for participation in wheelchair adapted athletics.

BENEFITS OF PARTICIPATION

Through the conduction of this study, we hope to gain an understanding of how being a seated athlete affects motivation for one to participate in adapted athletics. Through this study we also hope to increase the awareness within the occupational therapy community of adapted athletics and the impact it has on occupational performance for those that participate.

RISKS OF PARTICIPATION

There are risks involved in all research studies. This study may include minimal risks. The risk of injury during this study is minimal, however, interview questions may be emotionally overwhelming for some participants. Participants are free to decline any questions, ask for a break during the interview, or drop out of the study at any time. Semi-structures interviews will be conducted on an online video conferencing platform and there is a risk of a breach in participant confidentiality. In an effort to maintain confidentiality, participants will be asked to utilize an alias on the video conferencing call and turn off their camera.

COST /COMPENSATION

This study will not require any cost to the participant. This study will require a one-time audio and/or video call interview via zoom or google meet that will last between 60-120 minutes. A small incentive of a \$50 gift card to Target is offered.

CONFIDENTIALITY

All information gathered in this study will be kept confidential by allocating numbers to each participant. No reference will be made in written or oral materials that could link you to this study. All records will be stored in an encrypted and password protected computer on the campus of UNLV and in the PI locked office until the completion of the study after which the data will be destroyed.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with UNLV. You are encouraged to ask questions about this study at the beginning or any time during the research study.

PARTICIPANT CONSENT:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

Appendix D Semi-structured Interview Guide

- 1. When did you first encounter wheelchair court sports?
 - a. Did you initially think it was something you would want to participate in?
- 2. Did you participate in sports prior to becoming a wheelchair user?
 - a. If so, did your prior participation in sport influence your participation in adapted athletics?
 - b. If so, do you feel like your motivation for participation has changed?
- 3. How long did you use a wheelchair before becoming a wheelchair athlete?
 - a. How did you get started with wheelchair athletics?
 - b. What was the process like when you first encountered a sport specific chair?
 - i. Tell me a little more about the process of finding the optimal fit for your sport?
 - ii. Were there a lot of adjustments made to your seating/positioning for your sport chair
- 4. How did you feel when you first started participating in wheelchair sports?
 - a. Has that feeling changed?
 - b. Has your motivation for participation changed since your first began participating?
 - c. Do you feel like your motivation for sports participation is impacted by changes to your seating setup?
- 5. What makes wheelchair athletics meaningful to you?
- 6. What do you feel increases your motivation for participation in adapted athletics?
 - a. Can you think of any forms or internal motivation(core values, goals) for sports participation?
 - b. External (driven by rewards or accomplishments)?
- 7. What do you feel decreases your motivation for participation?
- 8. What does participation in adapted athletics mean to you?
- 9. What is the number one reason you feel that you participate in adapted athletics?
- 10. What advice would you give another wheelchair user to motivate them to participate in seated athletics?
- 11. Anything else you would like to share about your motivation for participation in wheelchair sports?

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Curriculum Vitae

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EDUCATION

Occupational Therapy Doctorate University of Nevada Las Vegas; Las Vegas, Nevada	May 2021-May 2024	
Capstone Project: Understanding the perspective of seated athletes' mo in adapted athletics	tivation for participation	
Bachelor of Science in Applied Physiology and Kinesiology Concentration: Fitness and Wellness University of Florida, Gainesville, FL	April 2016	
LEVEL II FIELDWORK		
Optimal Therapy Caseload: Outpatient Pediatric, Pelvic Floor, Neurological, and Upper F	May 2023-August 2023 Extremity	
Athletic Training Institute Physical Therapy Caseload: Outpatient Hand Therapy	May 2022-August 2022	
LEVEL I FIELDWORK		
Henderson Health and Rehabilitation Skilled Nursing Facility	Fall 2023	
Tick Talk Therapy Outpatient Pediatric	Spring 2022	
Cornerstone Christian Academy Pediatric Community	Fall 2022	
Hanger Clinic Prosthetics and Orthotics	Spring 2022	
The Garden Foundation Adult Daycare	Fall 2021	
RELATED WORK EXPERIENCE		
Gainesville Health and Fitness Center Se	ptember 2014-April 2021	

Master Level Personal Trainer/Onboarding Coordinator/Team Leader

Gainesville, FL

TEACHING EXPERIENCE

Gainesville Health and Fitness Center New Hire OrientationApril 2019-April 2021Functional Movement Anatomy: Squat and PushTotal number of times teaching course: 12

CERTIFICATIONS AND TRAINING

Building Capacity of School Personnel to Promote Positive Mental Health in Children and September 2022 KORU MindfulnessSeptember 2022 November 2021		
National Strength and Conditioning Association Certified Strength and Conditioning Specialist Certified Personal Trainer	May 2017-Present August 2016-Present	
American Health Association CPR and AED	September 2023-September 2025	
Power Plate Discovery Workshop	September 2019	
PROFESSIONAL ORGANIZATIONS		
American Occupational Therapy Association. Member	May 2021-Present	
Nevada Occupational Therapy Association Member	November 2021- Present	
STUDENT ORGANIZATIONS AND LEADERSHIP		
Coalition of Occupational Therapy Advocates for Diversity Student Member	November 2021-Present	
Project Lead	May 2022-Present	
Student Occupational Therapy Association	May 2021-Present	
Student Member Executive Board Member: Secretary	December 2021-May 2022	
VOLUNTEER EXPERIENCE		
High Rollers Adaptive Sport Foundation	April 2023-Present	
The Orthopedic Institute Hand Therapy	August 2018-January 2019	

Sidney Lanier Fitness Program

August 2014-May 2015

Shands Hospital Emergency Department

January 2013-August 2013