

AgrAbility and Occupational Therapy's Role: Working with Farmers and Ranchers

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Project Description & Site

The purpose of the doctoral capstone project was to work alongside AgrAbility to increase the understanding of occupational therapy's role in agriculture. Through the capstone project, there was an opportunity to learn more about AgrAbility and develop deliverables focusing on ergonomics, assistive technology, and the role of occupational therapists in agriculture.

Site: Purdue University - West Lafayette, Indiana



Needs Assessment | Literature Review

In agriculture, OTs aim to educate those within the industry to work in a manner that provides safety and keeps the body and mind healthy. When working alongside AgrAbility, many OT's are qualified and may assist in completing the following items:

- Occupational profiles
- Environmental assessments and modifications
- Occupational task and activity analysis
- Task and object modification and adaptations
- Education pre- and post-injury
- Recommending assistive technology
- Providing energy conservation techniques
- Providing pain management techniques
- Driving rehabilitation
- Home programming
- Return to Work conditioning
- Home and Job modifications

Increased awareness in the role OT can play in agriculture increases holistic care provided to clients. One way to increase carryover and promote OT services is through the collaboration of OT and AgrAbility services.

Project Completion and Outcomes

- ❖ CEAS II Certification
- ❖ Task Analysis' completed on farm related tasks
- ❖ Rapid Entire Body Assessment (REBA) and Rapid Upper Limb Assessment (RULA) completed on farm related tasks
- ❖ Development of course curriculum for healthcare workers for a future online course through Purdue University
- ❖ Created handout for future HUOTD students interested in a capstone project with AgrAbility
- ❖ Ergonomic Resource Binder for dissemination
- ❖ Presentation of ideas for virtual farm visits when comparing to telehealth services
- ❖ Opportunity to learn more about AgrAbility services
- ❖ Opportunity to learn more about agriculture and farming
- ❖ Created "Skills Acquired when Working on a Farm: An Occupational Therapy Student Perspective" handout
- ❖ Updated Plowshare 13 – Vision Piece for AgrAbility

Mission & Vision Statements

Mission: To empower and engage Indiana farmers in their meaningful occupations through ergonomics, assistive technologies, and advocacy after injuries occur, and implement strategies to prevent further injury, to enhance the current quality of life.

Vision: To provide exceptional services to increase the awareness of neurological and orthopedic deficits in relation to farming, prevent future injuries, and enhance the health and well-being of farmers around Indiana.

Deliverables

- ❖ Application of ergonomic principles by creating an ergonomic resource binder to be used for educational purposes pertaining to ergonomic tools and practices.
- ❖ Completion of a synthesis of literature, practice, and observation after completing 5 interviews with AgrAbility professionals throughout the United States who have assistive technology experience.
- ❖ Creation of a synthesis of information gathered after completing 5 interviews with Indiana AgrAbility clients.
- ❖ Production of pictures and/or videos demonstrating tasks completed in agriculture, followed by completion of task analysis of various farm-related tasks, providing ergonomic and assistive technology suggestions.
- ❖ Obtain a certificate of completion from an ergonomics CEU.



Future Implications for OT

- ❖ Development of virtual OT and AgrAbility assessment protocols and/or software
- ❖ Development of a healthcare CEU in-person course focused on farm assessments and agriculture
- ❖ OT's role in hand health for farmers, ranchers, and agricultural workers
- ❖ Host ergonomic and health workshops and create an ergonomic health program for farmers to participate in

KEY REFERENCES

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- Khan, M., Bath, B., Boden, C., Adebayo, O., & Trask, C. (2018). The association between awkward working posture and low back disorders in farmers: A systematic review. *Journal of Agromedicine*, 24(1), 74-89. <https://doi.org/10.1080/1059924X.2018.1538918>

*Full reference list and image reference list available upon request