

Introduction and Background

What is Wilderness Inquiry (WI)?

- WI is an inclusive, activity-leading organization whose mission is "to connect people from all walks of life to the natural world through shared outdoor adventures."¹
- WI offers educational outdoor programming, such as canoe rides and camping trips, to community members.¹

Why is Outdoor time important?

- Outdoor time leads to lower illness, mortality, and stress levels; more physical activity; and a greater sense of well-being and social capital.²

What Are Social Determinants of Health (SDH)?

- The social factors and physical conditions of the environment in which people are born, live, learn, play, work, and age.³



How is Outdoor time affected by an individual's SDH?

1. **ECONOMIC STABILITY:** Lower **socioeconomic status** hinders outdoor engagement due to decreased leisure time, lower budget for outdoor gear, and limited access to nature areas.⁴
2. **HEALTH:** People with **differing physical abilities** participate less in outdoor recreation.⁵
3. **EDUCATION:** **Lack of knowledge** of how to engage in outdoor setting hinders participation.⁴

We aim to show that WI addresses SDH barriers to promote nature-based wellness benefits



Cultural and Community Assets



1. Many nature spaces around Twin Cities area
 - 95% chance of living within a 10-minute walk to a park in Minneapolis.⁶
2. Wholehearted **enthusiasm** of WI team members and participants.
3. WI sees **abilities** as opposed to disabilities

*"It was good to be a part of a group of people from various backgrounds and physical abilities. We focused on people's strengths rather than the weaknesses."*¹

-WI participant

Methods

Participants:

- WI staff team, volunteers with differing abilities, community members

Procedures

- Inclusive, free, educational community events
- Canoeing program
 - Fleet of canoes that travel the country
 - Educate students about their waterways
- Weeklong nature outings
- Career-oriented outdoor education

Measurements

- Qualitative observations concerning WI's efforts to address nature-based wellness barriers involving the SDH of economic stability, health, and education.



Results

WI addresses SDH barriers to promote nature-based wellness benefits.



1. ECONOMIC STABILITY: WI addresses **socioeconomic status**:

- Events free of charge
- Organization-owned outdoor gear
- Physically visit the local areas, eliminating transportation need

2. HEALTH: WI includes individuals with **differing physical abilities**:

- Recognizing individual strengths and employing teamwork
- Staff members proficient in sign language
- Canoeing is accessible for people with lower mobility issues

*"I was ready to do this. I was surprised that it went really well. It was so much fun!"*¹

-Justine Porath, 21 year old Canoemobile participant who uses a wheelchair.

3. EDUCATION: WI addresses **lack of knowledge** through education:

- WI educates participants: how to use gear safely, history and geography of area
- WI's Outdoor Career Academy (OCA): prepares students for careers in the outdoor industry

*"Outdoor Career Academy affected many of the decisions I made about my future. I am using the skills I learned to make my community a better place."*¹

-Abdulmalik Daud,
Moved to Minnesota
from Nigeria in 2012.



Conclusion

Wilderness Inquiry addresses the SDH of socioeconomic status, differing physical abilities, and lack of knowledge through financially feasible, adaptive, and educational programs. These programs engage community members in outdoor settings, leading to increased nature time and subsequent promotion of correlated health benefits.

Applications and Reflection

Applications

- Consider SDH barriers to equitable participation when designing, implementing, and evaluating programs and policies.

- From an economic perspective, invest in health prevention opportunities to avoid unnecessarily costly acute health issues.

- As a future physician, explore health from a holistic perspective, especially with regard to the physical benefits of outdoor time.

Reflection

- My ongoing time at WI feels like being part of the greater Minneapolis community. It is easy to feel disconnected as a student with limited time, and I am grateful for WI's inclusion of myself both within their organization and within the wider community.



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References

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5. Cordell K, Green G, Williams R, et al. "Outdoor Recreation Participation of People with Mobility Disabilities: Selected Results of the National Survey of Recreation and the Environment." *Journal of Park and Recreation Administration* (2004). 22:2. 84-100.
6. Brody, Jane E. "The Secret to Good Health May Be a Walk in the Park." *The New York Times*, 3 Dec. 2018.
7. Cohen D, Han B, Derose K, et al. "Neighborhood Poverty, Park Use, and Park-Based Physical Activity in a Southern California City." *Social Science & Medicine* (1982). 2012;75(12):2317-2325.

Images

- Fig 1: "Social Determinants of Health." Community Health Innovation Region. MDHHS State Model. (Adapted from Healthy People 2020).
Fig 2-3, 5-7: WildernessInquiry.Org (see reference 1)
Fig 4: "Wilderness Inquiry Annual Report." Wilderness Inquiry Magazine (2017). 3.