

RESEARCH



Social Science R20: Challenges, Successes, and Our Future

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This presentation represents:



My personal experience

Including NWS project work



Stories shared with me

From the social science AND operational community



NAS

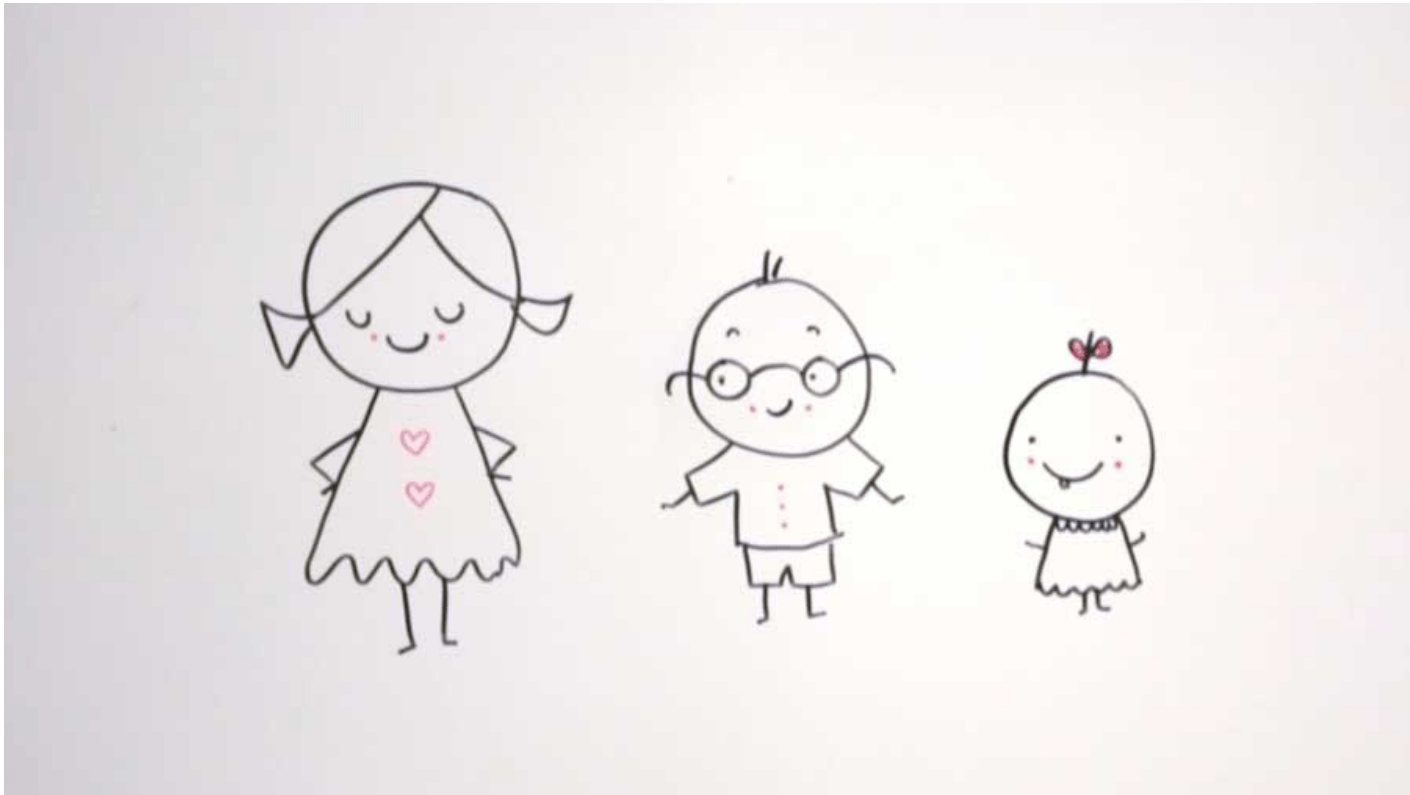
HOT OFF THE PRESSES! NAS report on Integrating Social and Behavioral Sciences Within the Weather Enterprise

Released *today* 11am!

Social Science R2O is like a family.



More specifically, SS R2O is like...



SIBLINGS

...as such, we have sibling order effects.
 (This is a metaphor. This has not been tested!)



Research is the

- Some like co
- Reliability ar
- Motivated to

OAR is the mi

- We're a go
- Peacemake
- Feels left o
- participate

Op

The person who came up with the idea is the only child.

- They *lead* us to a possible idea/solution.
 - They have confidence it's the solution.
 - They're *sensitive* when research indicates otherwise
- “without complication.”
- They seek attention ... to their warnings. =)

SIBLING RIVALRY

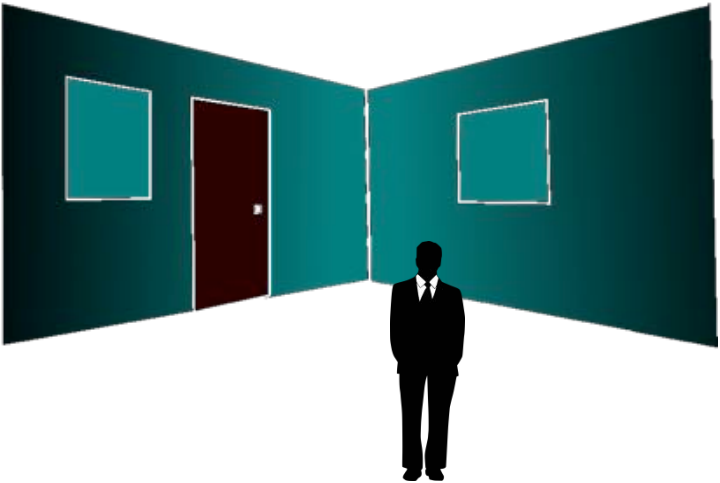
The Challenges of Social Science
Research to Operations/Operations to Research
(Also outlined in Section 3.2 of NAS SBS study)

WE HAVE MISUNDERSTANDINGS.

- Translating disciplinary language (physical and social) and understanding operational language is difficult.



WE'RE NOT ALWAYS ALL INVITED.



- How was an operational decision made?
- Did SSs OR operational folks have a seat at the table?
- What was the ratio? Are we outnumbered?
- Was there any incentive to invite the SS?
- Was there any compensation for their time?
- Who decided what the problem was?



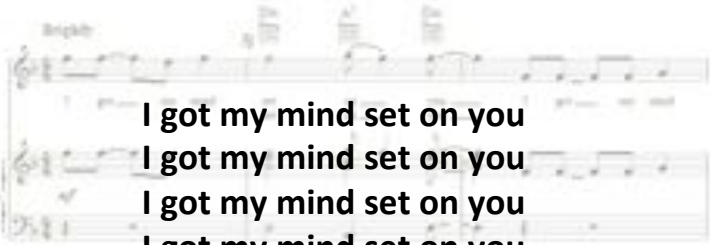
SOMETIMES SS IS AN AFTER THOUGHT TO AN OPERATIONAL DECISION.

- If we're invited late, what role do we really have to influence operations? Or, are we validating someone's idea?

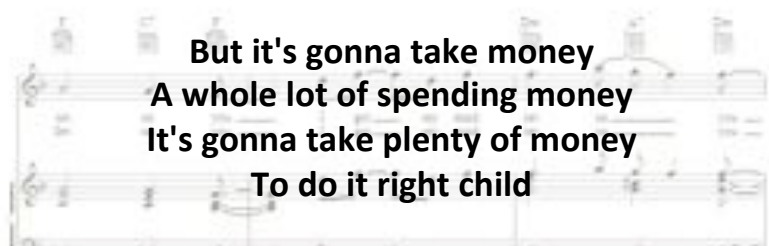


WE'VE GOT OUR MIND SET ON YOU ... R2O. WE JUST DISAGREE ABOUT SPENDING MONEY AND TIME

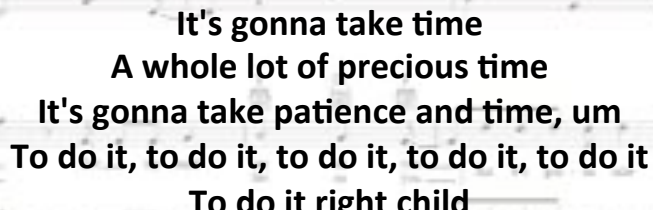
GOT MY MIND SET ON YOU



I got my mind set on you
I got my mind set on you
I got my mind set on you
I got my mind set on you



But it's gonna take money
A whole lot of spending money
It's gonna take plenty of money
To do it right child



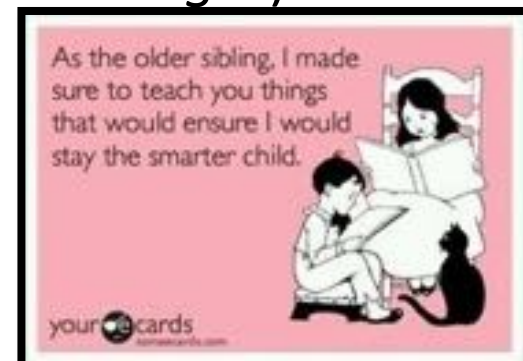
It's gonna take time
A whole lot of precious time
It's gonna take patience and time, um
To do it, to do it, to do it, to do it, to do it
To do it right child

- It's gonna take money.
 - An investment in SS (We're making progress!).
- It's gonna take time.
 - Researchers really like to take their time.
 - Operations needed it yesterday.
- To do it right.
 - But just give me *the* answer.

THE BIGGEST BARRIER? ALL OF US.



- That's the way we've always done it. (*Change it*)
- We have a policy for that already. (cough cough, ahem, *change it*)
- I don't like your findings. (Because the findings point to *change it*)
- Egos and more egos (It's in the report. Egos don't like *change!*).



EXAMPLE FROM EARLIER THIS MONTH...

My third email...

Background



Hi everyone!

I can explain a little bit of the message. However, the past year's titles did they still we offered the new titles that was universally understood where we explained what they also asked that we please

XXXX, you raise good

this project but for many of chance, that's a 4 in 10 chance are not universally understood solution for this is not absolute reasons that most partners more/less presents the same walk away comprehending graphics (Gist is a thing! =>) the probabilities of the model focusing too much on one interpretation interpreted as the official forecast" to the point certain Jeff will be happy to

I appreciate everyone's participation cannot promise that these last year's graphics.

Regarding HazSimp, though involved in all other studies series of partner surveys website, which essentially other studies, including for partners overwhelmingly I

To the extent I can, I am happy

Hi XXXXXXXX! =>)

Just to clarify, I am not ignoring the there wasn't enough time to retest another round of messages before operational decision deadlines. This is a challenge with research to operations. *Operations has clear deadlines. as for some communities winter is already upon them!* However, the re do another iteration of testing. We Again, no one is suggesting it's perfect consulted with many people before plan to follow-up with some partner

I appreciate your concern. It's hard. I know everyone wishes it existed too! But of forecast possibilities. Following the metaphors of interpretation, I mean. As we all know, there's a forecaster! In you will, may also need

Providing a clear, concise, short overview information doesn't necessarily provide partners. This means that partners your explanation of the graphics matter itself. My graduate research showed message. By itself, it's up for interpretation. Most partners said that by itself. Your briefings are an opportunity to clarify. Together, we will help communicate uncertainty.

If there is an opportunity for me to help with further partner evaluation, please let me know.

Culture change is happening.

Gina,



I hope you use these exact examples in future displays at NWAs or to whomever that **scientists need to get out of the way of their own messaging.**

It's hilarious to me.... that we literally have a *social scientist* telling us "*this is what your customers want*" because I asked them, and then we respond back by saying, "No, that can't possibly be true."

It's really unfortunate that is happening, but I certainly appreciate your help on these type projects. It was fun catching up with you out in Anaheim!

Email response back from a forecaster:

"Everyone that I've showed it to thinks I'm surprised that nobody sees this or thinks it's an issue."

Emphasis added

BASED ON SUCCESSES, HERE'S HOW THE SS R2O FAMILY COULD FUNCTION.

- Persistence, Patience, Empathy, and Understanding
- What do we need?
 - Opportunities to interact
 - Informal and formal: How?
 - Social Science Office Hours? (the NOAA social science team is considering this!)
 - Training?
 - Operations 101 for Social Scientists (or all researchers?)?
 - Social Science 101 for Operations (in the works actually!!)
 - Intro to Readiness Levels for social scientists?
 - Other ideas?



BASED ON SUCCESSES, HERE'S HOW THE SS R2O FAMILY COULD FUNCTION.

- Partnerships *and* Iteration (not one and done)
 - Starts with a seat at the table
 - Temporary working groups to allow for R2O iteration during the SS research process?
 - More formal working groups between NWS and OAR?
(So we can make sure WE understand each other's needs!)
 - What role should OAR/OWAQ play to help SS researchers?
 - Utilizing AMS Best Practices committee to help transfer knowledge?



BASED ON SUCCESSES, HERE'S HOW THE SS R2O FAMILY COULD FUNCTION.

- We need leadership at all levels.



NWS

CIMMS
NSSL

OAR/
OWAQ

AMS

NWS

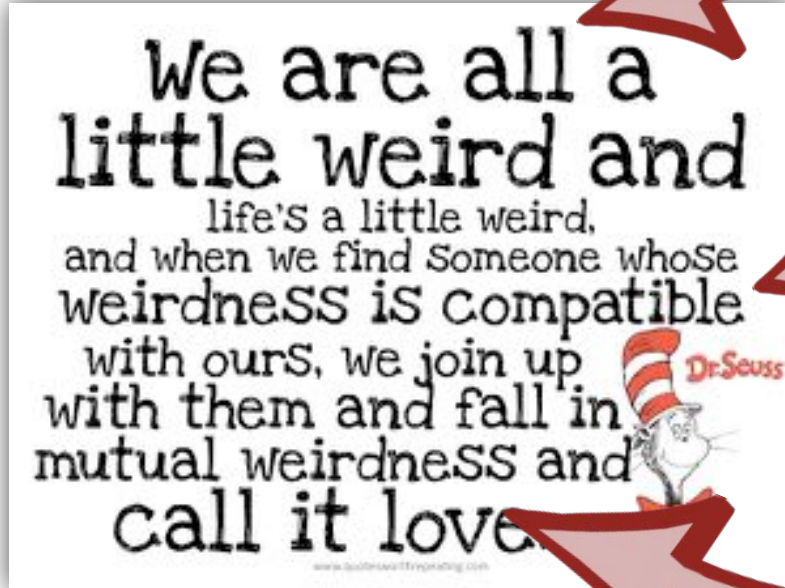


FORTUNATELY, THE PROCESS HAS ALREADY STARTED!

NOAA Social Science Committee includes:

- Climate Program Office
- Sea Grant
- Office of Weather and Air Quality
- National Weather Service
- Office of Performance, Risk, and Social Science

research *and*
operations



Like R2O and O2R

#AchievementUnlocked

Thank you!

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