2015 AgrAbility National Training Meeting, Rochester, NY

April 15, 2015
3:30-4:10 pm

By **Robert J. Fetsch**, Extension Specialist & Professor Emeritus

Director, Colorado AgrAbility Project,

Human Development & Family Studies

Colorado State University

& **NAP Evaluation Committee**

AANTWMcGillQOL4.1515 (Rev. 4.1015)

What Can We learn from Our 191 New Clients with McGill QOL Pre-Survey Data?

By Robert J. Fetsch (CSU),
Robert Aherin (UIL),
Sheila Simmons (KU),
Vicki Janisch & Hannah Gerbitz (UW),
Candy Leathers & Danielle Jackman (CSU/Goodwill Denver),
Sharry Nielsen (UN),
Rick Peterson (TAMU),
Diana Sargent (OSU),
Toby Woodson (UAR),
Inetta Fluharty (WVU),
Kirk Ballin (ESVA), &
Michele Proctor & Madeline McCauley (ECU).

Our AgrAbility Mission

"The AgrAbility Mission is to enhance and protect quality of life and preserve livelihoods. It's about supporting and promoting growth and independence. Ultimately it's about hope."

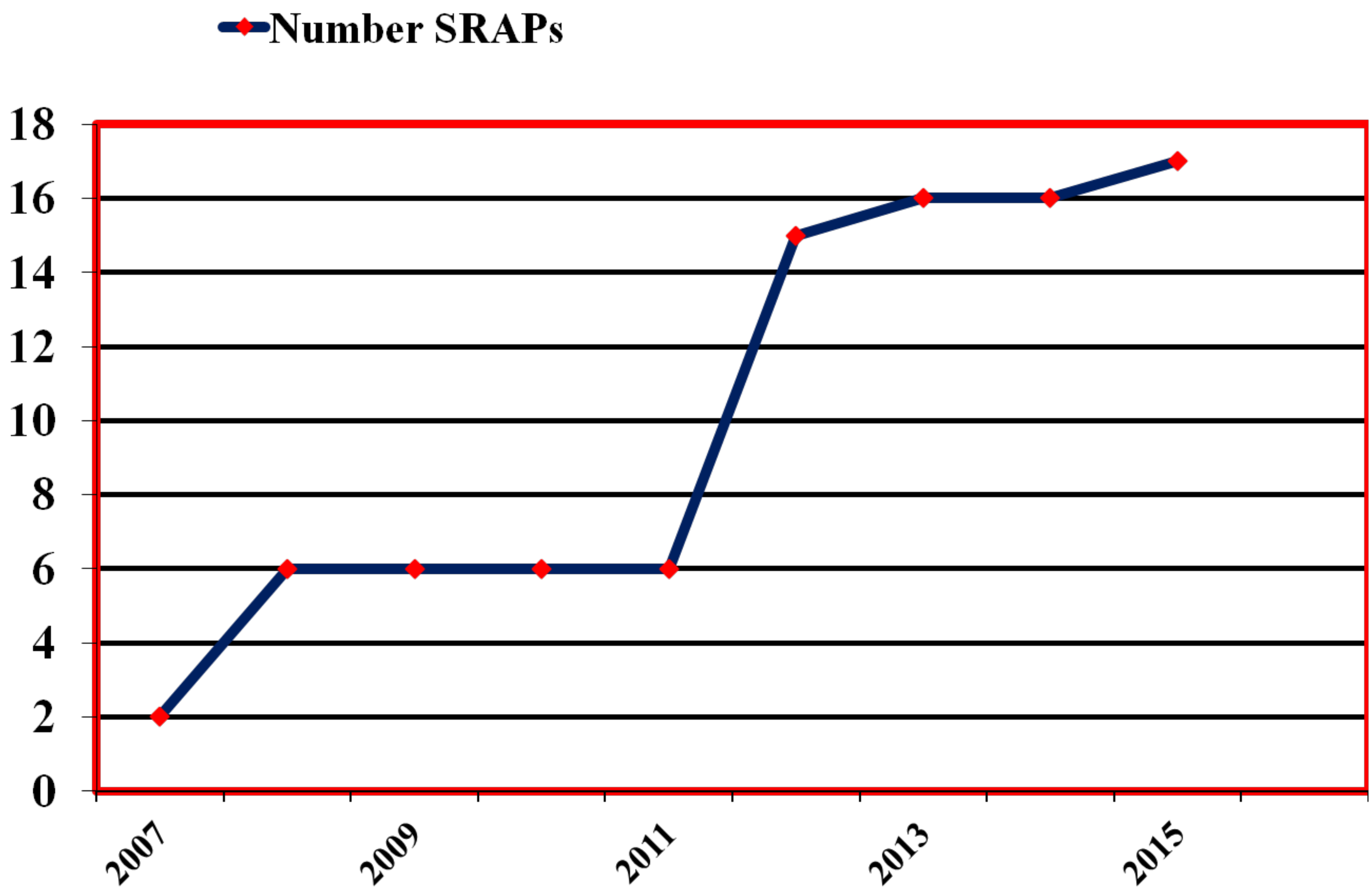
Source: National AgrAbility Project. (2011). *It's about hope* [DVD]. Author: Purdue University.

National AgrAbility Project Evaluation Committee (NAPEC) Produced Results

- Published 2 refereed journal articles and submitted 2 others.
  - Christen, C. T., & Fetsch, R. J. (2008). Colorado AgrAbility: Enhancing the effectiveness of outreach efforts targeting farmers and ranchers with disabilities. *Journal of Applied Communication, 92*(1&2), 1-12.
  - Fetsch, R. J., & Jackman, D. M. (2015, March 9). *Evaluating knowledge, attitudes, aspirations (KASA) and practice changes among farmers and ranchers with disabilities and professionals in an Extension AgrAbility program.* Manuscript submitted for publication.

NAPEC Produced Results

- Published 2 refereed journal articles and submitted 2 others.
  - Jackman, D. M., Fetsch, R. J., & Collins, C. L. (2015, February 21). *Quality of life and independent living and working levels of farmers and ranchers with disabilities.* Manuscript is being revised and resubmitted for publication.
  - Meyer, R. H., & Fetsch, R. J. (2006). National AgrAbility Project impact on farmers and ranchers with disabilities. *Journal of Agricultural Safety and Health, 12*(4), 275-291.



How many SRAPs are collecting QOL and ILW data from their new clients?

History of NAPEC

- *Who is an AgrAbility Client?* An AgrAbility client is an individual with a disability engaged in production agriculture as an owner/operator, family member, or employee who has received professional services from AgrAbility project staff during an **on-site visit**.

Measures Used in 10-State Study

- McGill Quality of Life (QOL) Survey & AgrAbility Independent Living & Working Survey (ILW)
- NAP Demographic Data

History of NAPEC

- Ten SRAP's conducted a 7.5-year pre-survey to post-survey study to answer three questions:
  - Do our clients improve their ILW & QOL levels?
  - How much do they improve?
  - How can your SRAP join us in determining AgrAbility's effectiveness?

Protocol

- Procedure—10 SRAPs mailed each new client the Pre-Survey, a cover letter, McGill Pre-Survey, and a stamped, self-addressed envelope with an invitation to complete and return the Pre-Survey.
- If no response in 10 days, we sent a second mailing.
- Same procedure with both pre- and post-.

Protocol

- Participants were given the choice of completing the survey themselves or of having the items read aloud by the AgrAbility team member. No one was coerced to complete and return their surveys.

We Have 3 Objectives Today

- To learn **whether** our clients improve their ILW and QOL levels.
- To learn **how much** they improve their ILW and QOL levels.
- To learn **how your SRAP can join us** in determining AgrAbility's effectiveness.

Who Were the Participants in the Study (N = 191)?

- 68.6% were male; 24.6% were female; 6.8% N.R.
- 65.4% were Operators/Owners; 15.7% were Spouses/Partners.
- 56.5% were Full-Time; 17.8% were Part-Time.
- M Age was 60.08 (SD = 15.41, Range = 20-95); M Age in U.S. was 57.1 in 2007.*
- Education level ? (12.6% reported)
- Ethnicity ? (5.8% reported)
- Total household income ? (5.8% reported)
- No. days off farm ? (5.8% reported)
- Veteran ? (5.8% reported)

*Source: Retrieved April 27, 2007 from http://nass.usda.gov/census/

Who Were the Participants in the Study? (N = 191)

- Primary Agricultural Operation was…

– Field/grain & hay	78	40.8%
– Livestock	48	25.1%
– Dairy	33	17.3%
– Agribusiness & other	13	6.8%
– Poultry, swine/hogs & other animals	4	2.1%
– Nursery, orchard, vegetable, fruit & specialized crops	4	2.1%
– Missing	11	5.8%

What Were Clients' Primary Disabilities (N = 191)?

Arthritis	19	9.9%
Back injury	19	9.9%
Visual impairment	16	8.4%
Joint injury	14	7.3%
Orthopedic injury	10	5.2%
Stroke	9	4.7%
Spinal paraplegia & quadriplegia	8	4.2%
Cardiovascular disease	7	3.7%
Leg & foot amputation	7	3.7%
Other	48	25.1%
Missing	34	17.8%

What Were Clients' Major Symptoms (N=191)?

• Pain	25	13.1%
• Vision Issues	20	10.5%
• Walking	16	8.4%
• Back Pain	14	7.3%
• Immobility	10	5.2%
• Mobility	10	5.2%
• Tiredness	9	4.7%
• Knee Pain	6	3.1%
• Shortness of Breath	6	3.1%
• Other	74	38.7%
• Missing	1	0.5%

What Was the Range and Average Length of Time with AgrAbility?

- The amount of time spent with AgrAbility ranged from 1 to 74 months (M = 14.75; SD = 9.86; N = 190).

History of NAPEC

- By February 28, 2015 AR, CO, KS, NC, NE, OK, TX, VA, WI, & WV entered their 191 matched pre-post-survey data into Excel files and e-mailed them to CO for entering and analyzing.

– KS	71	37.2%
– WI	58	30.4%
– CO	24	12.6%
– NE	10	5.2%
– TX	9	4.7%
– OK	6	3.1%
– AR	4	2.1%
– WV	4	2.1%
– VA	3	1.6%
– NC	2	1.0%
– Total	191	100.0%

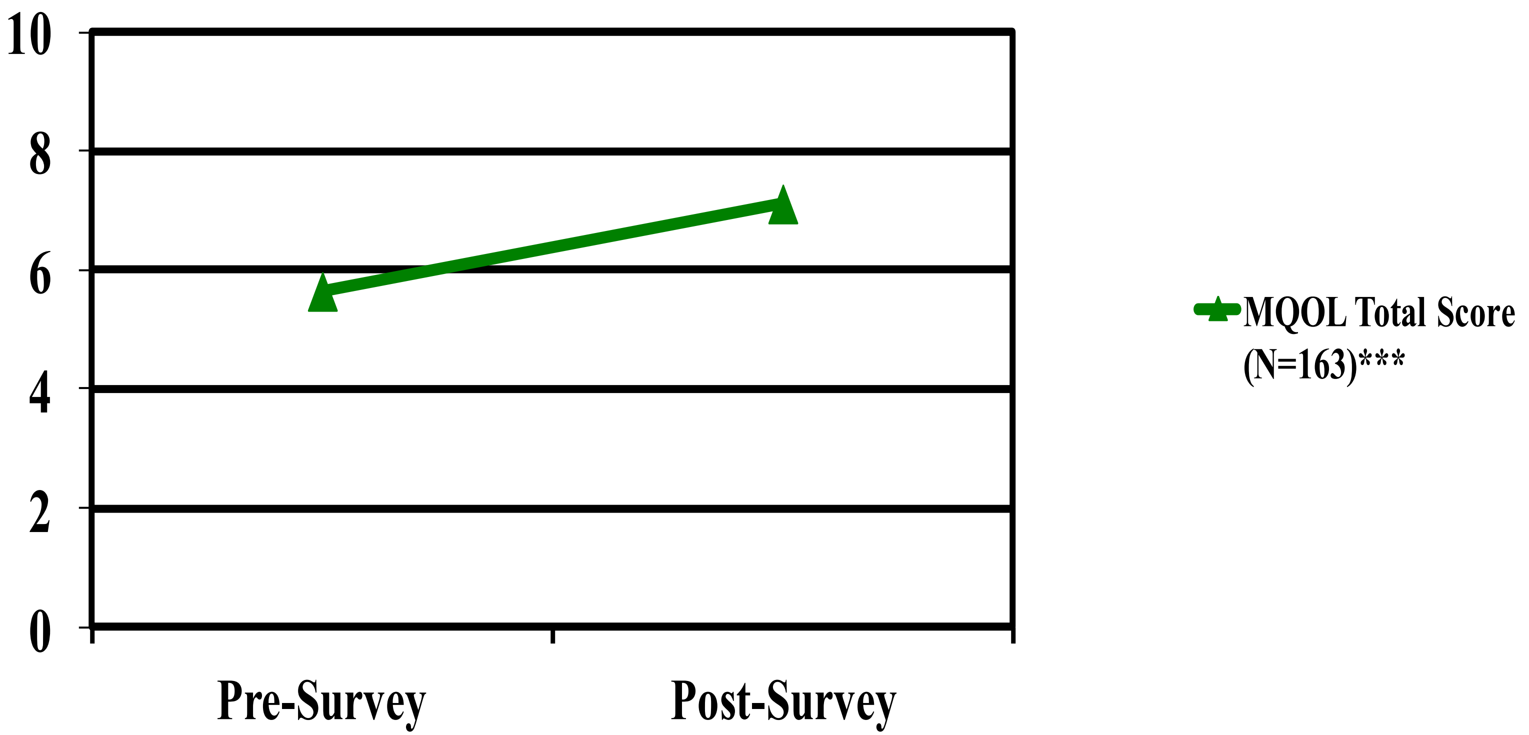
We Have 3 Objectives Today

- To learn **whether our clients improve** their ILW and QOL levels.
- To learn **how much they improve** their ILW and QOL levels.
- To learn **how your SRAP can join us** in determining AgrAbility's effectiveness.

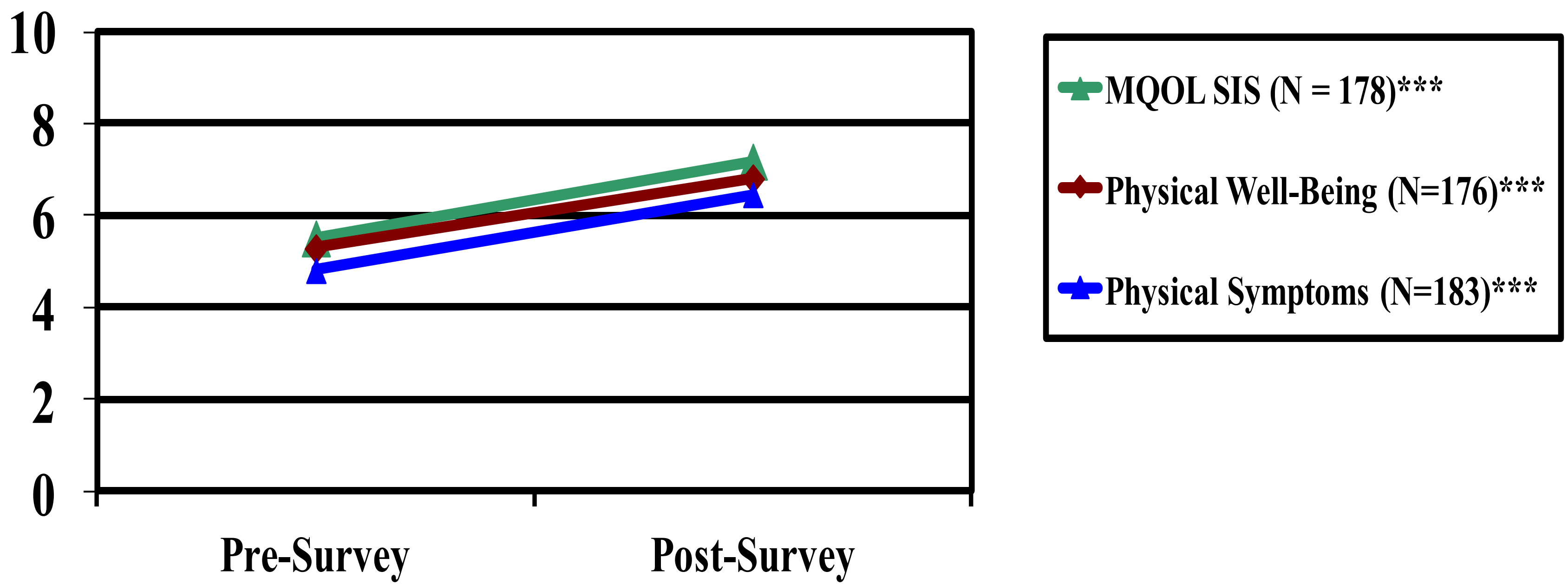
Q: Do Our AgrAbility Clients Increase Their QOL?

A: ?

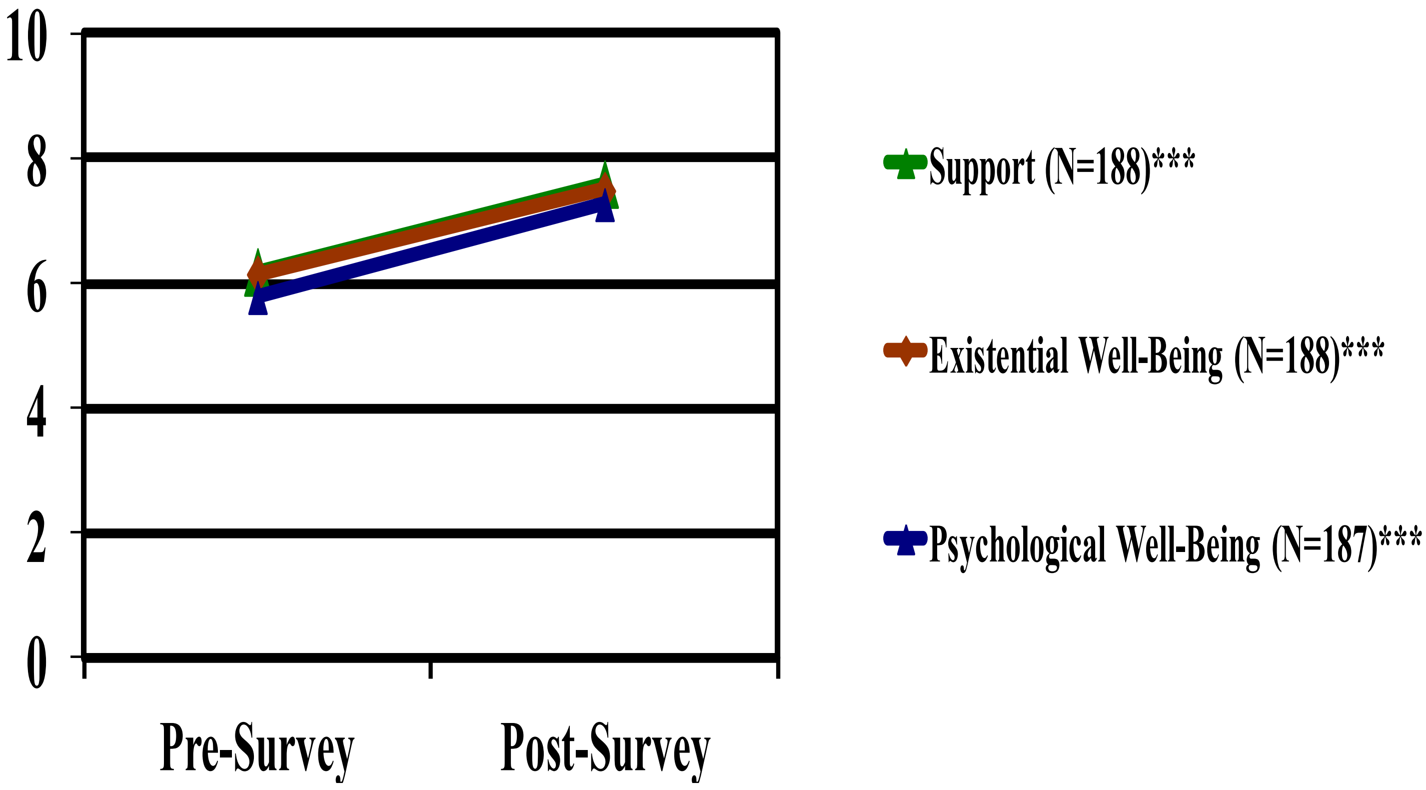
McGill Pre-Survey to Post-Survey Total Score Changes



McGill Pre-Survey to Post-Survey Changes (Single item Scale, Physical Well-Being, & Physical Symptoms)



McGill Pre-Survey to Post-Survey Changes (Support, Existential Well-Being & Psychological Well-Being)



Q: Do Our AgrAbility Clients Increase Their QOL?

A: **Yes, they report improvements on the Total QOL Scale plus on all 5 subscales!**

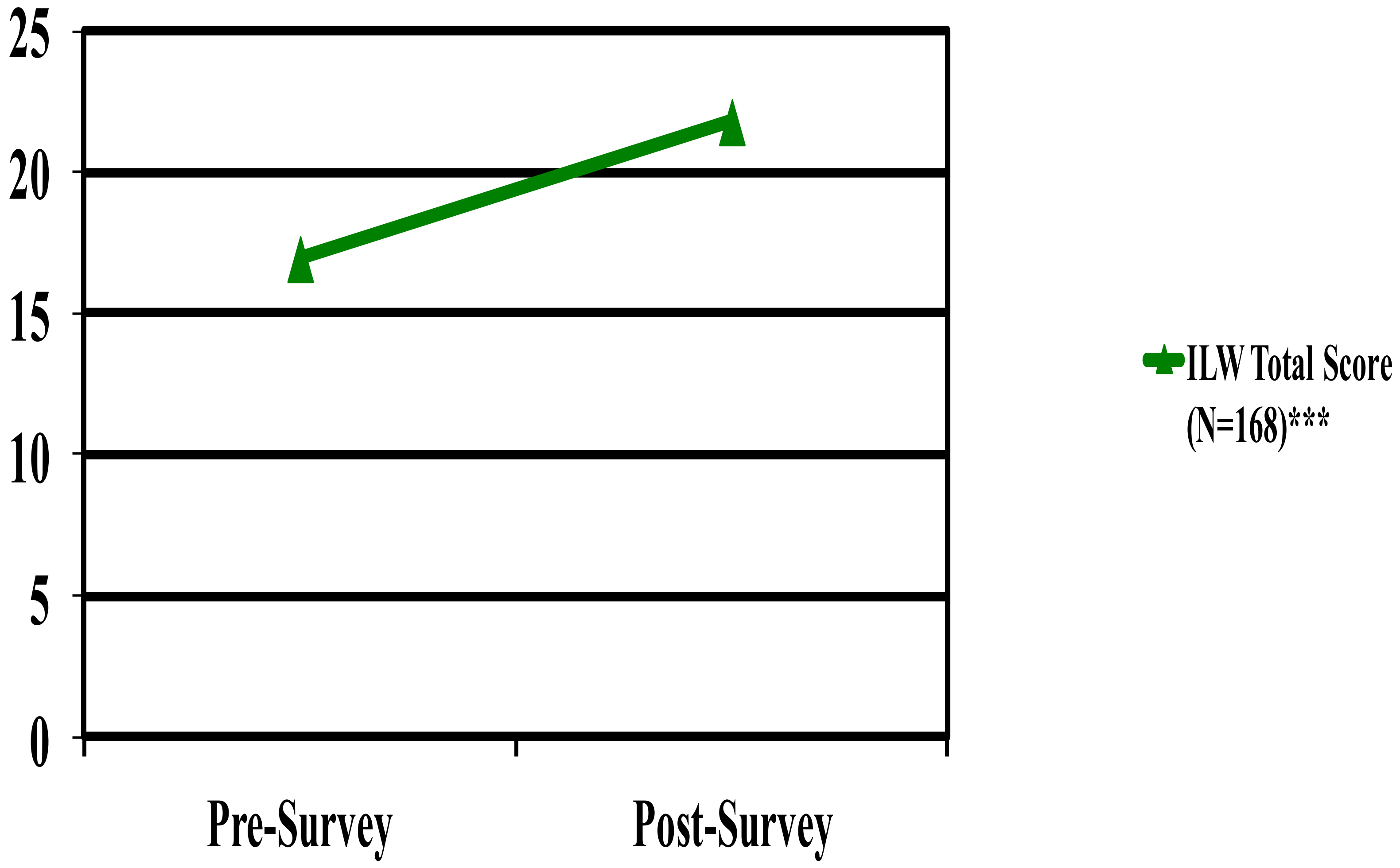
Q: Are Our AgrAbility Clients More Able to Live on, Operate, and Manage Their Farms/ Ranches if They Choose?

A: ?

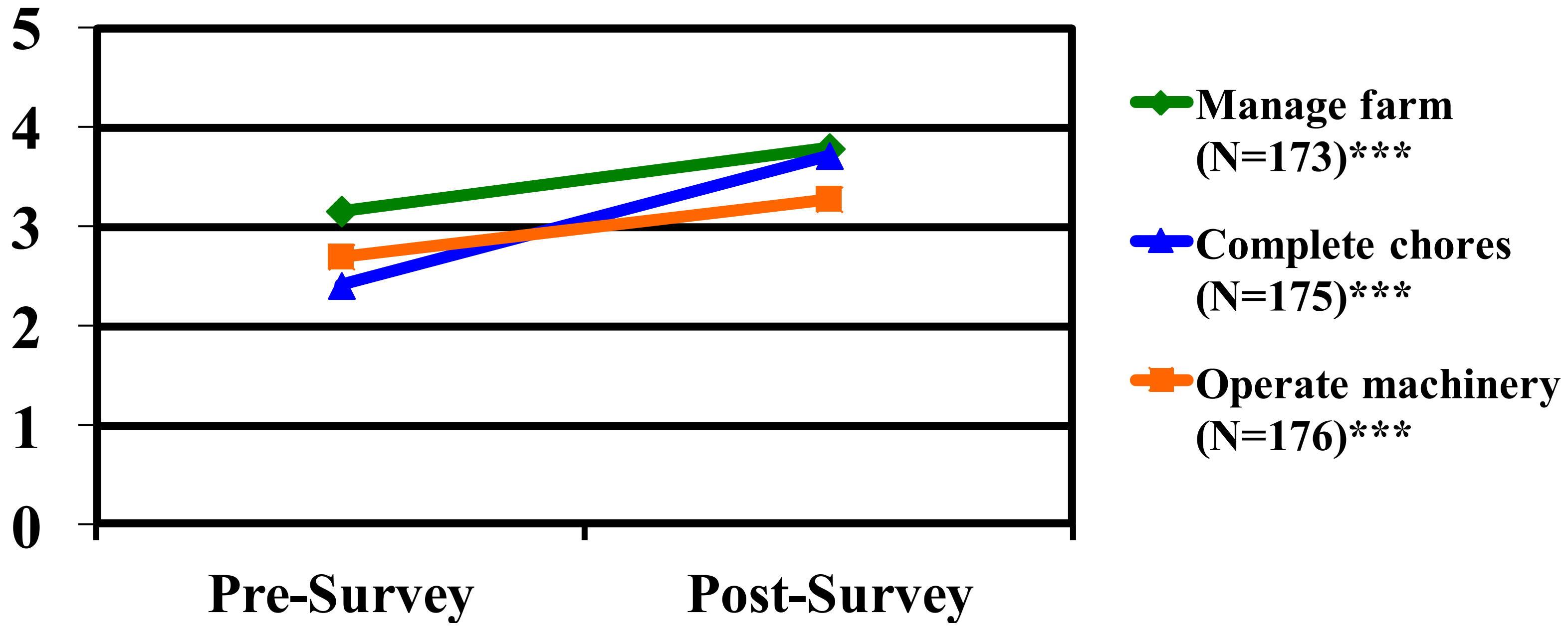
Independent Living & Working Survey (ILW)

- I am able to…
  - Complete chores on my farm/ranch.
  - Operate machinery.
  - Manage my farm/ranch.
  - Access workspaces on my farm/ranch.
  - Live in my home on the farm/ranch
  - Change or modify my machinery in order to accommodate my needs.

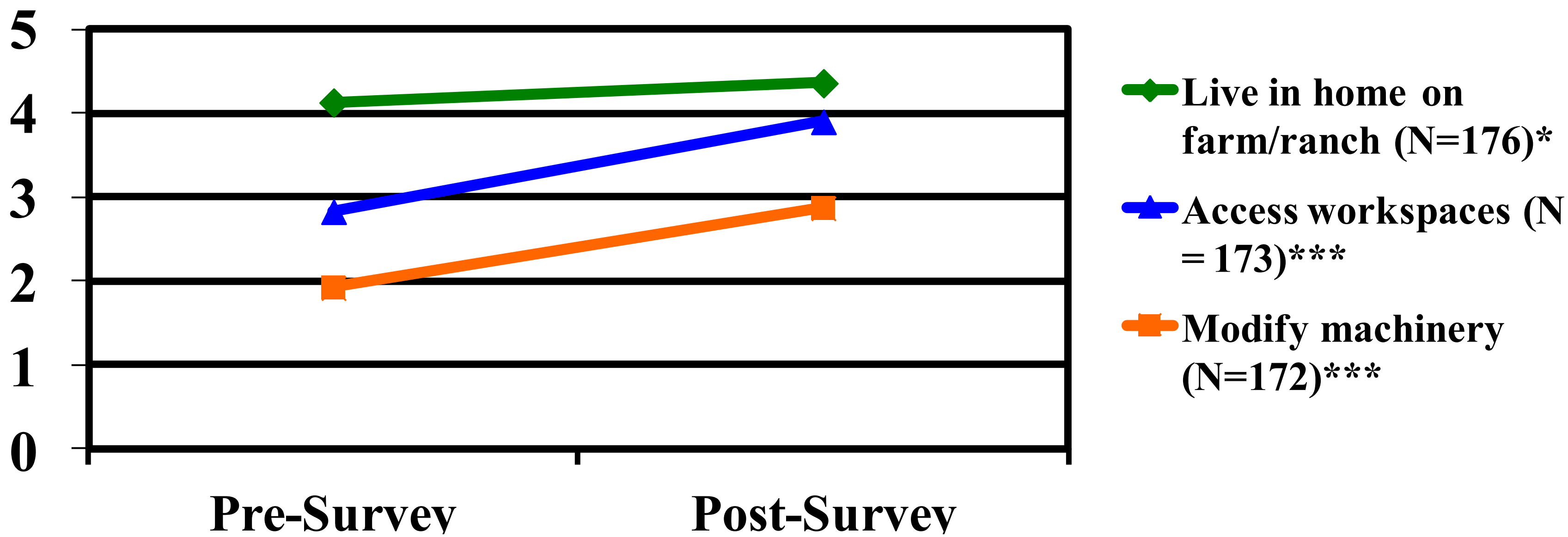
AgrAbility ILW Total Score Changes



AgrAbility Independent Living & Working Survey (ILW)
(Manage Farm, Complete Chores, & Operate Machinery)



AgrAbility Independent Living & Working Survey (ILW) (Live in Home, Access Workspaces & Modify Machinery)



Q: Are Our AgrAbility Clients More Able to Live on, Operate, and Manage Their Farms/ Ranches if They Choose?

A: **Yes, they report improvements on the Total ILW Scale plus on all 6 items!**

Q: What do these 10 SRAPs *do well*?

A: They have pre-post survey data that show statistically significant increases in their clients':

-QOL levels ($p < .001$)

-ILW levels ($p < .05$; $p < .001$)

“I would say because of my involvement with AgrAbility that our household income has improved.”

- Only 13/191 (6.8%) reported.
- Of those 13:
  - 3 (23.1%) Strongly Agree
  - 4 (30.8%) Agree
  - 4 (30.8%) Neither Agree Nor Disagree
  - 2 (15.4%) Disagree

Remember Our AgrAbility Mission

"The AgrAbility Mission is to enhance and protect quality of life and preserve livelihoods. It's about supporting and promoting growth and independence. Ultimately it's about hope."

Source: National AgrAbility Project. (2011). *It's about hope* [DVD]. Author: Purdue University.

These results look promising,

BUT…

How do we know these results are *not* due to something other than our AgrAbility information, education and service?

“Good News”

- AgrAbility is among the 45 federally funded programs that supported employment for people with disabilities in fiscal year 2010.
- AgrAbility is among the 10/45 programs with a review or study to evaluate the program’s effectiveness.

Source: U.S. Government Accounting Office. (2012). *Employment for people with disabilities; Little is known about the effectiveness of fragmented and overlapping programs* (GAO Publication No. 12-677). Washington, DC. (p. i).

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“Good News”

- “…The Department of Agriculture’s AgrAbility program conducted a review of its activities between 1991 and 2011 and found that 11,000 clients had been served, and that 88 percent of those clients continued to be engaged in farm or ranch activities.”

Source: U.S. Government Accounting Office. (2012). *Employment for people with disabilities; Little is known about the effectiveness of fragmented and overlapping programs* (GAO Publication No. 12-677). Washington, DC. (p. 27)

“Bad News”

- “However, this study did not determine whether other factors may have contributed to participants’ positive outcomes.”
- “No impact study.”

Source: U.S. Government Accounting Office. (2012). *Employment for people with disabilities; Little is known about the effectiveness of fragmented and overlapping programs* (GAO Publication No. 12-677). Washington, DC. (pp. 27, 80).

Aida Balsano & Brad Rein asked us to help respond.

- So far 17 SRAP's are working to collect data from AgrAbility clients with an on-site visit (AR, CO, GA, KS, ME, MN, MO, NC, NE, OH, OK, PA, TX, UT, VA, WI, & WV).

The Best Way to Know Is…

- To assign all of our new clients *randomly* to
  - Our Experimental Group that received onsite visits and AgrAbility information, education, and service OR to
  - Our Control Group that does not.

Another More Practical Way to Know Is…

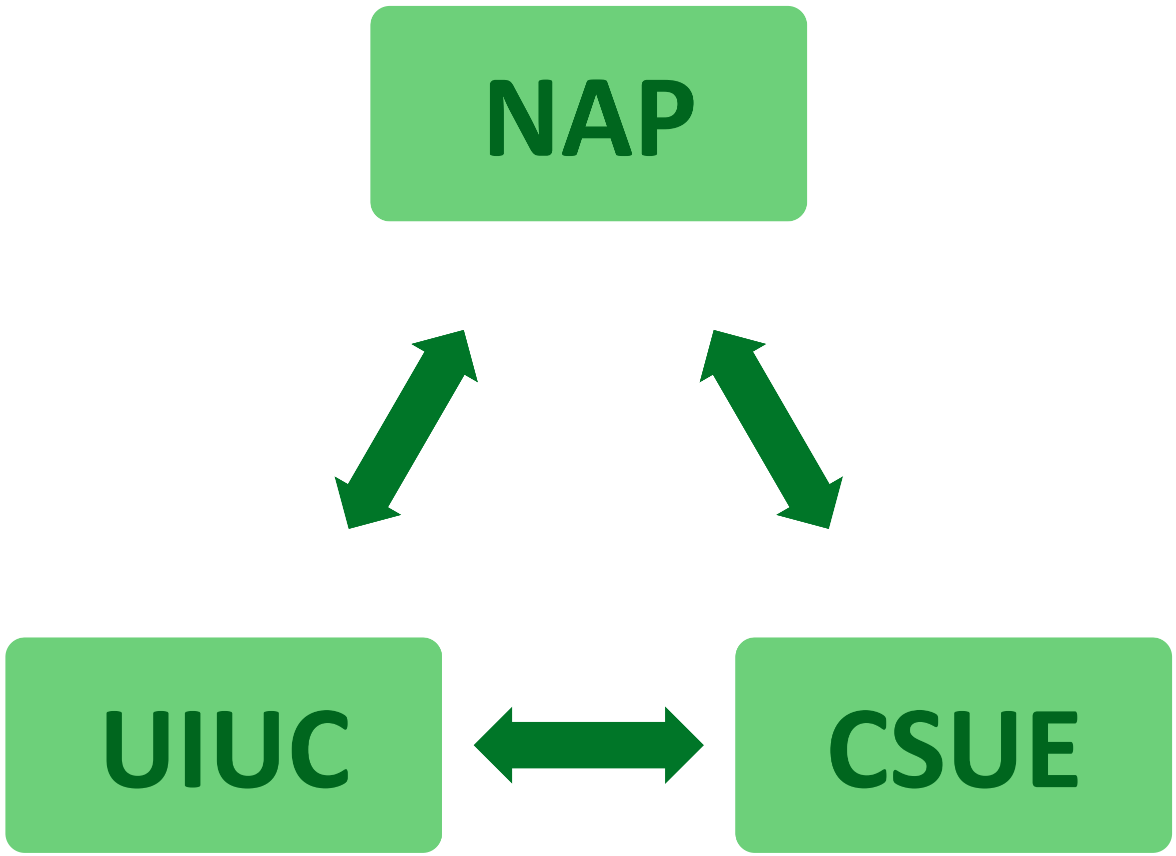
- To compare two groups' Pretest-Posttest QOL & ILW levels
  - 200 Experimental Group participants who complete matched pretest- and posttest-surveys.
  - 100 Control Group participants who complete matched pretest- and posttest-surveys.

Control Group (*N* = 100)

- **Cannot** be receiving any type of AgrAbility program services or onsite visits regardless of whether they are in USDA funded or Affiliate States.

Here's Where We Are Now…

- We now have our Experimental Group with 191/200 matched pretest-posttest surveys (95.5%).
- What we need now is a Control Group with 100 matched pretest-posttest surveys.


NAP
UIUC
CSUE

Chip Petrea has worked diligently on the No-Treatment Control Group.

- Chip has sent me **102 Pre-Surveys.**
- Chip has sent me **67 Post-Surveys.**
- **Thank you, Chip!**

Chip Petrea

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Bob Aherin

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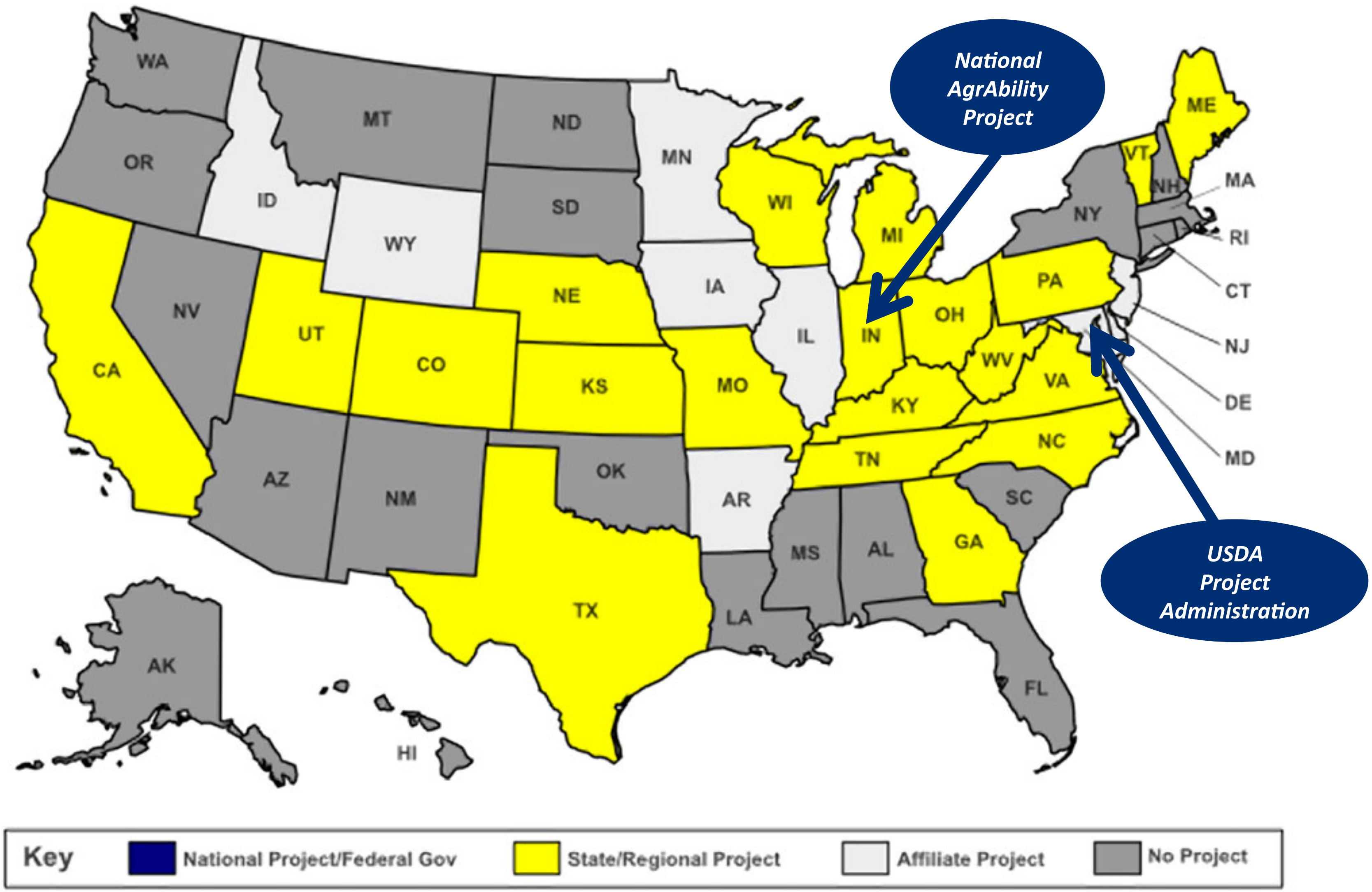
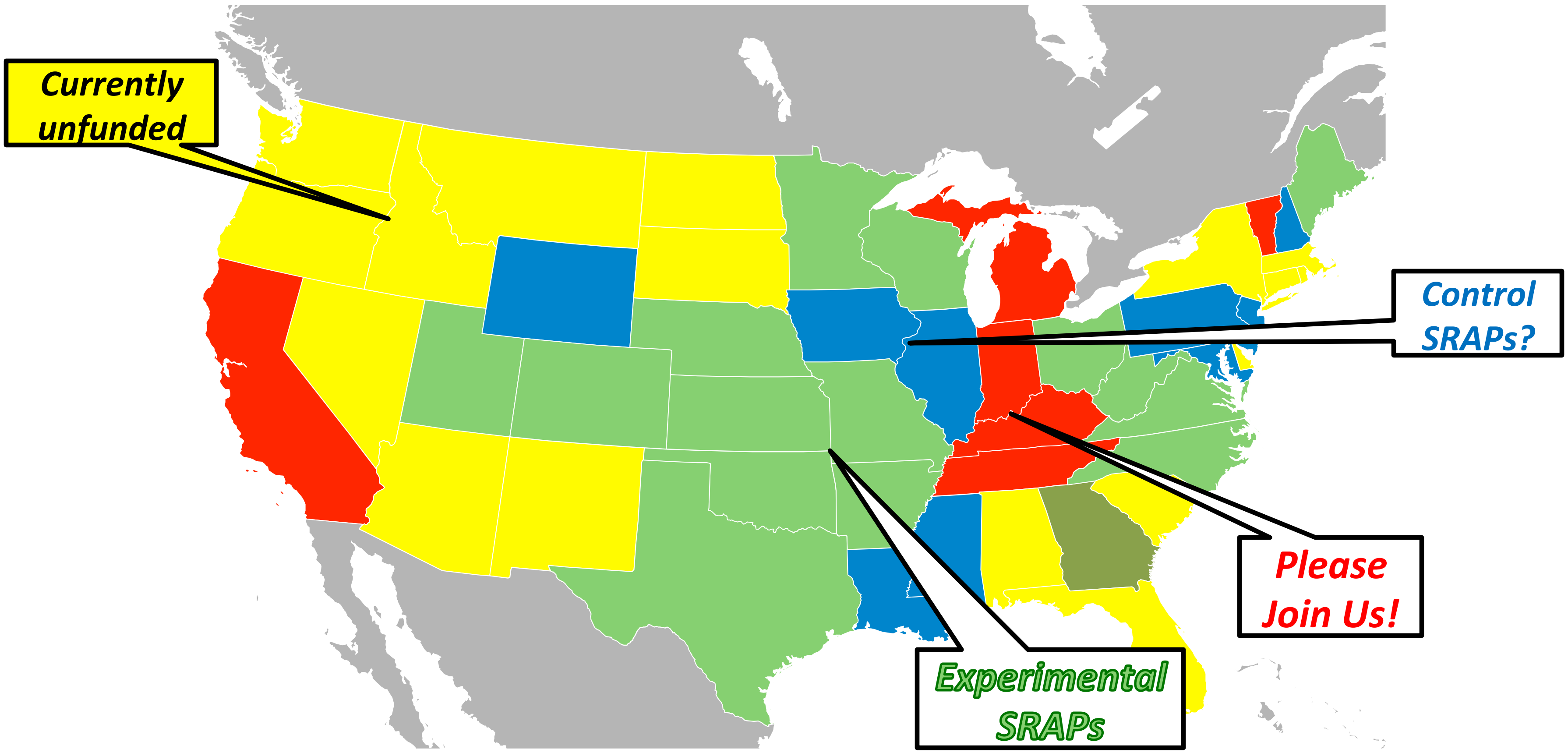
AgrAbility




Currently unfunded
Control SRAPs?
Please Join Us!
Experimental SRAPs

Why Join Us?

1. Document your project's *effectiveness* at increasing clients' ILW and QOL levels.
2. Enhance your chances of *receiving funding* next time with empirical evidence of your SRAP's quality and effectiveness.
3. Increase your chances for *outside funding* by demonstrating your accountability.
4. Contribute to AgrAbility's *Mission*.

Won't You Join Us? Here's how:

1. Send an email to robert.fetsch@colostate.edu.
2. Seek IRB approval from your Land-Grant University.
3. Study and use the same protocol.
4. Adapt CO to __ on pp. 1-2 & mail.
5. Enter your data into an Excel file that we will provide, proof perfectly & email to me.

Thank you very much!

How Reliable Are the Subscales?

- A common measure of reliability is Cronbach's alpha.

Subscale	Pre	Post
Physical Symptoms	.58	.84
Psychological WB	.92	.92
Existential WB	.93	.93
Support	.85	.81
MQOL Total	.79	.85
ILW Total	.77	.78

AgrAbility provided me with info/ recommendations I used:	**Yes**	**No**
To do my farm/ranch work better/more easily than before AgrAbility? (N=136)	84%	16%
To continue farming/ranching in part/ whole, without help I would not have been able to do so? (N=131)	73%	28%
To continue to live in my home independently? (N=131)	44%	57%
To continue to live on the farm/ranch, but successfully take up another occupation? (N=123)	6%	94%
AgrAbility did not provide me with help. (N=122)	9%	91%

I am able to:	SA/A	Neither	D/SD	NA
Complete chores (N=133)	80%	5%	10%	5%
Operate machinery (N=133)	66%	6%	7%	21%
Manage farm/ranch (N=132)	79%	6%	6%	9%
Access workspaces (N=131)	83%	8%	7%	2%
Live in my home on the farm/ranch (N=133)	92%	3%	2%	2%
Change/modify machinery (N=132)	51%	13%	8%	28%
Receive useful assistance info (N=132)	84%	5%	8%	4%
Follow thru on AgrAbility recommendations (N=130)	85%	8%	7%	1%

The Top Reasons Clients Were Unable to Follow AgrAbility Recommendations (N = 48)

1. Unable to obtain funding (*n* = 10/46 = 22%) (*n* = 10/137 = 7%)
2. Health conditions changed (*n* = 8/48 = 17%)
3. My financial situation changed (*n* = 5/47 = 11%) (*n* = 5/137 = 4%)
4. Recommendations did not work for me (*n* = 2/47 = 4%) (*n* = 2/137 = 1%)
5. Chose a different career (*n* = 1/47 = 2%)

Q: What do the results say we can *improve*?

A: We can do more as we assist farm and ranch families:

-"to *live in their homes* on the farm/ ranch" (p <.01) (M=4.06→4.43).

-"to *assist them in obtaining funding.*"

-to *support them* with listening, hearing, responding directly to their family goals.

What Were the Purposes of This 10-State Study? (N = 191)

- To determine pre-post service changes in clients' QOL levels and in their ability to live on, operate, and manage their farms/ ranches.

History of National AgrAbility Evaluation Committee

- 5 Questions:
  – Do our AgrAbility clients increase their QOL?
  – Are our AgrAbility clients more able to live on, operate, and manage their farms/ranches if they choose?
  – Are our group mean scores the same as those from the population group's mean scores?
  – Is the McGill QOL Survey sensitive to the effects of AgrAbility information, education, & service?
  – Who else will join us?