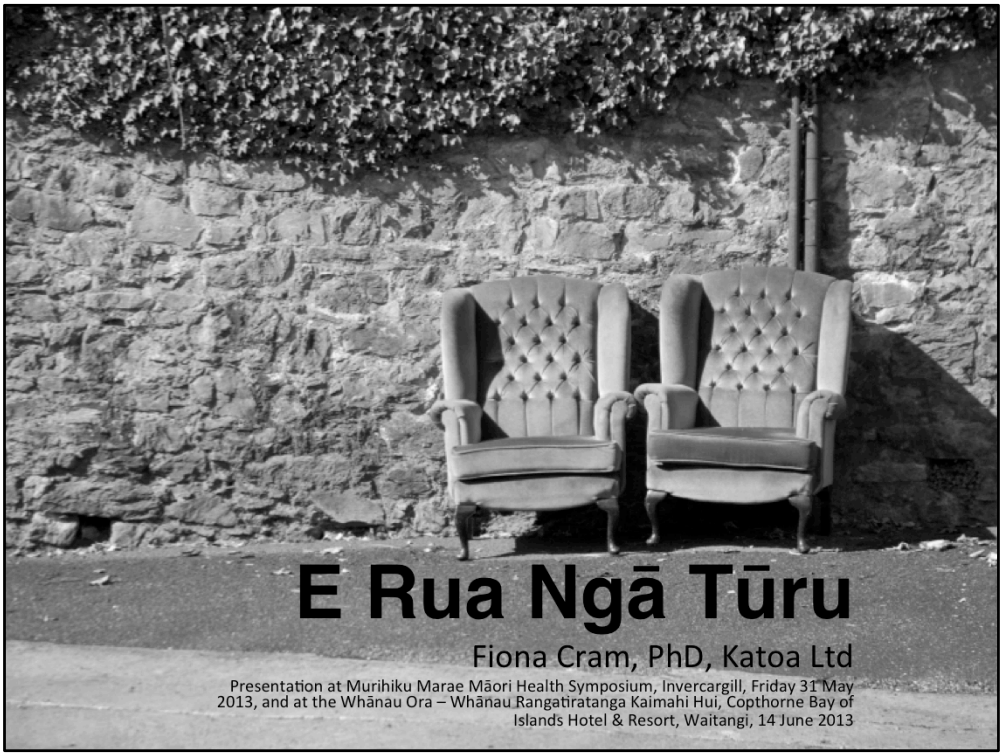


E Toru Ngā Tūru – A Second Tale of Two Chairs

Introduction

I'm going to assume this morning that you have some understanding of Māori health disparities, along with some understanding of how these disparities are determined by people's social and economic circumstances. So I'm assuming that you know that on average Māori men and women die 8-12 years earlier than non-Māori men and women; that Māori babies die at a higher rate than non-Māori babies, that Māori women diagnosed with cancer are more likely to die from that cancer than non-Māori women even when socio-economic circumstances and stage of diagnosis are accounted for. For health practitioners this means we have to look externally to the determinants of health, and internally – within our sphere of influence – at Māori access into and through health services.

As I've said, in the case of Māori health something is happening that can't be accounted for by socio-economic circumstances. Some of my colleagues describe this additional 'something' as the racism Māori encounter in many aspects of their lives. So, for example, Māori women in the least deprived neighbourhoods are often not experiencing the same health and wellness outcomes of non-Māori women in the most deprived neighbourhoods. Having made the assumption that you know about these things I want to talk to you this morning about how we assess whether the actions we're taking to try and eliminate health and other disparities are working. I'll talk generally about health interventions and a little about the Whānau Ora initiative, and how we might evaluate the effectiveness of these interventions for Māori. I'm also going to talk a little about chairs.

Suggested citation: Cram, F. E rua ngā tūru – A tale of two chairs. Presentation at the Murihiku Marae Māori Health Symposium, Invercargill, Friday 31 May 2013, and at the Whānau Ora – Whānau Rangatiratanga Kaimahi Hui, Copthorne Bay of Islands Hotel & Resort, Waitangi, 14 June 2013. Auckland: Katoa Ltd.

[This is the notes view of the powerpoint presentation that is downloadable from www.katoa.net.nz]

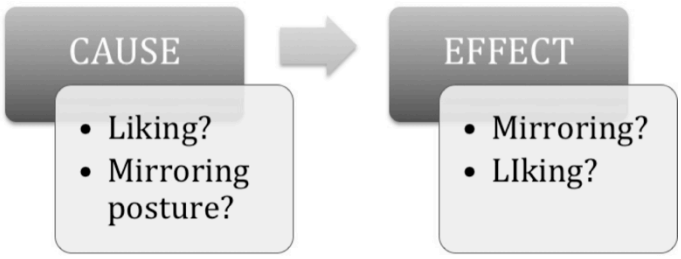
What leads to what?

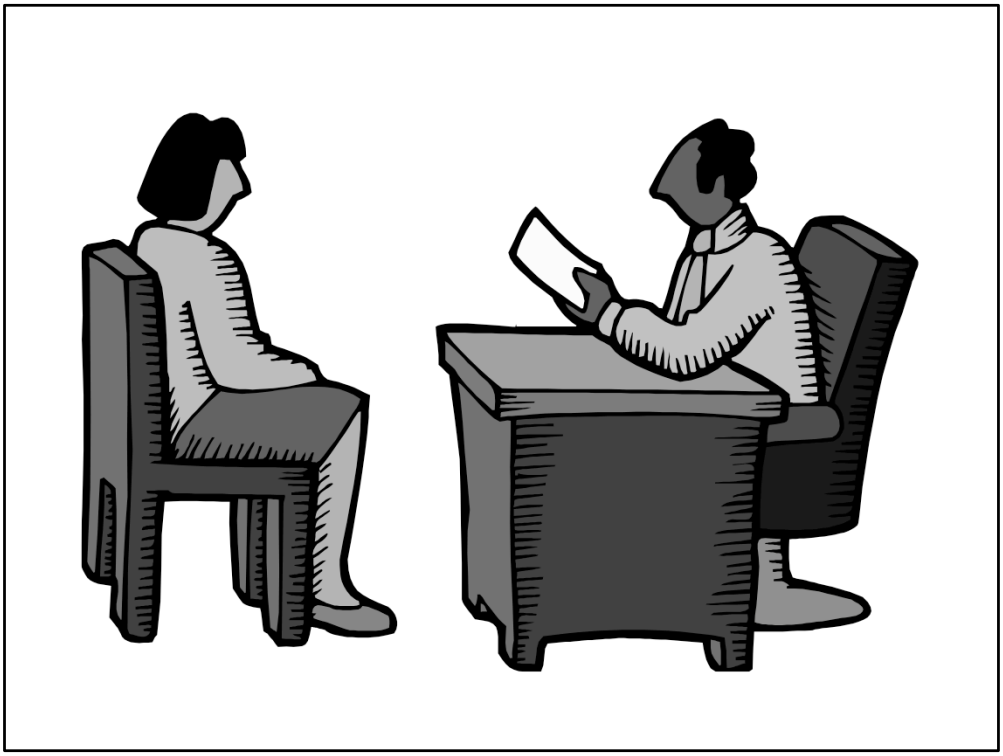
You can try this at home with your whānau – when you're having a really good conversation with someone and feeling like you're getting on well, try changing the way you're sitting and see if they follow your movements. Cross and uncross your legs at different points in time, and watch to see if they do the same.

Or when you're sitting with someone try first mirroring their movements and posture and then, after a while, try to not mirror their movements and the way they're sitting and see if you can tell whether it makes any difference to the way they're interacting with you.

If you want to go any further with your own experimentation you may have to think about getting ethical approval.

So what did this finding tell the psychologists? All it really said to them was that there was a correlation or a relationship between liking and mirroring of posture: an increase in liking was related to an increase in mirroring, or vice versa. They couldn't tell whether liking led to mirroring, or whether mirroring led to liking. So there was really no way they could say anything about cause – effect; or that one thing, say liking, caused the other thing, say mirroring; or, again, vice versa.





How is this relevant in real life?

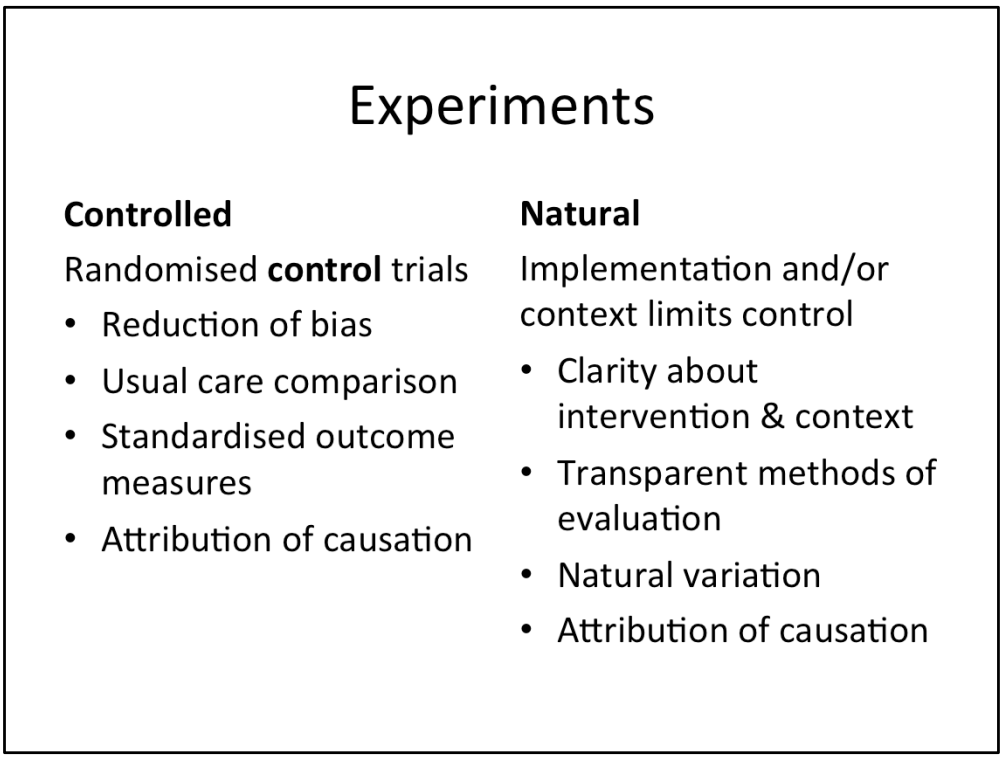
Now, you may ask, how is all this relevant to real life – aside from the testing you're going to do with your own whānau and friends.

First, let's pretend you're in a job interview. In order to establish some sort of status hierarchy you may find that the person who's interviewing you is seating in a completely different chair to you. The status part comes in if their chair looks way more comfortable than yours and their eye-line is higher than yours – so effectively they've put themselves into a position of power signaled by their ability 'look down' on you. But enough about that.

You're in this interview and you know about these experiments with chairs and mirroring body posture, and even though it's difficult for you to mirror your interviewer's posture you've got to give it a go, because research says that if you can pull off this feat it's more likely that the person interviewing you will like you more than if you don't mirror.

If you're being interviewed by a panel of people then you need to judge who's posture you're going to mirror and you'll know the interview is going well if you can get the panel to all by mirroring your posture – but I don't think you can count on this happening.

So a laboratory, very controlled study comes to life in the real-world. Although, I have to tell you, the more people who know about this the less it will work because people will pick that you're doing something deliberately and possibly react to it in unexpected, and possibly negative, ways.

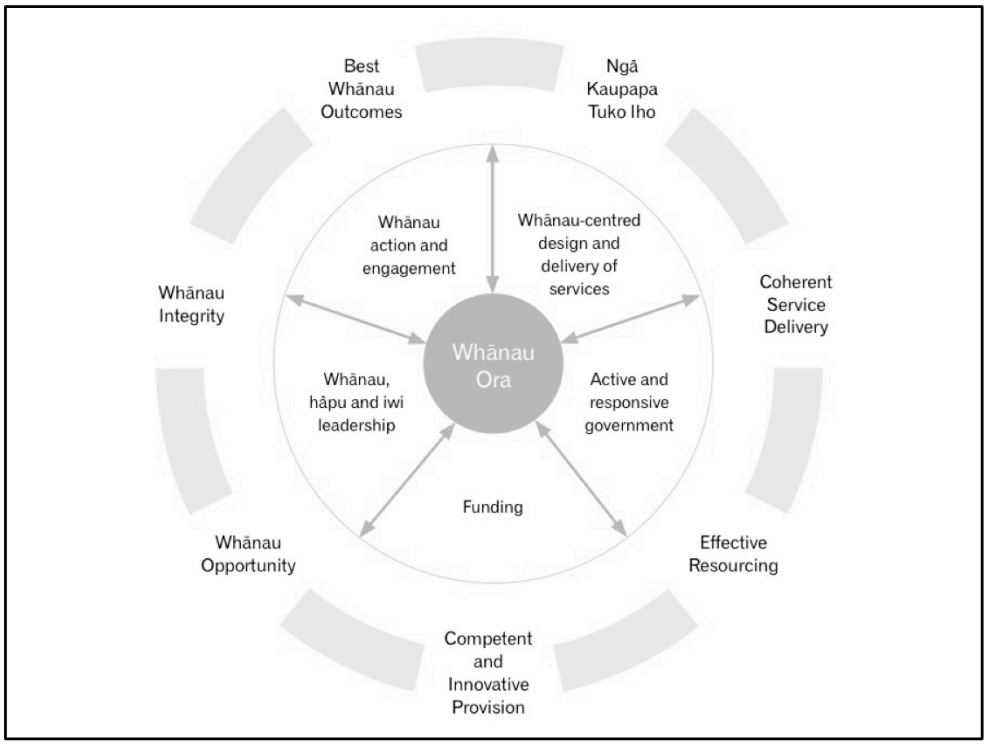


Controlled versus Natural experiments

So, back to how we collect evidence that something causes something else to happen. Like the experiment with the chairs and liking, research has what's called a 'gold standard' of evidence that's also about the ability to control variables, randomly assign subjects or patients to different conditions, and use validated measures to evaluate outcomes. When interventions are tested they're compared to a control that is often 'usual care'. For example, an intervention to facilitate health literacy may be a change in GP primary care delivery (cause). A control group for this intervention will receive the usual, unchanged care from their GP. Differences between the intervention and control group will then be examined, say for patients' health outcomes and satisfaction (effects).

While these controls may help reduce bias, they may also lead to the simplification of interventions that are tested through a random control trial (RCT). For example, the effectiveness of navigation services has been examined extensively by health researchers. Patient navigators help facilitate patient access to health services and help improve health outcomes for patients that may otherwise experience disparate health care. As navigation services are reasonably easy add-ons to a health service they are a good topic to study through an RCT. Other changes like organizational restructuring, professional development, and policy changes are more complicated and harder to study through an RCT so they aren't studied as much using this methodology (and yet they too help reduce disparities).

Other interventions may be implemented as **natural experiments**; that is, they happen without strict controls and randomization but we can still assess their effectiveness through other evaluation methodologies. These methodologies involve evaluators being clear about the context for the intervention as well as what the intervention is; being transparent about the methods we use in our evaluation; and studying natural variations in what's happening to people. My colleague Jane Davidson talks about the real 'gold standard' of evaluating whether an intervention works as **making sound causal inferences based on whatever evidence we can collect for the audience you're speaking to.**



Clarity about values and principles – Whānau Ora

One piece of evidence that is an important part of this causal inference equation is knowing what an interventions values or principles are. The example of Whānau Ora is a good illustration here. Seven principles underpin the Whānau Ora framework and, according to the Taskforce on Whānau-Centred Initiatives:

Ngā kaupapa tuku iho recognises that whānau draw strength from their cultural heritage.

• **Whānau opportunity** reinforces the importance of whānau connectedness and the ability to fulfil aspirations.

• **Best whānau outcomes** speaks to how the success of the Whānau Ora initiative will be measured;.

•**Whānau integrity** is about the accountability whānau members have to one another.

• **Coherent service delivery** recognises that whānau need service agencies (e.g., health, housing) to coordinate their service delivery to whānau.

• **Effective resourcing** is about ensuring the right level of service resourcing.

• **Competent and innovative provision** is about the capabilities of the practitioners providing services to whānau.

Five foundations of effective Whānau-Centred service delivery were affirmed by the Taskforce: whānau, hapū and Iwi leadership; whānau action and engagement (strengths-based); whānau-centred design and delivery of services; active and responsive government; and funding (i.e., relational approach to contracting with funding consistent with the Whānau Ora).

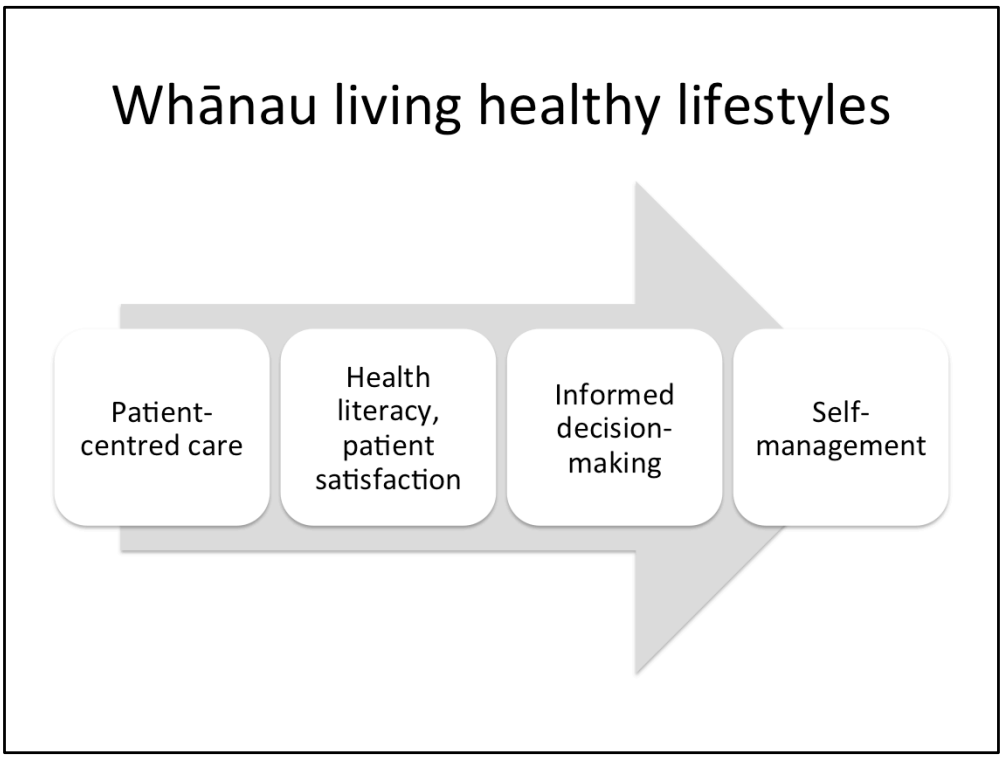
Theory of Change

- A 'theory of change' is a theory about how and why a programme works
- This may be based upon:
  - Wisdom and experience,
  - Anecdotal evidence and feedback,
  - Research and evaluation, and/or
  - Best/good/preferred practices

Theory of change

Once the principles or values underlying an intervention are clear, a next step in understanding an intervention is developing a theory of change.

A theory of change is a theory about how and why a programme works and it can be based on all type of evidence, including the findings of research and evaluation. You can start with an anecdotal theory of change about why you think the programme or service you want to provide will work for the people you want to provide it to. And then, an evaluation can help you expand that theory of change as well as providing formal evidence for if, how and why your programme works.



Theory of change : Patient-centred care

This is a very high-level theory of change about why patient-centred care might support good patient self-management of long-term condition. And it fits within the Whānau Ora outcome of whānau living healthy lifestyles.

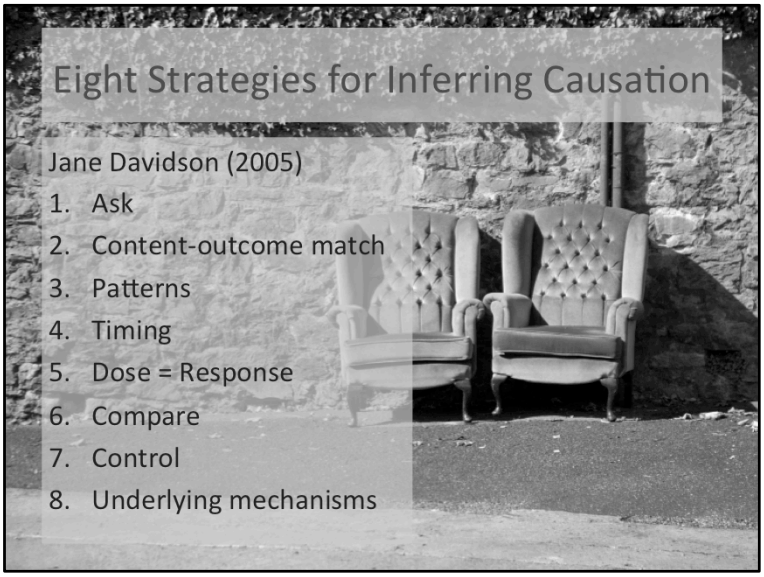
In this theory of change patient-centred care supports and leads to improved patient health literacy and understanding of their condition. The engagement with patients also leads to their improved satisfaction their their interactions with their health practitioner.

Improved patient health literacy and satisfaction then leads to more informed decision-making by the patient and their whānau about managing the patient's condition.

And this informed decision-making results in good patient self-management of their condition – quite probably within the context of whānau support and care.

While this is quite a linear representation, a theory of change doesn't have to be linear and it doesn't have to involve just one line. It can be circular with feedback loops and many pathways between variables. And no doubt it will get more complicated as knowledge about what's working grows. I'd also put in more about whanaungatanga and growing whānau understanding of, and support for, their whānau members need to self-manage their chronic condition

Exercise (not done this morning) Get back together with the person you've been talking with and a couple of others and develop a high-level theory of change (3-4 boxes like the slide above) for a community-based intervention to get Māori into paid employment (like the example under slide 12). *Give people 8-10 minutes to do this and then ask them to report back.*



Inferring causation

The next step in evaluating whether an intervention has had the intended effect, is the being able to say something about whether the intervention (the effect) caused the intended outcomes. My colleague Jane Davidson has written about eight strategies for inferring causation:

1. **Ask** We can ask those who have participated in the intervention (e.g., men in a DV programme), and we can ask those who are in a position to comment because they have seen the initiative in action (e.g., spouses, employers). Do they attribute changes to the initiative, to other factors?
2. **Content-outcome match** Can we see the intervention's content in the outcomes? If men in a DV programme learn strategies, are they then using these strategies? Are they using other strategies not from the programme (counterexamples), and where did they learn these?
3. **Patterns** Do telltale patterns suggest a cause? In asking this we're looking for 'evidence' of changes in participants that match our theory of change. Jane talks about this being like detective work.
4. **Timing** Outcomes should appear after engagement with an initiative. Knowledge and skills can be gained pretty much immediately; behaviour incorporating this knowledge happens after a short delay; changes in, say, health indicators will take longer; and changes in community statistics will take longer still. We can check timing, logical connection with the cause, and sequencing.
5. **Dose = Response** comes from drug testing and relates to the higher the dose of an intervention a group gets, the greater the outcomes we'd expect to see in them.
6. **Compare** Is there a comparison group that hasn't been involved in the initiative that we can compare our group of participants with?
7. **Control** of extraneous variables can be achieved statistically when we're collecting data from participants, particularly data before they enter the intervention and again at a later date.
8. **Underlying mechanisms** A logic model, or programme logic, allows us to compare the evidence we collect to the underlying causal mechanisms of a programme. In a logic model we're testing the strength of the arrows that connect logic model components. A logic model is an expanded and detailed version of your theory of change.

Reference Davidson, E.J. (2005). *Evaluation methodology basics: The nuts and bolts of sound evaluation.* Thousand Oaks, CA.: Sage.

Thinking about chairs and liking again

Take a moment to think about how you might study if there's a causal relationship between people being able to mirror each others' posture and their liking for one another, when this is taking place outside a laboratory in a real-life setting. In other words, a natural experiment. Think of those times when you've been able to sit and observe people interacting and talking with one another: a café, a pub, a hakari at the marae. How would you do this?

- Would you perhaps change some of the seats so that some people are able to mirror easily while for others it'd be more difficult?
- Would you observe people to see if they mirror one another or not?
- Would you give them a questionnaire about their liking for one another? Or would you ask them to discuss this with one another and come up with a shared rating out of 10 (with 10 being the highest liking)?
- Would you eavesdrop on their conversations and develop a rating system that would allow you to observe the amount of 'liking' statements they make each, say, 5 minutes of their conversation?

I'm not going to ask you to think about this too much now, but next time you're in a situation where people are seated and talking with one another maybe you can take a second, more careful look and give this a little more thought (or not).

Recommended reading

W.K. Kellogg Foundation Evaluation Handbook. Download from their website:

http://www.wkkf.org/knowledge-center/resources/2010/w-k-kellogg-foundation-evaluation-handbook.aspx

W.K. Kellogg Foundation Logic Model Development Guide. Download from their website:

http://www.wkkf.org/knowledge-center/resources/2006/02/wk-kellogg-foundation-logic-model-development-guide.aspx

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