WEST COAST SYSTEMATIC REVIEW WORKSHOP FOR RESEARCHERS

EVERYBODY ELSE IS DOING IT, SO WHY CAN’T WE?

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Melissa Rethlefsen – University of Utah
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AGENDA

- RIDICULOUS THOUGHTS
  - Identifying a need
- EVERYBODY ELSE IS DOING IT, SO WHY CAN’T WE?
  - Workshop overview
- NO NEED TO ARGUE
  - Funding & Collaboration

- LINGER
  - Participants and Curriculum
- ODE TO MY FAMILY
  - Preliminary Results
- DREAMING MY DREAMS
  - Lessons Learned & Future Directions
RIDICULOUS THOUGHTS

• Project developed as an extension of outreach efforts at USC
  • Lack of faculty understanding of systematic review methodology
  • Increase in requests from unprepared students/faculty
  • Most national training focused on librarians
RIDICULOUS THOUGHTS

• Recognition of national need
  • Systematic review interest at MLA has increased in recent years
  • Conversations with colleagues confirmed issues are not unique to USC
  • Residency programs asking residents to publish systematic reviews, but formal training does not exist for them
RIDICULOUS THOUGHTS

• Acting local, thinking global
  • Specialized training for librarians is often located on the East Coast
  • Nationally recognized West Coast experts from multiple universities volunteered their time
EVERYBODY ELSE IS DOING IT, SO WHY CAN'T WE?

• For health science researchers (NOT librarians)
• Four days of hands on training from librarians and epidemiologist
• Participants leaving with:
  • Drafted PubMed search strategy
  • PROSPERO Protocol
  • EndNote X8 & Covidence Review
  • Familiarity of meta-analysis methods
EVERYBODY ELSE IS DOING IT, SO WHY CAN'T WE?

• Does librarian training improve adherence to quality of systematic reviews?

• Measurement
  • Pre- and Post-testing
  • Post-workshop semi-structured interviews (happening in Spring 2018)
  • Following participant publishing in PubMed

• Dissemination
  • Hope for projects like this to propagate across the region and country
NO NEED TO ARGUE

- Institute of Museum and Library Services (IMLS)
  - Comments on grant application focused on interdisciplinary nature of this project and possible outcome on public health
  - Funding covered working lunches, travel for instructors, parking, materials, and software NOT participant travel/lodging
  - Extra funding from USC research grant for interviews and analysis
NO NEED TO ARGUE

• Collaboration with other universities
  • Rikke Ogawa – UCLA
  • Melissa Rethlefsen – University of Utah

• Collaboration with other professions
  • Dr. Victoria Cortessis – USC
NO NEED TO ARGUE

• Benefits of collaboration
  • Additional expertise
  • Mentorship model
  • Meeting space
  • On-campus housing
  • Technology
LINGER

Application

• Professional information
• What do you hope to accomplish by attending?
• Have you completed a systematic review before?
• Do you plan on completing a systematic review in the next 24 months?
  • What is your anticipated systematic review question?
  • Who are your systematic review collaborators?
• Curriculum Vitae
LINGER

• Applicants
  • 30 applicants total
  • Location heavily centered on Los Angeles, but from across the country
  • Diverse in status and disciplines
• 12 participants selected
  • 2 dropped out due to schedule conflicts
Status of Participants

- Faculty, 6
- Nurse, 1
- Research Staff, 3
- PhD Student, 1
LINGER

• Disciplines of Participants

Psychology/Psychiatry  Nursing
Acupuncture:  Pediatrics
Biokinesiology  Pharmacy
Dentistry  Surgery
Integrative Medicine
LINGER

- Affiliation of Participants

University of Southern California (5)
Bastyr University
Children’s Hospital, Los Angeles
Franciscan Missionaries of Our Lady Health System
University of Utah
Yo San University
LINGER

- **Day One:**
  - Systematic Review Basics
  - Protocol Development
  - PubMed

- **Day Two:**
  - Peer Review
  - Documenting Search
  - Other Databases
  - Grey Literature

- **Day Three:**
  - Data Extraction
  - EndNote
  - Covidence

- **Day Four:**
  - Meta-Analysis
  - Next Steps
ODE TO MY FAMILY

- Pre-Survey: n=6
- Post-Survey: n=10
- 3 month Post-Survey: n=4
ODE TO MY FAMILY

Do you plan to complete and publish a review in the next 24 months? (Post Survey)

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Systematic Review
Scoping Review
ODE TO MY FAMILY

Reasons for Switching to a Scoping Review (Post Survey)

“I had no idea about a scoping review! This is exactly what I am trying to do.”

“I don’t have a specific hypothesis to be tested.”

“Learned that I need to find out more specifics about this topic.”
ODE TO MY FAMILY

Reasons for not conducting a systematic review (Post Survey)

“I might not complete it due to time constraints”

”My question does not have studies about the problem”

”I’m open to it, but first would like to see how it goes with scoping review first before thinking about systematic review”
ODE TO MY FAMILY

How comfortable are you in developing a review protocol?

- Extremely
- Very
- Comfortable
- Slightly
- Not at all
- I’m not sure

Legend:
- Pre-Survey
- Post-Survey
- 3 mo Post-Survey
ODE TO MY FAMILY

How comfortable are you in searching PubMed?

- Extremely
- Very
- Comfortable
- Slightly
- Not at all
- I'm not sure

Pre-Survey  Post-Survey  3 mo Post-Survey
ODE TO MY FAMILY

How comfortable are you in designing and implementing a meta-analysis to address a specific research question?
ODE TO MY FAMILY

I left the retreat with the following:

- Focused PICO based question: 10
- Completed review protocol: 3
- Mostly completed protocol: 7
- Drafted PubMed strategy: 10
- Plan to conduct a meta-analysis: 3
- Decision not to include a meta-analysis: 8

Post-Survey
ODE TO MY FAMILY

MOST USEFUL ACTIVITY
• EndNote
• Covidence
• Searching PubMed
• Librarian feedback on search
• Developing a protocol
• All activities were helpful

LEAST USEFUL ACTIVITY
• Meta-analysis (all theory)
• Session on randomized control trial searches
ODE TO MY FAMILY

10 out of 10 participants reported on the post-survey that they would recommend the systematic review retreat to a colleague interested in systematic reviews.
DREAMING MY DREAMS

• Lessons learned:
  • Prepare for the immediate impact of instruction
  • Success of group work on pre-determined research topic
  • Break software training into smaller groups
  • Collaborate more with meta-analysis instructor
  • Formalize contact between participants following workshop
DREAMING MY DREAMS

• Continue surveys at 6 and 9 month periods
• Semi-structured interviews with participants
  • Interviewer will not be one of the instructors to encourage critical responses
  • Responses will be coded by 3rd party
• Survey/interview responses will be integrated into structure of workshop
• Late 2018 – push for another grant/funding source
• Encourage other librarian groups to conduct similar workshops
QUESTIONS?

Thanks!