RESEARCH ARTICLE

Why Do Some Farmers and Ranchers Overcome Limitations from Accidents and Illnesses and Others Do Not? AgrAbility Works for Most.

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Abstract

This article provides a summary review of several articles with data about the successful outcomes from the AgrAbility intervention for farmers and ranchers with functional limitations. The AgrAbility Project increased participants' self-reports of quality of life, independent living and working, and/or psychological wellbeing. Mastery motivation may be why some participants benefit more than others. The article provides some examples of successful AgrAbility intervention. Participants' individual mastery motivation propels them to overcome their physical limitations and to return to as many aspects of their farming or ranching careers as possible.



Several studies indicate that farmers and ranchers who participated in AgrAbility reported increased Quality of Life (QOL) and Independent Living and Working (ILW) levels. AgrAbility is a U.S. Department of Agriculture National Institute of Food and Agriculture funded project that provides information, education, and services to farmers and ranchers with functional limitations.

In a 10-state study with 191 AgrAbility participants, their QOL and ILW levels improved (p < .001) with d = .90 and .84, respectively, which according to Cohen¹ are considered large effect sizes.² In a 12-state study with 225 AgrAbility participants, QOL levels increased 28% and ILW levels increased 30% as compared with a group of 97 non-AgrAbility participants whose QOL levels decreased 4% and ILW levels increased only 8%.³ In 14 states, a group of 269 AgrAbility participants' psychological well-being levels improved significantly (p <.001) with a medium to large effect size (d =.64);¹ the no-treatment comparison group (n= 99) did not increase.⁴ These results provided evidence that AgrAbility participants reported greater improvements in QOL, ILW, and psychological well-being

levels than did non-participants in AgrAbility.

However, for a variety of reasons, some potential participants with knowledge of AgrAbility chose not to be involved in the program. Also, five percent who were included in the intervention group reported that they did not follow through with Division of Vocational Rehabilitation (DVR) therefore did not receive and the accommodations they hoped for from DVR, their health deteriorated, or they decided not to continue with AgrAbility.

There are, no doubt, many reasons why one might choose not to be involved in a program such as AgrAbility or choose not to follow through with the AgrAbility project team's recommendations. One factor might be the individual farmer or rancher's personal level of motivation. Such motivation might be intrinsic to the person and/or based on extrinsic factors.⁵

The motivation to overcome the limitations caused by an accident, serious illness, or disabling condition is called mastery motivation.^{6,7} Such motivation is seen in a person's persistent attempts to solve problems, master skills, and overcome

obstacles. Higher levels of mastery motivation have shown to be more predictive of later abilities in persons with developmental delays.^{8,9,10} Although most of the research on mastery motivation has been done with children and young adults with and without disabilities, the concepts are relevant across the age span, as shown by Doherty-Bigara & Gilmore¹¹ and in multiple cultures.⁶ Gilmore et al.⁶ found generally high levels of persistence and preference for challenge in adults not only in Western countries but also in non-Western countries such as Iran.

А farmer's or rancher's success in overcoming obstacles to their continuing to manage their agricultural operation and live independently is influenced by their motivation to take advantage of available help and resources such as AgrAbility and by their motivation to persist in the face of challenges. In the following paragraphs, we provide some examples of how motivation and internal and external factors affected AgrAbility clients' success.

The bottom line with farmers and ranchers who improved is that they had high mastery motivation; that is, they believed that problems can be overcome, barriers can be circumvented, and things will work out in the end. They were open to seeing if AgrAbility would help. The "can-do" attitude of many is inspirational to AgrAbility staff. Successful clients believe and have faith and hope that they will figure it out.

Their motivations to overcome limitations from accidents, illnesses, or disabling conditions is no doubt related to the fact that ranching and farming is not a job; it is a lifestyle, a vocation.¹² It is their identity. They love the agricultural work they do.

For example, a client of the Colorado AgrAbility Project (CAP) lives in southeast Colorado. He has a custom combine harvesting business that he loves and is highly motivated to continue in spite of the physical challenges from his farm accident. He is also an educator. By the time he started working with CAP four months post injury, his school, family, and community had already addressed the modifications needed for him to live in his home and to work at the school. For him, the purpose of the teaching position was to finance his farming and provide health insurance for his family and himself. He could not imagine the possibility of not being able to farm. AgrAbility and his strong motivation to overcome or minimize his physical limitations enabled him to

continue both his teaching and farming businesses.

Often ranchers and farmers do not think they can do anything other than farm or ranch, or they surely do not want to do anything but farm or ranch. This can be seen as a negative type of motivation, perhaps leading them to unsafe practices in their work or thinking they do not need help. AgrAbility can influence this both by helping clients see the positives that can come from continuing in agricultural work post injury or illness and by sharing with them how it can be done efficiently and safely. If a person thinks there is nothing else for them but the farm/ranch, and they do not know how they can continue given their limitations, the challenges can seem like unsurmountable obstacles. Just learning about options can keep doors open for them. However, they may think they have limited choices, that they have no choice but to continue to farm or ranch, or that nothing else, no other work, is available. These beliefs can lead to depression and prevent them from taking advantage of AgrAbility or to be among the 5% who report that the program was not beneficial to them in terms of quality of life, independent living and working, and psychological wellbeing.

Another reason that farmers and ranchers are so motivated is a deep love for what they do and their high levels of motivation to continue ranching or farming. In working with Craig Hospital and visiting with neurorehabilitation of patients with spinal cord injury and brain injury, patients and staff in Denver report that farmers and rancherseven before they progress very far in their healing when they are still focusing on relearning to sit, dress, and feed themselvestalk about how they need to learn how to get back to work on the farm. Hospital staff have shared that this mentality is similar to the professional athletes with whom they work. Folks in many other walks of life do not appear to be as determined or as interested as ranchers and farmers are in their work objectives so early in their rehabilitation.

Working with someone who is forward thinking and has hope makes all the difference in the world. Their hope and their desire to achieve goals and navigate obstacles, to believe in what they cannot see at the moment but know can happen is what farmers and ranchers are all about. They have "amazing grit and determination."¹³ They have a "mindset that promotes resilience."¹⁴

In conclusion, the current article provides a summary review of several articles with data

about the successful outcomes from the AgrAbility intervention for farmers and ranchers who had a serious accident, illness, or disability condition. The AgrAbility Project increased participants' self-reports of quality of life, independent living and working, and/or psychological wellbeing. Mastery motivation may be why some participants profit more than others. The article provides some examples of successful AgrAbility intervention.

Future research could attempt to provide empirical evidence for the importance of mastery motivation in providing the impetus for these ranchers and farmers to participate in the AgrAbility program. Their individual mastery motivation propels them to overcome their physical limitations and to return to as many aspects of their farming or ranching careers as possible. Acknowledgements: The United States Department of Agriculture's National Institute of Food and Agriculture funded this program evaluation research under Special Project numbers 2016-41590-25880, 2014-41590-22316, 2012-41590-20173, 2010-41590-20750, 2006-41590-03405, 2002-41590-01350, and 98-EDFA-1-0267. Special thanks go to William E. Field for supporting and funding this project. The funding sources were not involved in study design, in the collection, analysis and interpretation of the data, or in writing the report, but they did encourage the authors to submit this article for publication.

Conflict of Interest: There were no conflicts of interest.

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