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Okay. Welcome everybody to today's CGHS Research Webinar. Today's speaker is Sheri Walters from our kinesiology department. Sheri Walters currently serves as an assistant professor at A. T. Still University in the Department of Kinesiology. She has also served as a director at EXOS Athletes Performance, and as a consultant to the USA Women's Hockey at the 2018 Olympic Games. She has served as part of the volunteer medical staff with US Paralympic Track and Field since 2011 and the United States Olympic Committee invited her to assist with the delivery of medical care in London 2012 and Rio 2016. Sheri has served as the head athletic trainer and rehabilitation coordinator at Indiana State University, and worked at the Medical Center of Arlington, which provided rehab services to the Texas Rangers, Dallas Stars, Fort Worth Flyers, Dallas Baptist University, and local high schools. She is currently pursuing her PhD in physical therapy through Texas Woman's University and received her DPT from the University of St. Augustine. With that, Sheri, I'm going to hand it over to you.

All right. Unmuted there. As Marsha had mentioned, I'm currently working on my PhD at Texas Woman's University, hence, the slide deck being all in maroon instead of blue with A. T. Still logos. As soon as I graduate, we'll flip that over as we start to publish and disseminate this research. This is my PhD project, so it's a little of a point of pride and passion for me, especially my background with the team. With that said, another disclaimer. I get super passionate about it, and when I get passionate, I really start to talk fast so if that's the case, just raise your hand, and I will slow the train a little bit and backtrack if I need to. Then also, with it being my dissertation, it's not finished yet, but I'm looking to defend it in July. If you guys have any questions, comments about it, please let me know either online today or shoot me an email because that might help me make my study better and actually help me to graduate and move forward from here. I'm super open to all of that.

To get started ... It's not advancing for some reason. There we go. A little background on the Paralympics. Dr. Ludwig Guttmann is the guy that's basically credited with starting the Paralympic Games back in 1948. He was a Jewish-German neurosurgeon considered to be the best in the world, but obviously given the situation, he escaped and took refuge in Great Britain. When he was rehabbing the wounded warriors, he found that doing rehab through adaptive sport or exercises, for example, wheelchair archery, the athletes got better a whole lot faster. Not just physically, but spiritually, emotionally, mentally as well. It became a huge part of his rehab progression, and then the Stoke Mandeville Games was the very first version of the games in 1948, and wheelchair archery was the first sport. Then, the Paralympics as a whole grew out of that.

At the exact same time, Timothy Nugent was a wounded veteran in the US, and he started wheelchair basketball. He's credited with starting that, and then also with being the father of accessibility in the US. The American with Disabilities Act and then on campus, Services for Students in the US is really credited to him. Those two things were starting at the same time, and then within the
Paralympic movement as a whole, wheelchair basketball tends to be the most popular sport that people play. Those two guys really kicked things off for us.

Sheri Walters: In general, playing sport, any sort of recreational play domain is considered to be essential to fully realizing the human rights promise. There's been quite a lot published on that. Then, along that same vein, the ADA of 1990 didn't specifically speak to sport and play, but the Ted Stevens Act, the initial one in '78 didn't really mention it, but the one in '98 did. That forces the US Olympic Committee to donate resources to the Paralympic movement. That's part of how the Paralympics in the US really gets funded. This particular project really focuses more on track and field than anything else because of my experience with the team.

Specifically within the sport of track and field, the historical context for that being 1960, it was at a just track short event, 100-meter, 200-meter, 400-meter wheelchair races, and that was at the Rome games. Then overtime, the events expanded to the point that now track and field has the most events and the most athletes participating just based on the pure number of classification. Everything from spinal cord injury, cerebral palsy, visually impaired, limb amputations and even cognitive disabilities all participate in the sport of track and field. Then, really common this day and age is wheelchair racing and the road races, major road races. The Boston Marathon just happened, and you'll see the wheelchair racers in that race as well. Initially, they weren't allowed, but the first guy to do it was Bob Hall, and then the program organizer, the Boston Marathon organizer told him that if he could beat a certain time, that he would be awarded the race medal. He met that time and then, thus so inspired the whole Boston Marathon organization that they added it through their events after that point. Inclusion in sports within the high school model has been really slow within US, so the traditional method for a kid to get involved in sports is typically through their schools, but a kid with a physical disability, it's much harder for them to become involved, but certain athletes have been instrumental and pushing that forward for us and one of those athletes is Tatyana McFadden. She was already a Paralympic medalist. After the Athens game, she went home and tried to compete for a local high school and they wouldn't let her. That was probably the wrong answer given the fact that her mom worked for the US State Department, so they pursued legal action and the State of Maryland became the first state to require all schools to provide opportunities for students with physical disabilities.

She's also just recently a five time Boston Marathon winner, so she's pretty good at what she does. Along the same grounds, why it's so important? Just generally in life, we know the power of sport in the life of someone. We know the physical aspects, some of the psychosocial aspects, quality of life just for anyone. Whether they have a physical disability or not, especially when we look at things like obesity rates, diabetes rates, or even depression. One of the best ways to treat depression is with physical activity. The same thing carries over,
but even more probably profoundly with someone with a physical disability. We know that it helps with social reintegration. We know it helps with employment rates. If someone's involved in an adaptive sport, and they have a physical disability, they're much more likely to have a job.

Sheri Walters:

Same thing, it's a known contributor for four-year survival following a spinal cord injury. Along with that, there's a lot of people that have physical disabilities that aren't participating and they report a lot of barriers to getting involved in sport from a lack of awareness on their part or also their healthcare providers' part, so they're not referring them into sport opportunities. There's a lot of environmental barriers from facilities, materials or attitudinal. A high school coach is a perfect example that doesn't want that kid in a wheelchair on its high school team. Lots of times, it's because they don't know what to do with that kid. There's a lot of cost involved. Racing wheelchair, a cheaper one, a new one cost around four grand. If someone is a below the knee amputee, a prosthetic may run about $20,000 or running specific prosthesis that's in above the knee and that needs a knee component, it may be upwards of $35,000.

There's a lot of expense especially if it's a kid who's growing and they don't have access to some of the resources. There's a lot of knowledgeable coaches, and it's not so much about the technique. It's about some of the comorbidities or things that come along with what the physical disability is. There's also issues surrounding gender roles. We know that if you have a little boy and a little girl, there's a great example of this the other day at the hockey game. Dad got a puck, handed the puck to the little boy. Dad got another puck, handed to the other little boy even though the player was trying to get it to the little girl. We see a lot of that just in the world as a whole and it's even more profound within the adaptive sport world. Significant barrier for females to getting involved.

With someone that was able bodied and then becomes injured, there's a loss of an able identity, so they feel like, "Yeah. I played basketball when I was in high school, but now I have the spinal cord injury and now I can't." Then, one of the last ones that kind of been identified through the literature, and then it also became part of this study is the potential for a limitation coming from the actual classification process. For example, if a person wants to compete in judo in the Paralympic Games, they're not allowed to do that unless they have a visual impairment. Those are the only athletes that compete in the Paralympic Games in that sport.

Along with barriers, there's also a lot of facilitators. One of them is having an athletic identity. That same person that played basketball in high school even after the injury, if they still identify as an athlete, or we help facilitate that, then they're more likely to participate. Other peer athlete mentors. A lot of our Paralympic athletes go back and give back to their communities and help get a lot of the younger kids involved in sport, and the other social support avenues such as different family members or high school coaches or teachers that get kids involved within the study itself as it get to the results. I don't really talk about it in these particular papers, but the kids that have visual impairments,
they've all got involved because some teacher got them involved and that wasn't even a coach.

Sheri Walters: Then, different religious aspects tend to be a facilitator to getting people involved and then potentially the rehab process. If I as a PT, am working with the client in acute care setting, if I talk to them about the opportunities available in adaptive recreational support, then that can be a facilitator. When we look at the literature, there's a lot of research that looks at how just a kid in general gets socialized into sports. A middle schooler, an elementary school kid, how did they involved? Whether it be high school sports, elementary school sports or club sports, and then there's a lot of research too looking at it from a gender aspect. There’s less research looking at it on adaptive sports side, but there's still quite a bit.

Some of that looks at some of the personal attributes. What about a person helps them to get involved? Again, if they’re male, they’re more likely to be involved. The type of disability plays into it. For example, if you have a male guy that gets cancer and has a lower extremity amputation, he's much more likely to get involved than if you have someone that is a female, a child that was born with cerebral palsy. There are specific reasons for that based on perceptions culturally and then also from the parents' standpoint, and then the coaches trying to get people involved. Same thing from a physical therapist standpoint. A physical therapist is often unlikely to refer a kid with CP to participate in adaptive sports than a kid that has an amputation. Again, there's a lot of reasons for why that might be happening.

Other things to consider is the severity of the disability. If someone has a lot of involvement, they're less likely to be engaged in sport. And then same thing - the onset, if it was an accident or cancer, then somebody's more likely to tell them, but if it's a congenital thing, then less likely. Typically, the younger the person is, the more likely someone is to ask them about it. Then, the last one being some sort of racial or ethnic minority. Perfect example for those, the Asian cultures tend to refer less. Then, for some reason, Russia tends to refer less and a funny story involving Russia when they were hosting the games in '84, they refused to host the Paralympics because they said, "We don't have any people with physical disabilities. We're so great we don't produce them or if we do, then we have the power to just magically heal them and so they don't exist in our country."

It's different now to the point we've already started making jokes to this effect here in the US because now, not only do they dope their able-bodied athletes, they like their disability or Paralympic athletes so much, they dope them as well. It's a total shift. China now, and Russia now actually have the most number of Paralympic athletes. People are, across the world, taking a little bit more seriously than they have in the past. When we're looking at socialization, we look at socialization into sports. So how someone became involved, and then we look at them via sports. How they change once they're involved in sport?
There's quite a bit of research that look at socialization within track and field specifically some of the road racing aspects.

Sheri Walters: Getting involved in the Boston Marathon, New York Marathon and what that looks like, and then with that socialization typically comes a lot of empowerment through sport. People getting involved and then going back and helping people within their community, and then how they grow and develop out of it. Within the US Paralympic team and Rio, we had three people on the team that had PhDs. You don't typically see that with your traditional Olympic teams, not typically that highly educated. One of them is a biomedical engineer, so the sport really helped propel them in everything else in their life. Then, that community engagement, I mentioned and then the third one that we see a lot through participation in sport is a change in body image.

If we're honest with ourselves, somebody says someone is wheelchair bound, it's not very common for us to have one of these photos in our mind of what someone who's wheelchair bound looks like. Athletes are pretty cognizant of that, and so sometimes they like to shock people a little bit with that perception and honestly change our perception of what a person in a wheelchair would look like.

Through the literature review, when we looked at potential limitations or exclusions within the literature, there are certain things that we noticed. For one, there's no known investigations of the culture of an entire Paralympic team. There's limited investigation of an elite adaptive sport population as a whole, whether it's Paralympic or not. There's not a whole lot on the influence of actual Paralympic sports in the lives of the athletes or really their families either. There's a lot of studies that look at the barriers and facilitators in getting into recreational adaptive sport, but there's not much that looks at that transition over to the elite side. Then, past studies have looked at a lot of things from socialization into sport, adaptive sport coaching and development, role of healthcare providers, some of psychosocial aspects, but each one of those is just a little piece of the puzzle and nobody has really brought it altogether into one study.

The purpose of this study was to understand the team as a whole and the culture of the team in a qualitative manner. Then, secondary purposes were to examine the power of sport in the lives of the people involved, so the athletes, the coaches and the family members. The different barriers and facilitators to making that transition into elite adaptive sport and then issues relevant to the healthcare providers and the coaches. The people that were referring athletes to sport and getting them involved, and then some of the psychosocial effects of the Paralympic Classification System. That can potentially limit someone in either getting involved in sport or if they’re not classed appropriately, then they can essentially be classed out of sport because they're no longer competitive.

Some of the questions that we looked at, what's the socialization process into elite sport for the athletes, for the coaches? What was the impact of
participating at elite level on the athletes and the family members? How can healthcare providers assist a person with a disability in becoming and staying involved in sport? Then, same kind of questions for the sport coaches. Then, the fifth one, that psychosocial impact. When I first started this project, it actually came about because I was taking a qualitative study class for my PhD. I actually never ... Well, at least I never thought I’d read a qualitative study before and so, this actual project grew out of a pilot study from that class, but in general, a qualitative study answers "why" questions. When we commonly do research, we look at more the "how" or "does it even exist?" It’s more deductive, whereas qualitative tends to be more inductive.

Sheri Walters: It allows us to look at the individual's experiences and perspective, and it helps us to cover a diversity of the population. Specifically to this case when we look at how someone socialized in sport, it's going to range based again on their disability's severity, the type of disability, how old they were? Whether they're male or female, so we're able to track a lot of that through the course of this study. Specifically for this study, it started out as an ethnographic study. In part, because I didn't know what I would find, so we just went in and just gathered everything that we could. Ethnographic study is a study of a culture, more specifically its shared customs and traditions.

When I was telling and gaining consent from the athletes to participate, the way that I explain it to them initially is the example of Jane Goodall. We all know that she went and just immersed herself into the environment with the apes, and then she learned about the culture of the apes and the lives of the apes through her immersions in the field. I thought it was a great example, but then they started asking me if I thought that they were like apes. I stopped using that example, but that's essentially what that is. As we progressed and I learn more from the review of the literature and then more of what was happening specifically within the team, we also incorporated a phenomenological aspect. We're looking at just a particular phenomenon. The experience of the coaches or the experience of that classification process. Looking at the commonality of that lived experience.

In terms of the methodology, we also used a basic interpretive qualitative methodology and basically it just helps us to understand the meaning of that situation or the phenomenon. Some of the qualities of this type of methodology is that the researcher is the instrument. As the primary investigator, I am the instrument. We’re not using a goniometer or some other kind of test to gather data. I'm out in the field gathering it whether taking notes or doing interviews. I mentioned it being inductive. I’ll start with the observation, observe a pattern, develop a hypothesis and then over time, will develop a theory versus normal deductive. You start with that theory, go to your hypothesis, do your observations, take your measurements and then you confirm that at the end. The results tend to be very descriptive, so there’s a lot of words involved and then the data is our interviews, our observations and the documents that we pull in. Then, the results tend to be very rich, descriptive accounts of what's going on
Observational data. It started at World Championships in Doha, Qatar in 2015 and then we collected data all the way through six weeks after the Rio game. It was a little over a year. There were 129 team members that we observed. That included 103 athletes, 26 coaches and staff, four family members and three classifiers, one of which works at A. T. Still. I as a primary investigator served as a participative observer, so I was there as part of the medical staff, but I gained consent from the coaches and athletes to observe them and to interview them, and so I collected and took notes that way. I was there for all the on and off field activities. I traveled with the team, ate with the team. I was there for their medical treatments, for practices, for the events themselves. With the observations, it's just recording notes of everything that happened the day. Then, going back and typing those up and coding those later.

The observational sites and dates. Again, Doha, Qatar and in different camps and events during that one year period all the way through the Rio games. Oops. Then, at total, we did 41 interviews. 23 of them were athletes, 11 coaches and staff and then those four family members, three classifiers. The majority of them were conducted in person, but if my schedule, their schedule didn't allow, we did a few of them over the phone or via Skype. To select the participants for interviews, it was very purposeful. Using the coaches or maybe some suggestion from another athlete, we would pick people that were representative based on gender, physical disability, time in the program, and certain aspects like that.

They were all audio taped and lasted between 11 minutes and an hour and a half. That hour and a half was a doozy to type up. It was one of the physicians, and that woman could pack a lot of words into a sentence. Then, all of those were transcribed verbatim and then we sent those back out to the person that we interviewed so that they could check them. No one had really any suggestions except for, "Please take all the likes and ums out for me." I didn't realize I said that many of them, and then all of those were then uploaded into the software called NVivo and coded. All of the interviews were semi structured, so what that means is I had a guide. I developed that with the help of my academic advisor, and then one of my other committee members who is a PhD OT is also a member of the Paralympic team.

She knows a lot about what's going on in the environment as well, and then she's a qualitative researcher as well. She helped me develop that, and then I practiced it prior to performing it for the first time. I mentioned other data that we pulled in, other documents; and for me that ended up being their social media accounts. It's becoming increasingly more common to use social media as a data source for ethnographic studies especially in populations that are otherwise difficult to study. The team is together for blocks of time, maybe a week at a time. All the wheelchair racers will be together or all the ambulatory runners will be together, but then the rest of the time, they're disbursed out across the rest of the country, and so to be able to follow them across a period of time using their social media accounts was incredibly helpful.
Sheri Walters: Then, with that, the sites were tracked for that entire year period. We track Facebook, Instagram and Twitter, so quite a lot of social media post. Their relevant post were collected. My committee wanted to know what relevant post meant. I wasn't collecting all of their election year. I hate Hillary or I hate Trump posts. It was anything that was relevant to the sport that they were participating in, but that could be related to their nutrition or their funding, their sponsors, their coaches. All of that was collected. We uploaded it in NVivo and then coded it.

Then, along that same lines, what I was noticing was some local newspaper or news station would do a story about an athlete or Sports Illustrated, USA Today would do a story about an athlete. That athlete would take it, and then share that story, so we ended up pulling quite a lot of good data from these resources. We incorporated these news articles, TV stories into the study as well and then we went back through and started Googling each of the athletes to find additional stories. We use that to help triangulate the rest of the data, so the information that we're gathering from the observations from the interviews in this media were all used together to make sure that everything was accurate.

The data analysis. We use a directed content analysis, so it allows existing theory. Existing literature to help us focus the research question and help provide predictions of where we're going to go, especially with the coding scheme. In the constant comparative approach, it allows you to take emerging categories that are developed and compared across the entire dataset. As I interview a new person, I add that in to what's happening. I find a new trend, and then I go back and check all the other interviews that I've done and all my other observations, so constantly comparing to what we've already found to establish a pattern or a trend. Going into the project just based on the literature review. These were the things that we thought that we might find. There was a whole lot going on, so socialization is for things related to the healthcare providers, coaches, the power of sport, different barriers and help those breakdown, different facilitators. These were the things going in that we were looking to find and these were a bucket, so we're trying as we find things in our interview is trying to put them in one of these buckets.

If it didn't fit in one of these buckets, then we created a new one and then noticed overtime whether or not that was a pattern or a trend. It could've just been that one person or it could've been the whole team that was experiencing the same thing. Terms of the methods when we talk about rigor. That's really if you're a quantitative researcher, that's our reliability and validity. How do we make sure that I'm not just telling you a big old story and it's not fake news? That comes with the rigor of the study. Part of that comes through with the assistance that I had with the Purple School sampling. The coaches helping me to pick the people that would be best for this study at representative selection, and then the same thing with the question construction.

I had a person that didn't know anything about Paralympics and then someone that was a part of the team helping me to write these questions. The member
checking helps to make sure that the athletes and the coaches feel like what I took away from typing up their transcripts that it was accurate representative of what they were trying to say. The triangulation, I mentioned comes from making sure that everything from the observations, the interviews, the social media, the media coverage are all coming together and are consistent across the board. The participant observations being a primary investigator and the fact that I was already embedded in the team, already familiar with the team. I've been working with them since 2011. I already had that rapport with them. I already had shared experiences with them and they were already familiar with me, so they were a little bit more open than maybe someone that they had never met before just came in, dropped in and just started taking notes, they're not going to be as open.

Sheri Walters: With the reflexivity, as I was making those observations, I was writing the notes down, that allowed me to go back over time and make sure that from my perception, because we’re looking through my lens, that it was something that could be replicated by someone else and that it would transfer overtime. It also helps me to identify any sort of bias that I may have. Someone else can take my notebooks and look at them and like, “Well, you might not have just liked that person.” That might be why you had this particular perception. The same thing with that peer examination, it comes into that. My research team really helps with the analysis to make sure that we're eliminating any sort of bias because of my perception, my life experiences as a PT or anything else from my personal background.

Okay. For the results, after my proposal, the suggestion was: is that we took the pilot study from that class, which really looked just at the influence of sport, and the barriers, and facilitators and used it as my anchor point in terms of the methods. And then we also got more specific looking at the socialization into elite sport, and then the specific aspects related to the healthcare providers, to the coaches, and then a classification - so that ultimately, out of my dissertation, we'd be publishing five articles. Okay. Been a little busy.

When we're looking at those from the pilot study in terms of the guiding theory – it was a class period. I didn't really have one going into it because I didn't really know at that point what I was going to find, but we knew that we're doing ethnographic study, so we're going in and find observations that we're going to build a theory over time. In that study, it was a pretty profound impact on me, which is why I wanted to continue. And some of the direct quotes that came out of that study, from that pilot study of just one athlete, provided one there. Which is basically her talking about how because she's now an elite athlete, she's much more cognizant of her own health and well-being and staying on top of it because she knows that she has to be able to perform at a high level. Before she was getting urinary tract infections all the time, she barely ever got out of bed and she was living at home. Her parents were taking care of every aspect of her life, including her shower, her bladder, and now she's completely independent living and training on her own.
Out of that study, we had the big thematic map before and then these were our findings and the buckets that we had coming out of that pilot study. The socialization into elite sport, looking at that, this is what we were coming in to the study with from a lit review standpoint. All these different aspects that I mentioned before, but now we had a little bit of an idea of what we’re going to look at, and so we use the guiding theory of the feminist model to help us frame the rest of the study. It’s pretty common for the feminist theory to be used in examining disability and adaptive sport partly because of the aspect of empowerment through sport.

Coming into it, I didn’t really ... Honestly, I don’t have a sociology background so I didn’t know a whole lot about feminist theory, but it draws attention to a lot of different gender divisions and social life. That same kind of divisions from a physical disability and then it recognizes the relatedness of gender to other forms of domination including disability, race and age. Within those different cultures, it’s common to use this theory and then it has the potential to critique and transform those prevailing social theories and some of the major people that use this theory talk a lot about where there is power, there is resistance and then by sport or by banding together, or whatever the case may be, it allows us to transform ourselves to basically form a resistance against those social structures.

There’s been, as I mentioned, quite a bit of research about using the feminist model in sport as a tool for empowerment, both the females, both the people with physical disabilities and it provides a space for participants to have the power to deconstruct and then resist those power structures. When we were analyzing the data for the results, when we looked at it, I mentioned before, there were studies that looked at socialization in the sport and that’s been fairly well covered, but there wasn’t a whole lot looking at what it took to make that transition to an elite athlete. Instead of having that map, we came up with this wheel because it helped differentiate what some of those things looked like. For any athlete to make that transition from a recreational athlete to a more elite, obviously you have to have a certain level of athletic ability, talent, hard work, dedication, coaching, all of those sorts of intrinsic factors, but even with those, a lot of people still don't make that jump.

For the Paralympic athlete, a huge part of that is funding, to pay for the equipment, for training, so having access to really great coach at a university setting is incredibly helpful, but it’s not very common. Then, coming along that wheel, if they have that funding and that training, if they have those influences in their life, then what we see is transition into more of empowerment and this building of community. They start to get engaged. They start to be advocates. They start to educate others. They go on these speaking engagements. That helps develop this community involvement. It helps eventually to help with their funding because now they’re getting sponsorships, so there’s this turning of the wheel and I really have to thank one of the physical therapists at A. T. Still faculty. She actually and her students came up with the idea of using the wheel in terms of the intro into sport and the socialization, and so I was describing I
was having a hard time graphically representing this, and she suggested this model. It's so incredibly helpful for me in piecing this together.

Sheri Walters: When we look at some of the results for the healthcare providers, we decided to look at the self-determination theory. I, in part, because we want healthcare providers to help people find that connection, that relatedness to find confidence in something whether it be art, music, sports to help facilitate that autonomous control of their life and to help facilitate some sort of intrinsic motivation to get people involved in life. From a lit review, these were some of the things that we were looking at in the buckets that we tried to piece things into. With our results ... Sorry. Going back to self-determination theory. I'm sure most of you guys are familiar with it, but we're just looking to use sports to help promote independence, not only physically like the one woman I mentioned that was living at home with her parents, needing help in and out of the shower to the point that she's independent living. She's got that autonomy now.

We're looking for that physically. We're also looking for that mentally to help assist with the empowerment. These ideas of the feminist model and self-determination theory relate to each other, but we want to know what the healthcare providers’ role within that is. With the results with that, the common things that we saw is how the healthcare providers helped get our team members involved in sport or in all but one case, they didn't help at all. The athletes got involved because of some other influence. Usually, their parents not giving up on them. The perception of the athletes of their current healthcare providers was pretty astonishing to me. The majority of them had found people associated with the team that were helpful to them, but the majority of them spoke of instances especially with the urologist with the spinal cord injured athletes, where they felt like there wasn't a lot that the healthcare provider didn't really much believe in their potential as not only an athlete, but also as a human.

Their quote below is a direct quote from one of our elite wheelchair racers who just said, "It feels like to have a disability, you are no longer worthless, but you are worth less still and it feels like you know, why are you going to dedicate time, energy, resources? It's a reflection of what the view of a person's potential is, and the view of a person's potential with the disability is still culturally much lower than an able-bodied person, and that affects everything and you see it in the medical world just because time, resources and money, it affects people with disabilities." He was referring to his urologist who kept telling him, and so he had a spinal cord injury when he was eight, so a T2, and him and his parents kept getting told that he was not going to live to be in high school or he wasn't going to live to finish college. He wasn't going to live to do this, to do that.

Now, in his 30s, master's degree, working, employed and still competing. So his point is that there's still not a lot of emphasis placed on what's possible. It's just more of an emphasis, that old school emphasis, that most people with the spinal cord injury don't live past four years. That was his experience with his current healthcare provider and it was fairly common across the team. And so
not just from life expectancy but then also no emphasis or thought chewed the aspect of them being an athlete from everything from the insertion of back up and pumps that have effectively ruin people's athletic careers without any discussion of what that might look like.

Sheri Walters:
The third theme was the team medical personnel experiences, so what my experience has been with the team, what the team physician's experience with the team has been like in part to motivate people to become involved. Okay. From a coaching and coaching development, same thing. That guiding theory was the self-determination theory mainly again for those same reasons to get coaches at whatever level to getting more and more people involved to help facilitate that independence. Again, the same buckets that we were looking for with the data analysis and for them to plug in some of our themes. But with the analysis, the things that really stood out was how the coach became introduced to adaptive sport, and almost all of them ... Well, every single one of them had been an able-bodied athlete and then, themselves competing in the Olympics or collegiate level, high school level and then they became a coach and then someone asked them to help at the Paralympic team.

There was one exception to that. There was one coach that had competed in college as a two-sport athlete. He'd had an injury and then became a wheelchair racer and he's one of our wheelchair racing coaches. But all had been able-bodies athletes and knew the power of sport in their own lives, and so it since helped both able-bodied and adaptive athletes as coaches. The second aspect was coach education, experience, and development within the US model, and it's not just isolated to the adaptive sport experience. Coaching education in the US at the US associate level is not very good compared to other countries. Canada, Great Britain as the examples do a great job of educating their coaches and the US honestly doesn't. We'll get more into that later, but on the Paralympics side, it's even worse.

To take a coach that is able to coach on traditional track and field and ask them to coach adaptive sport, there's always a hesitation and a nervousness because they don't know what to do from an autonomic dysreflexia, a pressure source from their wheelchairs or their prosthesis or bladder function. There's this hands off, I don't know how to help so someone transfer. They're afraid - usually more than anything else. And so the experiences that the coaches on the team shared were very enlightening in terms of honestly with them, it's never been an issue. Helping to illustrate that through the publication would be helpful to hopefully get the other people involved in coaching adaptive sport.

Then, the last piece of this was the adaptive coach experiences. Just like looking at the experiences of the healthcare providers, the experiences of the coaches and what it's meant for them to coach in this population. My all time favorite quote from these interviews, I was interviewing a coach that has been an Olympic athlete himself. He was talking about early on with his career with adaptive athletes, he was at a military camp. He had a particular athlete that had a bilateral lower extremity amputations, and he just said that the athlete
the first day came in with crutches, and then as the week progressed, the athlete just got rid of his crutches and was doing things with his legs. He say he wasn't really good at it, but he had gotten rid of the crutches and then everyone started clapping.

Sheri Walters: The coach said in that moment, he got incredibly emotional and that one of the things that he had noticed and one of the reasons that he got so emotional was because the brightness had returned in the guy's eyes. The first day, the guy was very flat from an emotional standpoint. Then, in the middle of the interview, the coach started crying, asking why he is getting emotional in the middle of the interview, which ended up happening multiple times throughout the interview, but he said - this guy coaches Olympic athletes - he said, "And that I knew was the most satisfying moment for me as a coach."

Yeah. We want to share those experiences with people to help serve as a motivator to getting other people involved. Then, the last piece, I was looking at the classification process, kind of those same buckets that we're looking for. There was a lot of controversies during the 2016 Paralympic cycle. Some of those revolved around the grouping of the bilateral and unilateral amputees into the same group, and that becomes an issue because if someone's asymmetrical and they're running, they'll typically be slower. A bilateral amputee especially in the longer events are at an advantage, but the unilateral amputees are having to compete against them. It's not necessarily fair to them. Then, some of the issues surrounding an amputee running versus what they call les autres, so the others. These are people that typically have like a joint fusion, ankle joint fusion being an example. They have full sensation. They just can't go into plan reflection. It's usually the case, but if you watch them walk around, they look like there's nothing going on, so the amputees are there with their prosthesis and they're running against someone that looks like nothing is going on.

There's a huge perception of what that might be, and potentially not being fair. Then, there was a lot of issues surrounding the wheelchair classifications around trunk control. There were several athletes that got reclassified and they got classed into a higher division, which made them less competitive and it was somewhat different about how the IPC went about doing it, why they did it and maybe some of the communication around that could have been a little bit maybe better. The athlete perceptions of all of that, how it affects their life and their willingness to even participate in the Paralympic movement.

Yeah. The guiding theory for this for us was using what's called Morgan's Practice Community and essentially, it's a theoretical framework for the exploration and roles of the classification system within Paralympic sport. Basically, it's looking to examine how an institution has control of a situation and looking for ways to give some of that control back to what they call the practice community. The primary agents of that being the athletes with the secondary agents being more of the coaches and the people that are with the athletes on a regular basis. Looking to change that model, it would almost be
consistent with the NCAA giving up all of its control of collegiate sport and giving that control to the athletes and the coaches and the people at the local level.

Sheri Walters: Probably never going to happen, but you can understand the point on some level that maybe people at the NCAA are making a lot of money on the back of the athletes, the same thing within the IPC that there's these people that are on the ground with the athletes on a daily basis that are making all of these decisions and may not necessarily have the best interest of the athletes at heart. We're using that as our guiding theory as we go through to identify the different themes and the things that really stood out, the athletes typically when they think about some of the event management versus the classification stuff.

The bilaterals running with the unilaterals in a race, then they consider that a classification issue, but it's not. They're still divided into their separate classes, but they're competing in a single event for that same gold medal. That's not a classification issue. It's more of an event management and that came about because the IPC made an agreement with the International Olympic Committee, and part of that agreement is we get to be at the same venues and same cities as the Olympic games. It helps promote the sport, but the event can't be a whole month long. It has to fall within a certain window and part of that is managing the number of events.

In a traditional Olympic session or season, you'll have one men's 100-meter final, one women's 100-meter final, but at the Paralympics, because of the different disabilities involves, there's actually 15 men's 100-meter finals, and 11 women's 100-meter finals. The time involved to get through all of that is exponentially greater. Typically during the Olympics, track and field is only half of the Olympic games and then swimming is the other half of the Olympic games, but at the Paralympics, both go the entire time just because of the sheer number of events. It's not a classification issue. It's an event management and that changes the frame that we examine it from. The other issue surrounding that was what was called MASH. How long the prosthetic lens are if those two groups are going to be competing against each other?

Then, another aspect of that is the elite versus inclusive mindset. The international Paralympic committee with their mission statement and they talk a lot about inclusion, so people of all disabilities, all levels, the severity, but sponsors don't necessarily understand a seated thrower that's got a severe disability. It's hard to get commercial support for someone that's not throwing as far versus maybe an ambulatory discus thrower that's throwing almost as far as someone that doesn't have as physical disability. It's easier to sell that.

There's this back and forth between the athletes on one end of the spectrum versus the other about which direction the international Paralympics should go. Should they be more inclusive or should they be more elite and try to pursue those funding sources and so there's this give and take and the athletes feel that the IPC needs to pick one and go with it, and not this back and forth. We talked
about the wheelchair racers and the trunk control, but the biggest thing with that in the middle of the year, they change their ruling on some of their former classification, so for an example, there was an athlete for the US that had competed in one class for 16 years. This was her third Paralympic games, and they changed her class. It was based on a test that isn't even part of the traditional classification model and it affected her ability to win races.

Sheri Walters: She still performed well. She still medaled, but it was probably one of those things that shouldn't have happened in the middle of an actual Paralympic year and if they were going to re-class some of the people, then they should have went through and re-classed the entire class, not just picking, choosing certain ones. There was a lot of controversies surrounding that, and then the athletes, the classifiers that we interviewed and the coaches suggest that several opportunities for improvement for the IPC to help give some of that control back to the athletes and the coaches and last with people that aren't necessarily in the field on a daily basis. All right. A lot of information that I ran through. I'll open it up to questions.

Marsha: Yeah. If anybody has any trouble unmuting themselves, use the chat to let me know and I'll try help unmute you.

Tracie: Hey Sheri, it's Tracie.

Sheri Walters: Hi.

Tracie: How do you see the adaptive sports track that you developed for the kinesiology program filling some of these gaps that you have identified in the coaching and other services?

Sheri Walters: Excellent question. Glad you asked. Obviously for me, that whole track came out of this study. If you look across the US, there's honestly no track like that. There's a couple of adaptive sport programs, one in Atlanta is probably one of the better examples that tries to do something similar not in a university setting. It's not attached to any sort of kinesiology exercise fizz, exercise prescription, corrective exercise background and it's very basic. There's two different levels in that. Someone has a high school diploma and they can get a certain level and they could start coaching maybe like high school type kids or people in their community, and then they have a track that's for people that are maybe already healthcare providers or have a master's degrees or strength and conditioning coaches, they can pursue it that way, but it's essentially a weekend certification course.

Just like being a personal trainer taking a weekend course, it's probably not quality wise as what we would want it to be. Along those same lines, I was an athletic trainer and a PT, and I had no idea when I first got involved with this team, how to do what I do now? Trying to find some way to bridge that gap for people in part to help eliminate some of that fear and that healthcare providers
have, that coaches have in making that transition. The track is really set up for people, PTs, OTs, athletic trainers that are already certified, maybe even done, they can come back and just take these four courses to help bridge that gap. Or people that are currently in the master's program and they want to be a personal trainer or strength and conditioning coach, maybe they're already doing that, but they want to work specifically with this population, but they still have that fear of working with this group.

It just helps build that knowledge base to help assist with that, but at the same time, identifying those people that have the interest and plugging them in with some of the connections, so they can get practical experience at the same time. I've never played wheelchair basketball, but I feel pretty confident at this point that just based on my knowledge of the sport of basketball, that I could get a team going and have no problems with that. Most of the coaches that do that at a youth level, that's exactly how they do it. They played ambulatory basketball and they take those same principles and apply it to folks using a wheelchair. So I'm trying to create more coaches. One of the coaches on the team, the occupation therapist by trade. Her last OT internship was at Spaulding Rehab in Atlanta, Georgia. It was right before the '96 games, and so there was this huge energy surrounding the Olympics and the Paralympics and so that's how she was exposed as an OT to adaptive sports.

She runs her own local program at home now and the stories that come out of that program are just profound with some of these itty-bitties, but she's got coming into that program that are now ... She's been with them so long. She's been doing it so long that she's got a lot of them on the Paralympic team. When we went to Doha, we had 80 something athletes... it was 84 athletes. She had actually worked with ... She had started to work with 20% of the entire team. She's based out of Spokane, Washington. Then, I looked around and I was living in Dallas at the time, and we didn't have a single athlete from Dallas. You look at population difference between Spokane, Washington and Dallas, Texas. There's no reason for that to be the case. There's no way she should have produced 20% of the track and field team and not one come from the Dallas metroplex. Especially considering Texas, and the profound influence of sport in the state of Texas.

The area that I was living in at the time, there are now six high school football stadiums that cost $60 million or more within a four-mile radius. Sport is life in the Dallas metroplex, but there are no adaptive sport programs for track and field there. There's a couple of wheelchair basketball and one sled hockey team in the area.

Dave: Sheri, this is David Line. How are you?

Sheri Walters: Great. Thanks.
Dave: I'm with the MPH Program. Marsha's going to take notes for me. The reason I say that is because I see the implications of the aspects of this really powerful in the public health arena.

Sheri Walters: Yep.

Dave: I think that once you've published, that will be fantastic. But also if you could think about focusing something on a public health perspective, so that we could deliver it to clinicians around the nation. But where Marsha's going to take notes specifically is we're now reviewing our behavioral health course, and I think that this research would be fantastic integrating to that course, Marsha. Once you've got those notes, you'll send it out to everybody. Thank you.

Sheri Walters: Yeah. When we first started talking about the program and who to market it to, the MPH students were some of the ones that we had talked about. I personally am not that familiar with the program, but you guys helping to integrate that in would be amazing because there was obviously huge implications in terms of general health and well-being.

Dave: Thank you. Marsha, if you could facilitate a conversation between Sheri and I, I'll put that into my notes for the course.

Marsha: Okay. Just a follow up on what Dave was saying, I think this is a great body of research and I would love to see someone continue on with it at a less elite level.

Sheri Walters: Yep. Honestly, the majority of the research in the past has been done. There's quite a bit out there. There's always obviously room for more. In the less elite level, there's quite a bit especially in the leisure and recreational activities research that look at the military population. I mentioned that I'm out here with the Air Force Wounded Warrior Group right now and for me, that's one of the directions that I want to head because I have access to this population. It would be fairly easy to be able to collect data and to build on this research outside of just the Paralympic group, but the stories that come out of the military are honestly quite profound as well.

There are several members of the Paralympic team that had served in the military. And so, it didn't end up becoming part of these five studies in my dissertation, but I have so much data that honestly I could probably write for the rest of my career just on this data collected. But a huge piece after I'm done, and I actually get to graduate, will be looking at those military members of our team. The story for profound... two of the family members that I ended up interviewing were family members of those military folks and so again, just incredibly profound experiences and the way that sport changed their life. We're going to be doing that piece next.
Marsha: Do we have any other questions? Yeah. A few thank yous in the chat group. Don says, "Very interesting, Sheri. Thanks for sharing your research." Kathleen Mathieson says, "This is fascinating work, Sheri. I love seeing the sociological aspects you incorporated. It's also really nice to hear about high quality qualitative research. Great job." Sarah Everman said, "This was so great, Sheri. Thank you for this presentation."

Sheri Walters: All right, guys. I appreciate it.

Female: Thanks, Sheri.

Female: Yeah. Thank you, Sheri.

Marsha: Yeah.

Sheri Walters: Enjoy your nap, Don.

Marsha: Thank you all for coming.

Sheri Walters: All right. Thanks guys.

Marsha: Thank you.

David: Bye-bye.