A System of Equine-assisted Therapy: Stakeholders, Practices, and Issues

Aehong Min
Indiana University Bloomington
Bloomington, Indiana
aemin@iu.edu

Cassie Kresnye
Indiana University Bloomington
Bloomington, Indiana
ckresnye@iu.edu

Patrick C. Shih
Indiana University Bloomington
Bloomington, Indiana
patshih@indiana.edu

ABSTRACT

Equine-assisted therapy has provided various treatments and activities with horses to improve one's physical and mental health. Few technologies has been utilized to promote the therapy in terms of its system and influences on clients and other stakeholders. We are conducting a study aiming to (1) understand stakeholders and their current practices and issues of the therapy which involve several stakeholders; (2) explore what and how technologies could support the stakeholders; (3) to design and develop technologies to promote equine-assisted therapy for the stakeholders. Observations and interviews have been conducted at a local facility for equine-assisted therapy, and we bring up additional questions considering other subjects (clients and horses) who need to be noticed differently.

KEYWORDS

Equine-assisted therapy, Animal-assisted therapy, Human-computer interaction, Animal-computer interaction

Figure 1: PALS - playground & facility

INTRODUCTION

As part of animal-assisted therapy, equine-assisted therapy has offered diverse treatments and activities with horses to promote one's physical and mental health. It has been demonstrated to provide benefits to people who have physical and mental issues such as standing and quadruped balance [1], confidence, self-concept and social stimulation [2]. Also, the environment of horse-riding provides perceived safety without stigma-related concerns such as judgement from other people [2]. Despite the importance and effects of this therapy, few technologies has been utilized to reinforce those effects of therapy and support a system of therapy including managing volunteers. Also, little HCI research has been studied to support this therapy. We started conducting research that aims: (1) to understand current practices and issues of a system of equine-assisted therapy which involve several stakeholders; (2) to explore what and how information communication technologies (ICTs) could support those stakeholders in terms of well-being, efficiency, and care; (3) to design and develop technologies to support equine-assisted therapy and those stakeholders. While we are conducting this study, we noticed other stakeholders such as people with cognitive issues and horses who are not easily fully understood by typical research methodologies. Thus, we suggest questions that were come up from our study.

METHODS

We first contacted staff of People & Animal Learning Services (PALS), which is a nonprofit therapeutic riding center in Indiana, USA. Since we got permission, we have observed several sessions that involve different clients (riders), volunteers, and trainers. During the session, a caregiver of the client is usually watching the client riding a horse in a separate room or on the second floor of the facility. On the spot, we have conducted 1:1 semi-structured interviews with those caregivers and volunteers before, during, or after the session. The interviews were transcribed, and we conducted an initial analysis with data from our observations and interviews.

PRELIMINARY FINDINGS

Through our observations and interviews, we found that there are several stakeholders who have involved in the process of equine-assisted therapy. The stakeholders at the facility include caregivers, clients (riders), volunteers, trainers, and office staff. Their roles, responsibilities, and issues are diverse during a session. For example, caregivers usually provide a ride for their care recipients and just watch the session. Trainers lead the session by directing the direction, speed, and so on. Volunteers usually help clients ride a horse and walk on the side of a horse together. Both trainers and volunteers also take care of horses. Staff members in the office usually manage schedules of sessions, workers, and clients.

Figure 2: PALS - staff & service animals

This section will briefly describe how the equine-assisted therapy is conducted and what dynamics among stakeholders exist in the process, and we will suggest questions came out from our findings.

Matching a client to a horse

The staff members mentioned that the main trainer get information about a client in advance. The information about the client includes a purpose (e.g. physical rehabilitation, mental rehabilitation, entertainment), health condition (e.g. spinal cord injuries, autism spectrum disorders, epilepsy). Then the trainer decides what horse will serve the client. The way to match a horse to the client depends on the experiences and judgement of the trainers, rather than utilizing a systematic analysis on the capabilities and preferences of each client and horse.

Vagueness to see progress

There are many clients who aim to improve their physical health such as gross motor function, or to mitigate other types of health issues. Some caregivers mentioned that they could see how their care recipients gradually improve their health by taking equine-assisted therapy. However, there is no technology that could detect progress, and any chart and data of client's progress. Information about the progress has been delivered by the trainers verbally, but caregivers would like to see the progress more clearly and more in detail.

Disconnected communication chains

Communications among those stakeholders are not connected well. Volunteers are one of stakeholders who can see and take care of clients closely during the session. However, they said they usually do not have any chance to talk with caregivers. Since they are not required to see any progress during the session, they know almost nothing about it, and they think they do not need to communicate with caregivers. Also, we could not find clear collaboration with primary healthcare providers of clients, who knows the clients well. Moreover, there were not ample communications with some clients who have disabilities. It could be assumed that involving primary healthcare providers in the process of animal therapy might be beneficial to understand the clients and provide proper treatments to them.

QUESTIONS FROM OUR STUDY TO NOTICE DIFFERENTLY

In our study, we could explore and understand practices and issues of general stakeholders of equine-assisted therapy. We will collect more data from observations and interviews to design and develop technologies for equine-assisted therapy. However, there are still gaps in terms of understanding clients and horses, and below questions have been come up from the study.

Figure 3: PALS - a client, volunteers, and a trainer during the session [3]

Noticing experiences and needs of people with disabilities

We have not conducted interviews with clients directly because many clients are kids and/or they have cognitive issues or developmental disorder (e.g. autism), and there are several methodological and ethical issues to conduct research on these populations (e.g. privacy, underage subjects, understanding of their way to communicate, think, and behave, etc.). We could see whether they enjoy riding horses through observations. However, with typical research methodologies such as observations and interviews, it was hard for us to notice what they really prefer, feel, and need during the therapy, what they want to know see in terms of progress, and how they want to communicate with other stakeholders. In addition to kids with developmental disorder, it would be also difficult to communicate with patients or older adults with dementia, Alzheimer's Diseases, disability, etc. If we want to study those kinds of populations, we might need to find experts to communicate with them and understand what they experience and feel. However, it is not a direct way to know their thoughts and experiences, and incorporate their needs into HCI design. How could HCI researchers involve those populations in HCI design research? What HCI design research methodology could we differently apply to them?

Noticing perspectives of service horses

Another question was whether we need to consider horses and involve them as one of stakeholders for the therapy. It is not easy to notice and consider animals' aspects when the purpose of the study is for human. However, in this equine-assisted therapy, the horse's role could be considered as the most important role. They directly interact with clients during the session. As we are also considering to develop a technology that is related to horse's body and movement, we should "notice" the horse's perspective, which will be different from human's perspective. To do so, how could we identify and understand their views and issues? It is possible to see their behaviors and related issues via observations. However, it would be still based on human's perspective. Then, how could we notice a horse's perspective in HCI design research?

If we could understand clients' needs and experiences more precisely, and if we could consider horse's perspectives, we could design and develop more appropriate technology to promote both human and horse's well-being. In this sense, during the workshop, we would like to explore different perspectives on HCI research methodologies for those people with disabilities and service animals.

REFERENCES

[1] M. J. Biery and N. Kauffman. The effects of therapeutic horseback riding on balance. *Adapted physical activity quarterly*, 6:221–229, 1989.
[2] H. Burgon. Case studies of adults receiving horse-riding therapy. *Anthrozoos*, 16(3):263–276, 2003.
[3] People & Animal Learning Services (PALS). PALS Therapy, 2019.