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Experiences of therapeutic horseback riders in their youth: A self-determination perspective

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Abstract: Therapeutic horseback riding (THR) has many physical and psychological benefits for youth with physical disabilities. However, to the authors knowledge, no study has explored participant experiences of THR within the context of self-determination. Self-determination is essential for quality of life outcomes for youth with disabilities and it may help individuals acquire greater choice and control over personal physical activity needs. Therefore, this study aimed to understand youths' experiences in THR through a lens of the theory of self-determination. One-to-one semi-structured interviews were conducted with individuals with a physical disability (3 males, 1 female, 11-37 years, mean age = 27) who participated in horseback riding in their youth. Interpretative thematic analysis helped uncover the meaning of participation in THR. Casual agency theory guided interpretation of participant experiences. Results: Three themes emerged: (a) horseback riding is not a sport, (b) relationships with others, and (c) the meaning of independence. THR experiences can facilitate or limit self-determination. THR was at times perceived to limit goal-setting and choice-making opportunities. A positive connection with the instructors and horse was important for autonomy, comfort and enjoyment. Developing a sense of independence was possible when participants felt safe riding but was limited when they received too much help from instructors.

Keywords: Qualitative methodology, physical disability, causal agency, physical activity

Introduction

Therapeutic horseback riding (THR) refers to an adapted or modified sport (Stergiou et al., 2017) that aims to help individuals reach physical, social, emotional, cognitive, behavioral or educational goals (PATH International, n.d.) while developing a therapeutic bond between the rider and the horse (Bass, Duchowny, & Llabre, 2009). THR assists participants with a variety of physical disabilities as well as behavioural, intellectual disabilities, and autism to gain independence using the horse (PATH International, n.d.). THR is facilitated by a certified instructor whose aim is to help the rider improve basic riding skills (Snider, Korner-Bitensky, Kammann, Warner, & Saleh, 2007).

Research has explored the efficacy of THR on psychosocial variables (Goodwin, Hawkins, Townsend, Puymbroeck, & Lewis, 2016; Gabriels et al, 2015; Kaiser, Smith, Heleski, & Spence, 2006), motor function (Drnach, O'Brien, & Kreger, 2010; Winchester, Kendall, Peters, Sears, & Winkley, 2002), posture (Bertoti, 1988; Hamill, Washington, &

White, 2007; Land, Errington-Povalac, & Paul, 2001), gait (Gilliland & Knight, 2012; Honkavaara & Rintala, 2010; Mackinnon et al., 1995; Steiner & Kertesz, 2015), and balance (Biery & Kauffman, 1989; Homnick, Henning, Swain, & Homnick, 2015; Rigby et al., 2018). Additionally, studies conducted on children with autism found that participation in THR contributed to improved self-regulation and adaptive living skills as well as decreased sedentary behaviors (Bass et al., 2009; Gabriels et al., 2012). Few studies, however, have explored participant views of THR despite the importance of perspectives of individuals with disabilities in understanding physical activity experiences (Haegele & Sutherland, 2015). One exception is a study in which individuals reported several factors associated with THR such as excitement, positive relationships with volunteers, improved self-confidence and self-esteem, and a love of animals (Elliot, Funderburk, & Holland, 2008).

Causal agency theory as theoretical framework

Casual agency theory was used as a theoretical framework to facilitate an understanding of THR experiences of individuals with a physical disability. Shogren Wehmeyer, Palmer, Forber-Pratt, Little, & Lopez (2015) suggested self-determination is a "dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined people (i.e., causal agents) act in service to freely chosen goals." (p. 258).

Self-determined action is characterized by three essential characteristics that lead people to act in a self-determined manner: (a) volitional action, (b) agenic action, and (c) action-control beliefs. Volitional action refers to making a conscious choice based on one's preferences (Shogren, Wehmeyer, & Palmer, 2017). Agenic action refers to self-regulated and self-directed actions that enable a person to make progress toward freely chosen goals and to respond to opportunities and challenges. Action-control beliefs refers to the belief that individuals have what it takes to achieve freely chosen goals (Shogren, Wehmeyer, Palmer, 2017). This set of attitudes and actions must be present for an individual to be self-determined.

Self-determination can be enhanced by promoting skills associated with these three essential characteristics, referred to as component elements of self-determined behaviour. They include: (a) choice-making skills, (b) decision making skills, (c) problem-solving skills, (d) goal setting and attainment skills, (e) self-management skills, (f) self-advocacy and leadership skills (g) an internal locus of control, (h) perceptions of self-efficacy and outcome expectancy, (i) self-awareness, and (j) self-knowledge (Shogren, Wehmeyer, Palmer, Forber-Prat., Little, & Lopez, 2015; Wehmeyer, 1999). Self-determination is viewed as a dispositional characteristic; as such individuals should be consistently using the component elements and related behaviors to exert control over their lives.

While studies examining physical activity experiences and self-determination are few, Robinson and Liberman (2004) suggested that youths with visual impairments may benefit from learning self-determination skills via physical activities such as track and field events. Parents, teachers, and even THR instructors can play an important role in supporting and teaching individuals with a physical disability to use the skills associated with self-determination (Doll, Sands, Wehmeyer, & Palmer, 1996). In the THR setting, instructors can support the development of self-determination by providing choices, and encouraging goal setting in and outside of lessons (Wehmeyer, 1992; Wehmeyer, Sands, Doll, & Palmer, 1996) as well as opportunities for taking initiative, providing constructive feedback and rational for their actions (Mageau & Vallerand, 2003). With appropriate supports, accommodations, and opportunities from staff, individuals with a disability can develop enhanced self-determination (Wehmeyer 1999). For instance, a person with limited mobility may need support from a side-runner to nudge a horse to make it go faster. Restriction may occur when an authority figure who is of great influence, such as a parent or teacher believes the person

is incapable of making good choices or lacks experience in making informed choices (Wehmeyer, 2005).

Learning about experiences and perspectives of youth in THR programs may inform instructors and volunteers of these programs and ultimately enhance THR. Therefore, the purpose of this study was to explore THR experiences of individuals with physical disabilities. More specifically, the objectives of the study were to gain insight into (a) how participants experienced THR and (b) the opportunities participants had to provide input into their experiences.

Methods

A qualitative interpretivist research approach guided this study. This allowed multiple perspectives from which participants experienced THR (Scotland, 2012).

Participants

Ethical approval was obtained from the ethics review board of SUNY Cortland. A purposeful sampling strategy was used to identify participants. Participants were four individuals with a physical disability (3 males and 1 female, 11-37 years, mean age = 27) who participated in horseback riding in their elementary, middle, or high school years. Details are available in Table 1.

Table 1. Description of Participants

Pseudonyms	Age in years	Sex	Condition
Jenna	32	Female	Cerebral Palsy
Jacob	37	Male	Cerebral Palsy
Perry	23	Male	Arthrogryposis
Carl	11	Male	Spina Bifida

Data collection

Interviews. The primary researcher conducted two one-to-one semi-structured interviews with each participant to elicit rich descriptions of their past experiences. None of the participants took part in THR at the time of the study. All interviews were videotaped and transcribed verbatim. Interviews lasted approximately one hour. Interview questions were open-ended, allowing participants to possess few assumptions and allow accurate expression of thoughts and feelings (Creswell & Creswell, 2018). Probing questions such as, "How would you explain your idea to someone else?, Can you provide a story to illustrate your ideas?, and How did you feel?" were used to encourage detailed descriptions of their experiences.

Artifacts. Participants were asked to bring an artifact significant to their THR experiences. The idea was that participants would be able to use the artifact to further share and articulate their thoughts on the experience.

Field notes. The first researcher made notes after each interview. General impressions of happenings and preliminary thoughts about themes that might relate to the data were recorded. The field notes served to facilitate the analysis (Bogdan & Biklen, 1998).

Data Analysis

Data were analyzed using interpretive thematic analysis (Braun & Clarke, 2012). Thus, beginning codes were produced and quotes of interest were highlighted in the transcripts. After initial coding, the researchers reviewed emerging codes, discussed variations of codes, and reviewed emerging themes. In these reviews, the themes and supporting sub-themes emerged and were examined. In subsequent meetings, the major themes and subthemes

were narrowed down related to similarity of meaning and content. The final themes and sub-themes were agreed upon by both researchers.

Research quality

Credibility and reflexivity were addressed to ensure a rigorous research process (Zitomer & Goodwin, 2014). To ensure credibility, triangulation (i.e., use of multiple data types) enabled viewing of the players' experiences in various ways (Creswell & Creswell, 2018). The interviews, artifacts, and field notes lead to similar conclusions about riders' experiences. The primary researcher conducted follow-up interviews to get clarification or additional information from participants, where necessary. Direct quotations from the participants are provided to illustrate themes and ground interpretive claims. Reflexivity is a unique and important part of a rigorous qualitative research process (Zitomer & Goodwin, 2014). The primary researcher (CM) acknowledges the potential impact that her personal and professional background may have on the research study and findings by sharing her position as a researcher and former THR participant. As a child, she took part in a THR program for several years. The experience provided her with unique insight into this topic and motivated her to explore participants' perspectives. She believes that physical activity, including THR can be vehicle for independence and social opportunities. As a researcher, she wants to give a voice to youth to allow their experiences to be heard.

Results

Data analysis uncovered three themes: (a) horseback riding is not a sport, (b) relationships with others, and (c) the meaning of independence. The components of self-determination were evident in the participants' experiences within the context of THR and will be discussed in detail below. The participants expressed that the experience of THR can either facilitate or limit self-determination.

Horseback riding is not a sport

Participants relayed that they did not choose to take part in THR. Rather, they expressed their parents enrolled them in THR because the activity was suggested by a medical professional or they believed it may help ameliorate some symptoms of their children's disabilities. As Jenna put it "*Mom read articles that (stated) it helps children with CP with balance*". All of the participants articulated that they did not perceive THR to be a sport, but described it as a "*clinical intervention*" (Jacob), "*therapeutic activity*" (Perry), or "*rehab-based*" (Jenna). Jacob stated:

> I think it just didn't feel as results oriented as other sports. I didn't do any youth competitions or anything… like in soccer there was a score. I was playing toward so I got to score goals and with racket sports you could kind of see results…. For some reason it never clicked. I never felt that I wanted to become an Olympic horseback rider. I never got into it the same way I did soccer or racket sports.

The participants emphasized that they expected THR to be more like a sport than it turned out to be when they actually took part in the experience. It seemed they could not conceptualize THR as a sport because they felt they were not in control of the activity or the horse. In addition, three of the participants held a fantasy of being a cowboy or cowgirl, similar to what they may have seen in movies or on television. Jacob relayed: "*I liked the boots. We had these boots, the riding pants, and like these knee and elbow things.*" Perry said, "*The situation was controlled but I wasn't controlling it*". He added, *"I wanted to gallop off into the sunset but it didn't work that way. It was fine. It was more of a therapeutic calming type thing"*. These participants' ideas of THR, combined with the

knowledge of their parents' perspectives suggested that the activity was not viewed as a sporting experience, but rather for the therapeutic benefits. Notably, participants expressed that the lack of relationships with other youths and not feeling like part of a team contributed to their views of THR as not a sport.

Relationships with others

Relationships with others were critical to a positive THR experience, yet participants voiced dissatisfaction with opportunities to bond with others. A strong connection with the instructors and horse was important for autonomy, as well as comfort and enjoyment. Participants suggested that a good instructor was one who was present and supportive, but not overshadowing. Close relationships with the instructor and staff were viewed as positive and meaningful. Jenna said "*I liked my teacher. I always looked forward to my lesson. She was really nice to me. She was a kind and caring person",* and Carl expressed, *"I know them pretty well. And they are like wicked nice"*. when asked about his helpers.

All participants noted that lack of social interactions with same-aged peers seemed to influence their adherence to the program and overall enjoyment. Perry thought his THR program served a wide-demographic of people and that having more same-aged peers might have been helpful in keeping his interest. He said,

> And then eventually I think I stopped going (to THR) because I didn't have any friends in the program besides the people working there but they changed too, so there was no real consistency. I didn't have any friends to look forward to seeing. It was just the horses which was cool but I don't think it was enough for me to stay.

He continued,

> There wasn't a lot of interaction. I wasn't riding with someone and say 'I cannot go this week because I have to go with this person'. I never had that feeling, and with soccer, it was like 'I can't not go to soccer practice'.

Perry noted he lacked social connections he felt were necessary to his adherence to the THR program. Further, he compared THR to soccer, and suggested that unlike in THR, he could not miss soccer practice because he had an obligation to his teammates. The sentiments revealed that the notion of being part of a team may also encourage participation in THR.

Jacob also noted a lack of same-aged peers, and therefore compared his own riding abilities to others who did not take part in the THR program. He said "*I would hear from my friends, just at school…. Kids would talk about the things they were doing. It was not specific but they were all cantering and I was not cantering yet*". Perhaps having peers with similar abilities in the THR program would allow participants to feel challenged, yet able to gauge their personal strengths and weaknesses.

The meaning of independence

Developing a sense of independence was possible when participants felt comfortable riding and were able to ride with minimal assistance but was limited when they received too much help from instructors or felt a lack of control. Participants acknowledged that it was the instructor's job to keep them safe. Jenna said, "*I was young, 5 to 8 years old so the teacher would decide where we would go, I'm sure to keep me safe but I think she would do that for any child",* whereas Perry expressed, *"They were there to make sure I didn't fall and I was appreciative of that"*.

Lack of control was experienced when others interfered or took over. Carl stated, *"They did not ask me if I was ready or not. My dad just picked me up and put me on the horse.*

And told me to go". The same participant with a sense of disappointment said, *"I only got to take the reins once or twice"*.

Similarly, another participant felt like he was in a passive role, rather than in charge of the activity. Perry said,

> I remember asking if I could have the horse run, and they said no. And I was like humph. (makes a face). Fine, this sucks. It was kind of one of those things 'what am I doing here? I'm just walking around then'. I never felt completely in control when I was on horseback, but it wasn't like I was out of control and worried. I felt like the horse, but the situation was controlled but I wasn't controlling it. And, I didn't really think about it at the time but looking back on now, that's why I didn't stick with it for sure. I was just kind of there. Instead of actually participating. Not to say I didn't participate, but not in the way that other things have made me feel.

Notably, the lack of control felt over the THR experience seemed to contribute to a loss of interest in the activity. Fear and anxiety also played a role in how the participants felt about the THR experiences. All participants spoke about situations in which they felt unsafe. In some cases, their feelings were influenced by a lack of connection with horse or being an inexperienced rider. Carl learned that he had control of how he reacted to unpredictable situations, saying "*I decide if I should panic or not"*. He also acknowledged that he would like his teachers to encourage him to take more risks. He said, "*What I think I need is for them to tell me to suck it up and just know that I'm not going to fall. That's what I think I need. That's not what they think*".

For most participants, independence meant riding on their own. Participants frequently talked about the fantasy of being like a horse and moving fast. For children with a physical disability who are physically slower than their peers, the horse perhaps provided a sense of mobility they didn't possess. Some participants felt the horse enabled accessibility and was almost like an extension of their body. Perry said, *"I definitely wanted to run but I remember it being a pretty unique experience, like a big alive wheelchair. So, it was cool. Definitely got me places"*.

While participants would have preferred to be independent, they acknowledged that success in horseback riding could also mean doing something challenging for the first time, working towards a goal, or feeling good about completing a task. Jenna said, "*to have the right rhythm with the horse you're supposed to stand up and sit down, be one with the horse. I remember when I could do that for the first time*". Carl suggested that making progress towards independence and using minimal assistance means success saying, *"working my way up to people not holding onto me but being near me"*. For Jacob, success occurred when he felt confident about his abilities. He expressed, "*just knowing in my own head that I was doing it the right way, it felt good"*.

Discussion

Self-determination emerges as youngsters develop and acquire multiple interrelated skills (Doll et al., 1996). Essential characteristics of self-determination are volitional action, agenic action, and action-control beliefs and several components elements enable the expression of these essential characteristics, such as making choices, solving problems, setting and attaining goals, making decisions, self-advocating and acquiring self-awareness and self-knowledge (Shogren, Wehmeyer & Palmer, 2017). Much like at home, school or during leisure activities, THR is one environment where participants can learn and practice these skills. Participants in the current study described experiences that both facilitated and limited their ability to be self-determined in THR programs. Instructors and volunteers both facilitated and inhibited opportunities for self-determination. They were supportive of self-

determination when they encouraged and provided opportunities for participants to have a sense of control over their riding and lesson. Participants relayed that their opportunities to develop self-determination were reduced in lessons when their instructors did not allow for risk-taking when they felt they were ready to try new things or made them feel like they were simply a passenger on the horse.

THR was perceived by participants as a therapeutic activity, rather than a sport. The therapeutic relationship tends to be hierarchical in nature. The therapist has the power to assess and make decisions whereas the patient is dependent and passive (Apelmo, 2012). The sense of dependence was evident when participants described experiences of just being placed on the horse, and feeling unable to play an active role in their own riding experience. Furthermore, Jenna expressed that her parents enrolled her in a THR program for therapy, specifically to improve her capabilities affected by her disability, and not to learn riding skills alone. Researchers have indicated that parents perceive THR to have many positive physical, psychological, and social effects on their children (Boyd & LeRoux, 2017), hence it is possible that parents focus on these therapeutic effects over riding skills. From a self-determination perspective, it is important for parents to inform their children about THR and make their own choices, or at least provide input, regarding their decision to enroll and participate in a THR program (Shogren, Wehmeyer & Palmer, 2017). Open dialogue between parents and their children as well as instructors and riders can facilitate opportunities for discussion of abilities and difficulties and enable goal setting (van Swet, Wichers-Bots, & Brown, 2011). This may also enable participants to gain a sense of control over physical activities they wish to take part in and enhance overall commitment to a program (Wright, Roberts, Bowman, & Crettenden, 2019).

The notion of control connecting between the themes of "not a sport" and "the meaning of independence" was evident as participants repeatedly expressed few opportunities for self-determination as they felt they had no control over their lesson or horse. Instead, they heavily relied on instructors or volunteers to guide them through the activity. The participants' sentiments were not surprising given that athletes with physical disabilities report feeling empowered and in control when participating in sport (Allan, Smith, Cote, Martin-Ginis, & Latimer-Cheung, 2018). It is also important to note that THR did not offer the same opportunities as other sports might have. As expressed by the participants in this study, there were few opportunities for competition or developing relationships with other riders.

A feeling of connection to peers and instructors facilitated opportunities for self-determination (Ryan & Deci, 2000). The relationship with the horse positively impacted THR experiences for the participants. In this study, participants spoke of the importance of developing a rapport with the horse to feel comfortable and confident. The ability to control a large animal such as a horse has helped youths with a physical disability to gain confidence and independence (Lessick, Shinaver, Post, Rivera, & Lemon, 2004). Instructors, volunteers, and parents also played a key role in facilitating or limiting self-determination among youths in this study, a finding clearly supported in self-determination literature (Shogren, Wehmeyer & Palmer, 2017). Previous research revealed that parents and teachers influence youths with a physical disability's participation in physical activity (Li & Chen, 2012), and supportive coaches and teaches who are thoughtful and considerate with positive attitudes are important to meaningful experiences (Fitzgerald, 2005). Similarly, Jenna and Carl's cases illustrated that supportive instructors were important to their THR experiences, but also enabled them to be more independent.

Interactions with peers and a sense of success or competence facilitates participation in physical activity among youth with a disability (Shields, Synnot, & Barr, 2012; Shields &

Synnot, 2016). Belonging to a sport community may help them feel less isolated because of their disability and experience increased feelings of self-confidence and empowerment (Goodwin et al., 2009). Perry's experience of THR did not include developing ties with other peers of the same age or abilities, and he believed that developing friendships would have given him a reason to continue in the THR program and make it more enjoyable. The evidence suggests that youth with a disability may have feelings of inadequacy and frustration when they fail to keep up with the expectations of their peers without disabilities (Bredahl, 2013; Healy, Msetfi, & Gallagher, 2013). This was particularly pertinent to Jacob's experience of comparing his achievements to those of his peers at school and feeling bad about himself in comparison.

Wheelchair-users have described the wheelchair as a liberator, viewing it as an extension of themselves (Reid, Angus, McKeever, & Miller, 2003). This idea was particularly pertinent to Perry's experience where he felt a sense of independence and freedom when the horse was getting him places. The horse, like the wheelchair, compensated his physical limitations and supported his ability to have a meaningful experience. Logically, it seems the horse helped to maximize independence and autonomy under proper conditions.

Self-regulation and goal-setting are important to the development of self-determination (Wehmeyer, 1999). Carl's ability to articulate that it was his choice or not to remain calm on the horse demonstrates that he was learning to self-regulate and control his feelings and emotions. Participants were also able to set personal goals that allowed them to feel successful. Their experiences perhaps indicate that teachers should guide participants in setting reasonable goals over-time so riders feel more successful. For example, participants could help to establish the goals they wished to achieve in riding lessons and throughout the THR program.

Interpreting THR experiences through a self-determination lens provided a unique view of participants' perceptions and needs. Understanding how participants perceive THR can help teachers identify strategies to improve instruction. Based on the experiences shared, three key considerations for THR instructors and parents emerged. First, parents should have a conversation with their child, even those at a young age, prior to enrolling them in THR to set appropriate expectations and determine if it is an activity the child wishes to pursue. Perhaps youths would be more likely to adhere to the activity if they had a say in their participation. Second, instructors should plan careful lessons that provide opportunities for youth to practice self-determination skills. Participants should have opportunities to set, track, and attain goals, choose activities according to their preferences, and develop a sense of their personal capabilities on the horse. Further training for the instructors may contribute to educating them on strategies to allow youths with a physical disability to have more choices and modifications to equipment and activities. Finally, opportunities for social interaction with peers should be given, perhaps through group riding lessons or cooperating to complete stable chores.

This study has some limitations. Participants may not have been representative of all THR experiences, particularly because only four participants were included. Given that participants were interviewed years after their THR experiences, the research relies on their memory of the experience. It is also possible that participants' views of THR were impacted by the fact that they did not choose to participate in the program in the first place. Perhaps none of the participants stuck with the THR program long-term because they had little initial desire to engage in the activity.

Future studies should explore potential tensions between allowing youths to be more independent on the horse and concerns the THR instructors or organizations might have about legal liability. Examining each of the identified themes that emerged in the study may

provide greater insight into the THR experience and have implications for participation in other physical activities, particularly in activities pursued after taking part in a THR program. It would also be useful to know if the participants would advocate for THR and foster self-determination as educators or parents. Future work should also investigate experiences of youths currently participating in THR programs. It is possible that the nature of THR lessons and coaching has changed since this study's adult participants took part in the activity as children, thus experiences of current participants may differ. Exploring experiences of youths of different ages and abilities may be useful. It may be that participants are provided with more or less frequent and different opportunities for self-determination as they get older (Doll et al., 1996) or have more significant disabilities (Wehmeyer, 2005). Gender differences in relation to THR experiences may warrant further investigation since only one female participated in the current study. Perhaps the experience of THR and self-determination is different for males and females. Finally, it is worth learning more about parents', instructors', and volunteers' perspectives and how they view the potential of THR to provide opportunities to enhance self-determination of participants.

Conclusions

The present study provided insights into participants' experiences in a THR program. The findings provide cause for reflection by participants and their parents, as well as THR instructors and volunteers on what may contribute to quality experiences in these programs and perhaps similar physical activity programs for individuals with physical disabilities.

Perspectives

The findings of this study are relevant to the field of Adapted Physical Activity. First, advocates have been calling for the voices of those with disabilities to be heard (e.g., Haegele & Sutherland, 2015). The current study provides insight into physical activity experiences of individuals with physical disabilities from their viewpoint. Second, the THR experiences shared by the youths offer important considerations that may be adopted by THR instructors and findings could be of interest and use to others, including practitioners, who provide physical activity programming to individuals with physical disabilities.

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