THE SCIENCE OF SELF REPORT

Workshop Module for
Transdisciplinary Understanding and Training on Research –
Primary Health Care (TUTOR-PHC)

A collaborative initiative by

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Institutes of:
Aging; Aboriginal Peoples Health; Gender and Health; Health Services and Policy Research;
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Objectives
- Identify the advantages and limitations of self-report measures in clinical research.
- Examine issues related to the use of self-report measures in your own research.

Reading Assignments
Please read (ideally in the following order) before the workshop begins.


   *Less technical

   and/or

   *More technical


Tasks/Exercises:
Week 1
Discuss the advantages and limitations of self-report measures in clinical research. Participants will identify the methodological strengths and weaknesses of self-report measures that they have used or measures that are commonly used in their fields.

Weeks 2-3
Participants present self-report measures that they utilize in their own research and examine questions and dilemmas that arise when using self-report measures in their research.

Discussion Summary
Number of participants: 4
Total number of messages: 59
Number of facilitator posts and comments: 16
**Week 1 – Original Facilitator post**


Sorry that I’m slow off the mark re posting the framework of the workshop on WEBCt. I aim to have that up by Friday.

However for this first week, here's the plan:

Phase 1: From now until Wednesday (9th at noon)

Consider the following question, and post (in the lab discussion group) your thoughts in the lab discussion group:

1. In your area of research and/or clinical activity, what are the phenomena/constructs for which a self-report measure is:
   a. Not appropriate
   b. The most cost effective of several approaches
   c. The only approach to take.

   Explain why.

Background readings for this question:

#1 (Baldwin) and #2 (Schechter et al).

Phase 2: Wednesday afternoon until Friday afternoon

Consider the following question, and post (in the lab discussion group) your thoughts in the lab discussion group.

Identify a self-report measure you have used, or one that is commonly (or not-so commonly) used in your field. Identify the methodological strengths and/or weaknesses of this measure.

Background readings for this question:

#2 (Schecter) and #3a and/or #3b (Schwarz)

Just to let you know, I will be in meetings most of today and tomorrow.

Thus, I won't have much (if any time) to read and react to your postings until tomorrow evening.

Have fun, and take care.

**Number of participant posts: 20**

**Number of facilitator comments: 8**

**Selected facilitator comments:**

Hi all:

I’ve been impressed with the level of discourse this week. You all clearly have had considerable experience with self-report as a methodological tool. Moreover, almost all of you, through your comments, have indicated that you are already grappling (and tackling) some tricky issues in this area. There is a lot of good stuff to react to! In this first posting, I’ve put down some of my reactions/thoughts/questions re postings in the first part of the week. Don’t feel obligated to respond to any of the questions – I’ve put them out, in part, to help us react to each other’s postings, and in so doing, move each one of us forward in our work and thinking in this area. Thoughts/questions re the postings in the second part of the week will come later today.
If we think of the common types of self-reports, (as per Schechter, Reading 2), based on what I’ve learned about your research/clinical work via your postings:

Knowledge: Questions for recall of facts – Jay- depression history; routinely in her clinical psychology practical training Eleanor- Diagnosis of rheumatic/arthritic disease Cathy- routinely in her family medicine clinical practice: History of use of treatments/management approaches for fibromyalgia; success of those treatments.

Behavior: Questions that ask for recall of occurrence Lynn – Urinary incontinence Cathy- routinely in her family medicine clinical practice Jay – routinely in her clinical psychology practical training

Opinions: Reports of beliefs or values about those beliefs [the facilitator]: Attitudes about conventional medicine; Beliefs about fibromyalgia; judgements about a range of treatments for fibromyalgia.

QUESTION 1: Are reports about one’s mental processes (some call this meta-cognition) , such as ruminations (as per Jay), basis for one’s decisions about careers – (as per Cathy), basis for distinctions between and preferences for treatments for fibromyalgia (me) a special case of opinions, or is this something fundamentally different- are people reporting on mental events. If so, can we be expected to have access to our internal mental events as readily as other mental events? – I think Cathy would say no to this, and she provides some very interesting references re the “limits of introspection”... If access to internal mental processes is harder, how do we get around this?

QUESTION 2: (directed at Jay): Jay- your advisor, David Dozois, has very successfully used methods from cognitive science to discern the stability and predictability of both the structure of content of beliefs about the self (self-schema) wrt tracking response to treatment and predicting relapse in depression, and, I believe, is extending this to anxiety. Do you see a role for these research methods (or an adaptation of these methods) to some of the questions you, Cathy, and I are asking? It would be terrific if you could find (or ask David to suggest) a good summary article on the uses of cognitive science methodology to map/track clinically relevant changes in one’s mental state.

Here are some additional questions that were implicit in your comments during part 1 of the week.

QUESTION 3 All of you mentioned situations that you have encountered in which self report is one of several ways through which to measure a given construct. What drives the decision to use a self-report measure instead of or in addition to another measure? If you use self-report of a construct in addition to another index of the construct, and the two sources of data don’t jive, what do you do?

ELEANOR gives the really interesting example of self-reported arthritis and rheumatism versus an OHIP-identified primary care visit for arthritis and rheumatism. She has opted to use both – rather than one or the other because, as she notes “by mixing the self-reported data with the administrative data, I may have assembled a slightly better cohort than if I just stuck with the self-reported individuals”. What I found interesting is that in the process of trying to figure why the populations identified from these
methods are not completely overlapping, she has come up with potential problems in the both means of classification. Self-report is fallible—people can both overclassify (“I have a wee bit of rheumatism”) and under-classify themselves (not consider gout, sinovitis) as a rheumatic disease. However, Eleanor also notes that the “gold standard”—OHIP identified visits—is not so golden (because only one diagnostic code is used per visit, and many people with RA have comorbidities, and that not all those with RA see primary care physicians for their condition.). Eleanor—you note that discovering these inconsistencies has caused you frustration—though in trying to ferret out these inconsistencies, you’ve uncovered some really interesting things—about the limits of both self-report and an administrative database.

QUESTION 4: For Eleanor and others—if Eleanor had the luxury (or misfortune?) to be in a position to create the question(s) in the survey that identified people as having RA/rheum more accurately, how might she do this? Moreover, if Eleanor could make one or two changes to the way in which OHIP visits were entered into the database to make the database more research-friendly, what would they be?

LYNN gives the example of the Edmonton Capital Health Authority (CHA) tool for the assessment of uncomplicated urinary incontinence, the reliability and validity of which she has evaluated in earlier research. One of the impetuses for the development of this self-report instrument is that the alternative way of assessing this—urodynamic testing is expensive, inaccessible, and often unacceptable to elderly individuals. She also mentions a voiding diary as an alternative self-report method. I’m not sure what a voiding diary would look like.

QUESTION 5: A question for Lynn and others: What are the relative merits of a voiding diary versus the CHA tool—Might this depend on the clinical/research impetus for measuring this in the first place?

JAY gives the clinical example of the discrepancy between mental health history as per self report versus mental health history as per chart review, and aptly notes that autobiographical memory may be problematic to assess in an elderly population. Like Eleanor (“twinge of rheumatism”), she points out the importance of being aware of lay uses of language (“nerves” versus depression.)

QUESTION 6: In her own research, Jay will be focusing on rumination in an elderly population—this is clearly something that cannot be observed in others. Can people observe this in themselves? Might QUESTION 1 be relevant here?

Week 2 – Original Facilitator post

Hi all:

So, we're off to Week 2 of our adventure. I know that there were alot of postings over the weekend, and that many of you have not had a chance to read and digest them yet.

So, here's what I'm proposing as our activities for Week 2:

1. Continue to process part two of our discussion from last week, namely, our reflections on and reactions to methodological strengths and weaknesses of
self-report measures we've used or are commonly (or not so commonly?) used in our respective fields.

2. Each of us chooses a more specialized methodological approach, and/or theoretical issue and runs with it this week- thereby giving the rest of us the benefit of the time and effort they spend doing the more in-depth processing. If it turns out that more than one of us chooses the same topic, that's fine.. It means that this is an issue that "rings alot of our bells" and thus deserves alot of attention this coming week.

Moreover, if, in the process of delving deeper into a given issue, we come across some references/articles that we have found quite interesting, perhaps we can send them as an attachment to the rest of the group; this will enrich the set of resources we all have by the end of the workshop.

Let me start the ball rolling here with a list of potential specialty issues/topics - These are by no means exhaustive, nor do I expect that they will be picked up by someone. I'm just putting them out.

1. The Limits of introspection. Two of you indicated that this was a topic of interest to you. This area is very broad. Some more digestible sub-areas might include: -A consideration of Nisbett and Wilson's Telling More than We Can Say (1977) classic article (Catherine mentioned it in her initial E:mail) and any more recent follow-up pieces/reviews. - Catherine notes that people do not always have ready access to the basis of their decisions. What paradigms might be profitably used to help elucidate this process. What is the evidence for their effectiveness in this regard? Some techniques that come to mind: think aloud techniques, vignette approaches, time/$ tradeoff techniques (used to elicit values in the medical field (the journal Medical Decision Making as well as journals focussed on market research can be useful sources here). - Methods derived from cognitive science (e.g., priming, masking, Stroop tests, etc) to assess the salience of certain themes/constructs for individuals.

2. How the questioning process can distort or produce false memories for events (The Loftus reading is relevant here)

3. The role of psychological factors in the reporting of physical symptoms (The Stone reading is relevant here)

4. Problems with and solutions(?) to self-reported adherence (to treatments, daily monitoring, etc) in a research or clinical setting. (The Rand reading is relevant here, as is the Stone reading I attached to an earlier E:mail- I'll attach it and another related article too).

I've got to leave for a meeting now. Will check back later today, and will try to post some additional readings that could serve as starting points.

Take care.

Number of participant posts: 3
Number of facilitator comments: 4

Selected facilitator comments:

Hi all:

I don't want to take us off track, but this was something I had wanted to post last week as part of our discussion about methodological issues. It's an example of a modification of a questionnaire to mimimize acquiescence bias
The Science of Self Report

(i.e yea or nay saying). I'm posting it only as a FYI- don't feel obliged to respond..

It is an example of a questionnaire that was used/developed by Siapush to measure "post modern attitudes about health". He found these attitudes distinguished conventional medicine users from CAM users. This measure was intriguing to my colleagues and I, who were in interested in measuring virtually the same construct in our study on "Views of treatments for fibromyalgia". After looking at Siapush's questionnaire, two of my colleagues (Richard Harsman and Marg Lundy) expressed concern that the questionnaire included more "positively" than "negatively" keyed items, and so a high score might merely reflect a tendency to agree with (any) statement rather than tapping the underlying construct. So, they set themselves the task of changing the wording on some of items to rectify this imbalance.

I thought this might be interesting for some of you. The original questionnaire and its modifications are attached.

Week 3 – Original Facilitator post
Moira wrote to her online group:
"You have done what was asked and each of you has presented your thoughts... Now I would like to see two things happen. I want each of you to respond to other's comments by posting a reply to any you think you want to reply to. As well I want you to feel free to reply to my posting here. These responses will get a more conversational and interactive discussion going. See what you can do.

"As a way of beginning you could point out where you agree or mentioned the same theme as another. You could point out where have different perspective from another and you want to make that perspective explicit. Or say what was new in another's posting.

"I would like you all to tackle common themes you saw so far in the postings. Maybe this will become more obvious when you respond to each other and point out areas of commonality and difference. I was going to start doing this comparison but think it would be better done by you all.

"As you are beginning to tell, I'm not going to "teach" in the conventional sense. You are going to clarify the issues for yourselves. Please continue to engage each other. You do not have to be writing long four paragraphs each time especially when shorter clarifications are needed...."

Now it's me, [the facilitator], talking/writing again. I'd like to suggest we try the following process/structure from now until the end of the workshop. Now that we have the basic content under our belts, let's try to spend the rest of our time working through one or two given issue/problem using the process Moira describes above.

Ideally, these problems issues would come from your own research- either the project/question/dilemma you are currently struggling with... or, if that's too circumscribed, a broader definition of the problem that will enable us to
apply what we've been reading/thinking about this past week and a half, and take it further. Also, including attachments (as pdf or msword files) of self-report instruments you've used/ are modifying/developing/unhappy with for us to look at to comment/give suggestions might not only only help you, but help us all apply what we've been reading about, and give us more experience providing feedback to our fellow researchers.

Anyone want to take up this challenge/opportunity? If so, begin a new thread - and let us know what you're looking for. Ideally, I would like us to begin two such threads this week, and our task next week will be to continue to process the material/give feedback to the initiator of the threads. My hope is that two of you will be the initiators.

Eleanor noted in her last posting is that the reason she signed up for this workshop is to get other people's opinions about their cohort assembly. This would be a terrific starting point for a thread (hint, hint, Eleanor), with the idea that the question/scope of the discussion would be somewhat broader than this. It also strikes me that Jay and Catherine are grappling with issues in their research (how to assess rumination, and how to shed light on the process of decision making, respectively) that would lend themselves well to a new thread as well.

Any takers?
I'm hoping there will be.

However, if no new threads get posted by the end of this Friday, I'll post a thread re a project/grant I'm planning to submit by the end of the Summer on placebo mechanisms.

Bye for now.

Number of participant posts: 20
Number of facilitator comments: 4

Selected facilitator comments:
- Thanks, Catherine, for volunteering to start a thread on your work. I've been away all weekend, but will download your material and look it over tomorrow am. I'm looking forward to learning about your work this week.

Additional Resources Provided
Participant Feedback
Average workshop rating (1=poor, 5=excellent): 3.8
Selected comments

Comments related to the instructor
[The instructor] was very enthusiastic about the subject and clearly knowledgeable. I really liked the initial questions which stimulated thought and discussion related to the readings. I think more questions along those lines during the workshop would have been good. Her feedback on our contributions was thoughtful and detailed.

Started off with a slow start.

The most useful part of this workshop was
Specific questions and responses from participants. Problem solving, suggestions from all participants. Overall a great experience and useful.

Suggestions for improvement
It probably needed more participants to get the discussion flowing better. I am not sure how to achieve more sense of connection and flow. The gaps between contributions and my difficulty logging on except at the end of the week and on weekends led to a bit of a disconnected feeling. This may be mostly my problem.

This workshop module was offered in June 2004. For more information, please contact the TUTOR-PHC program manager at tutor@uwo.ca.