Realist Impact Evaluation

Sanjeev Sridharan
Realist Impact Evaluation in six steps

Step 1: Develop a broad/general Theory of change

Step 2: Develop configurations of contexts-mechanism-outcomes

Step 3: Prioritize what configurations will be explored in your evaluation

Step 4: Describe what data and design will be implemented to explore the CMO configurations

Step 5: Explore variations in and across outcomes across contexts and mechanisms (incorporate design)

Step 6: Learning: Re-develop your theory of change as a result of this exploration
Theory-based evaluation

Realist evaluation

Examples

Impact Evaluation

General Steps
Basic features of Theory-based evaluation
Theory-based approaches to evaluation

• Theory-based approaches to evaluation use an *explicit theory of change to draw conclusions about whether and how an intervention contributed to observed results*”
  
  (Treasury Board of Canada Secretariat, 2012)

• Focus on both *Accountability* and *Learning*
The idea of theory-based evaluation is very simple:

– evaluation seeks to discover whether programs work;
– programs are theories.

Therefore it follows that:
– Evaluation is theory-testing.

What does it mean to say that programs are theories?
Thinking theoretically about programs and policies

• “Interventions are always based on a hypothesis that postulates ‘If we deliver a program in this way or we manage services like so, then this will bring about some improved outcome’ ... Interventions are always inserted into existing social systems that are thought to underpin and account for present problems. Improvements in patterns of behavior, events or conditions are then generated, it is supposed, by bringing fresh inputs to that system in the hope of changing and re-balancing it”

(Pawson et al., 2004, p.4).
The intervention is a theory or theories

The intervention involves the actions of people.

The intervention consists of a chain of steps

These chains of steps or processes are often not linear, and involve negotiation and feedback at each stage.

Interventions are embedded in social systems and how they work is shaped by this context.

Interventions are prone to modification as they are implemented.

Interventions are open systems and change through learning as stakeholders come to understand them.
Definition of a Theory of Change

• A theory of change describes the *relationships* between *activities*, outputs and short and long term *outcomes*
  
  (Kubisch et al, 2010; 1998)

• ”the theory of change *(TOC)* goes further [than a logic model] by outlining the *mechanisms of change*, as well as the *assumptions, risks and context* that support or hinder the theory from being manifested as observed outcomes.”
  
  (Treasury Board of Canada Secretariat, 2012)
Elements of a Theory of Change

• Expands on results chains to articulate why the sequence of results is expected to occur through casual links

– The ‘story’ of what should ‘happen’ in the arrows that link boxes on a logic model

• Theories include the context, mechanisms, assumptions and risks that might support/hinder a step from ‘working’ as planned
Results-based thinking:
Questions to assist with a common-sense perspective

– What is the program?
– What are the outcomes? How will the program impact outcomes?
– What are the key assumptions made by the program?
– What is it about the program that brings about the change in outcomes?
– How long will it take for the program to impact outcomes?
– How will the process and outcomes be measured?
– How will the results data be collected? Who will be collecting the results data?
– How will the data be analyzed? Who will be analyzing the data?
– How will you know the program is having an impact?
The linkages between the various components: Connect program activities to outputs and short and long term outcomes.

The components of the program

TOC: Clarify mechanisms, assumptions and risks underlying the program logic

Develop clear expectations of a timeline of results

Link evaluation questions to learning to specific linkages of the program logic. Identify program linkages that are central interest.

Develop clear measures to study progress along the theory of change

Implement a design to understand if the program is having an impact

Communicating results and refining the theory of change based on data from the evaluation

Eight Steps to Conducting a Theory Based Impact Evaluation
### Inputs/Resources
1. Southern and Canadian Researchers
2. Southern Knowledge Users
3. Canadian organizations provide funding for addressing developing country health problems

### Activities
1. Researchers and Knowledge Users identify local health problem faced by developing countries
2. Collaboratively develop grant proposal to potential research solutions
3. Win grant proposal

### Outputs
1. Grant reports
2. Capacity Building workshops
3. Proof of concept
4. Deliverable Report

### Short Term Outcome
Research ‘solutions’ to the local health problem

### Intermediate Outcome
Implementation of ‘solution’ widely in the local area

### Impact
Improvements in health in the local area

### Long Term Outcome
Local health strategy implemented globally
Short Term Outcome

Find ‘solutions’ to the local health problem

Assumption
Canadian partner understands the local context

Mechanism
Advanced science and understanding of local context can find innovative solutions

External Factors
Country is stable

Evidence Needed
• Proof that the solution works in the local context;
• Proof that capacity exists to implement solution;
• Proof that the solution is sustainable

Risks
Academic culture can interfere with local problem-solving

Outputs
• Grant reports
• Capacity Building workshops
• Proof of concept
• Deliverable Report
Short Term Outcome
Find ‘solutions’ to the local health problem

Assumption
Researchers share results with knowledge users

Mechanism
The critical features of the research solution can be clearly planned as an intervention

Risks
Solutions are highly context specific and won't work everywhere

External Factors
Stable government interested in spread

Intermediate Outcome
Implementation of ‘solution’ widely in the local area

Evidence Needed
• Plan for scaling up;
• Resources allocated for scaling up
Data collection to support theory of change work:

- Interviews with planners in multiple funding organizations
- Formal analysis of final reports
- Formal analysis of proposals
- Surveys of grantees—separate surveys were conducted with Canadian researchers, Southern researchers and knowledge users
- Video interviews with grantees
- Brief case studies of three grantees including Skype interviews with Southern partners
- Bibliometrics analysis
**ACTIVITIES**

**ORGANIZATIONAL LEVEL**
- Holiday open house
- Fundraiser Gala & Performance
- Media/documentary
- Intergenerational projects
- Free demonstration classes

**REGULAR ACTIVITIES**
Dance Methodology
- Mirroring
- Music
- Free Dance/Improvisation
- Structured Choreography

Social Connectivity Formula
- One-on-one social time with teachers/volunteers
- Time to share stories and experiences with other participants in the class
- Physical touch (e.g., partner work, corrections)
- Emphasis on eye contact with dance partner/fellow dancers
- Care-partner/caregiver relief and support

**SPECIAL ACTIVITIES**
(Individual)
- Visiting guest artists
- Workshops/seminars
- Organized Social Outings

**EVALUATION OF DWP**

**MECHANISMS**

**Influences**
- Increased awareness of DWP
- Enhanced partnerships with other organizations and medical community
- Greater knowledge of dance as a critical intervention into Parkinson’s disease

**Channels of Change**
- Facilitates artistic and emotional expression
- Removes physical/emotional constraints
- Creates a safe environment for emotional and physical expression
- Brings people out of isolation and into a creative community
- Validates individuals as artists and instills confidence

**Inspirational Themes**
- Hope: “She lived Wednesday to Wednesday, class to class” (Monika)
- Freedom: “[It’s] the only time I’m unaware of my Parkinson’s limitations” (Andy)
- Joy: “It’s FUN and exciting” (Graeme)
- Vitality: “I am revitalized by the dancing” (Malcolm)
- Connection: “[I can] share personal experiences – frustrations, triumphs, hopes and dreams” (Allan)

**INITIAL OUTCOMES**

**Improved ability to expand/replicate the program**

**Increased ability to recruit and retain participants**

**Establish DWP as the Canadian authority on dance interventions into Parkinson’s disease**

**IMPACTS**

**Elevated mood**
- Improved energy
- Reduced falls & physical symptoms (e.g., freezing, tremor)
- Reduced stress (for individuals with Parkinson’s as well as their care-partners and caregivers)
- Deepened social connections
- Enhanced artistic expression
- Evidence that DWP is working

**Increased sustainability through new sources of funding**

**Enhanced evidence base of dance as a necessary intervention for Parkinson’s patients**

**Greater dialogue around Parkinson’s**

**Improved quality of life for those living with Parkinson’s and their care-partners**

**Fewer people relying on the health care system, resulting in progressive savings to Canada’s health care system**
Activity 1

• *Please work with a partner (ideally not an evaluator from the same organization)*

• Briefly discuss a program that you are presently evaluating

• What do short and long term success mean for this program?

• How will results of the program be assessed?
  – How will you know if your program is successful?
  – What data do you plan to collect?
Activity 2

• *Please work with a partner (ideally not an evaluator from the same organization)*

• Work with your own program (or alternatively work with someone who already is working with an example)

• Using concepts learned from theories of change, identify ways in which the program logic can be enhanced

• Identify assumptions for 1-2 linkages of the program logic

• Clarify 1-2 mechanisms that underlie the program
FOCUS ON REALIST EVALUATION
Distinguishing features of realist evaluation

• Focus is on ‘What works for whom and under what conditions?’

• Learning is focussed on ‘Contexts-Mechanisms-Outcomes’ configurations

• Some examples of a ‘realist matrix’
“Contexts are contingent conditions that can alter the relationship between the treatment (the program) and the outcomes. In what contexts are programs most likely to work? How can programs help create conditions for its own success? Context can refer to country policies, community norms, institutional locations, and cultural systems” (Pawson et al., 2004)

– What are some of the underlying contexts that might be conducive for the program to work? Did the program plan incorporate such thinking into the design of the intervention?
Mechanisms

• A mechanism is “an account of the makeup, behavior, and interrelationships of those processes that are responsible for the outcome” (Pawson et al., 2004). Understanding program mechanisms is critical in understanding how programs work.

  – What mechanisms are needed for the program to work? Did the program incorporate knowledge of such mechanisms in its design?
Contexts and Mechanisms in the social sciences

• “Social programmes work by offering resources designed to influence their subject’s reasoning. Whether that reasoning, and therefore action, actually change also depends on the subject’s characteristics and their circumstances.

  – So, for example, in order to evaluate whether a training programme reduces unemployment (O), a realist would examine its underlying mechanisms M (e.g. have skills and motivation changed?) and its contiguous contexts C (e.g. are there local skill shortages and employment opportunities?).
The focus of realist evaluation

• “Realist evaluation is thus all about hypothesising and testing such CMO configurations.
  – Putting this into ordinary parlance we see, under realism, a change in emphasis in the basic evaluative question from ‘what works?’ to ‘what is it about this programme that works for whom in what circumstances?’”
### Table 2.1: Multiple CMOc propositions

<table>
<thead>
<tr>
<th>Context</th>
<th>+</th>
<th>Mechanism</th>
<th>=</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$C_1$</td>
<td>+</td>
<td>$M_1$</td>
<td>=</td>
<td>$O_1$</td>
</tr>
<tr>
<td>$C_2$</td>
<td>+</td>
<td>$M_2$</td>
<td>=</td>
<td>$O_2$</td>
</tr>
<tr>
<td>$C_3$</td>
<td>+</td>
<td>$M_3$</td>
<td>=</td>
<td>$O_3$</td>
</tr>
<tr>
<td>$C_N$</td>
<td>+</td>
<td>$M_N$</td>
<td>=</td>
<td>$O_N$</td>
</tr>
</tbody>
</table>
The nature of mechanisms

• “In fact, it is not programmes that work but the resources they offer to enable their subjects to make them work. This process of how subjects interpret and act upon the intervention stratagem is known as the programme ‘mechanism’ and it is the pivot around which realist research revolves. Realist evaluation begins with the researcher positing the potential processes through which a programme may work as a prelude to testing them.”
Deeper dive into Contexts

• i) **Individuals** – the characteristics and capacities of the various stakeholders in the programme.
• ii) **Interpersonal relations** – the stakeholder relationships that carry the programme.
• iii) **Institutional settings** – the rules, norms and customs local to the programme.
• iv) **Infrastructure** – the wider social, economic and cultural setting of the programme.
## Example of Realist matrix

<table>
<thead>
<tr>
<th>Context</th>
<th>Mechanism</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals who already know how to navigate the health system</td>
<td>Heavy engagement with the ‘new’ intervention (more exercise, better diet etc)</td>
<td>Health improves even further</td>
</tr>
<tr>
<td>Marginalized individuals who have very low expectations of health interventions.</td>
<td>Limited amount of engagement. Mechanism not activated</td>
<td>Unchanged health outcomes</td>
</tr>
</tbody>
</table>
Another example of Realist matrix (Rogers, 2012)

<table>
<thead>
<tr>
<th>Context</th>
<th>Mechanism</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivated, high ability students from low income backgrounds</td>
<td>Achievement of threshold level of computer skills and knowledge</td>
<td>Successful entry into computer courses</td>
</tr>
<tr>
<td>Students from low income backgrounds with learning difficulties and/or behavioural problems</td>
<td>Mechanism not activated</td>
<td>Unchanged educational destinations</td>
</tr>
<tr>
<td>Context</td>
<td>Mechanism</td>
<td>Outcome</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Individuals who danced regularly before symptoms of Parkinson’s disease</td>
<td>Dancing at a lowered capacity reminds them of how they have deteriorated</td>
<td>They avoid attending classes and therefore don’t get health benefits of participation</td>
</tr>
<tr>
<td>Individuals who have never danced regularly before DWP</td>
<td>While dancing they experience the feeling of freedom from their symptoms and relief from stress and depression</td>
<td>They feel better, have an incentive to attend classes regularly, and therefore gain health benefits</td>
</tr>
<tr>
<td>Individuals who live alone</td>
<td>Social connection with other participants, teachers and volunteers, physical contact, and creative and emotional expression</td>
<td>Deepened social connections, enhanced artistic expression, improved quality of life</td>
</tr>
<tr>
<td>Individuals with care-partner or caregiver</td>
<td>1+ hour that person with PD is engaged in dancing in a safe environment with others with PD</td>
<td>Enhanced care-partner/caregiver relief and support</td>
</tr>
</tbody>
</table>
How does realist evaluation approach work?

1. Through both document and evidence reviews and stakeholder interviews describe context-mechanism-outcome (CMO) configurations

2. Explore the data (based on an implemented evaluation design) and find if there is support for such CMO-configurations

3. Learn and refine theory based on step 2
Different views of programs (Pawson et al, 2004)

The realist hypothesis grid

<table>
<thead>
<tr>
<th>Some plausible mechanisms</th>
<th>Some potential contexts</th>
<th>Some possible outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>C1</td>
<td>O1</td>
</tr>
<tr>
<td>M2</td>
<td>C2</td>
<td>O2</td>
</tr>
<tr>
<td>M3</td>
<td>C3</td>
<td>O3</td>
</tr>
<tr>
<td>M4</td>
<td>C4</td>
<td>O4</td>
</tr>
<tr>
<td>M5</td>
<td>C5</td>
<td>O5</td>
</tr>
<tr>
<td>M6</td>
<td>C6</td>
<td>O6</td>
</tr>
</tbody>
</table>
Causation in realist evaluation

• Successionist
• *Generative*
The successionist model

• “.....what is needed to infer causation is the ‘constant conjunction’ of events: when the cause X is switched on (experiment) effect Y follows, and when the cause is absent (control) no effect is observed.”
The generative model

• “The generative model calls for a more complex and systemic understanding of connectivity.

  – It says that to infer a causal outcome (O) between two events (X and Y) one needs to understand the underlying generative mechanism (M) that connects them and the context (C) in which the relationship occurs.”
An example from the physical sciences: gunpowder

- “To use a physical science example, researchers would not claim that repeated observations of the application of a spark (X) to gunpowder and the subsequent explosions (Y) was a sufficient base on which to understand the causal relationship. Rather the connection (O) is established by what they know about the chemical composition of gunpowder and its instability when heat is applied (M). They also know that this mechanism is not always fired and that the explosion depends on other contextual features (C) such as the presence of oxygen and the absence of dampness.”
Step 1: Develop a broad/general Theory of change

Step 2: Develop configurations of contexts-mechanism-outcomes

Step 3: Prioritize what configurations will be explored in your evaluation

Step 4: Describe what data and design will be implemented to explore the CMO configurations

Step 5: Explore variations in outcomes across contexts and mechanisms (incorporate design)

Step 6: Learning: Re-develop your theory of change as a result of this exploration
Activity 3

• What are some of the underlying contexts that might be conducive for the program to work?

• What mechanisms are needed for the program to work?

• How will your theory of change be revised incorporating this knowledge of context and mechanisms?
AN EXAMPLE: DANCING WITH PARKINSON’S
ACTIVITIES

ORGANIZATIONAL LEVEL
- Holiday open house
- Fundraiser Gala & Performance
- Media/documentary
- Intergenerational projects
- Free demonstration classes

REGULAR ACTIVITIES
Dance Methodology
- Mirroring
- Music
- Free Dance/Improvisation
- Structured Choreography

Social Connectivity Formula
- One-on-one social time with teachers/volunteers
- Time to share stories and experiences with other participants in the class
- Physical touch (e.g., partner work, corrections)
- Emphasis on eye contact with dance partner/fellow dancers
- Care-partner/caregiver relief and support

SPECIAL ACTIVITIES (Individual)
- Visiting guest artists
- Workshops/seminars
- Organized Social Outings

EVALUATION OF DWP

MECHANISMS
Influences
- Increased awareness of DWP
- Enhanced partnerships with other organizations and medical community
- Greater knowledge of dance as a critical intervention into Parkinson’s disease

Inspirational Themes
- Hope: “She lived Wednesday to Wednesday, class to class” (Monika)
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Channels of Change
- Facilitates artistic and emotional expression
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- Brings people out of isolation and into a creative community
- Validates individuals as artists and instills confidence

INITIAL OUTCOMES
- Improved ability to expand/replicate the program
- Increased ability to recruit and retain participants
- Establish DWP as the Canadian authority on dance interventions into Parkinson’s disease
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ELEVATED MOOD
- Improved energy
- Reduced falls & physical symptoms (e.g., freezing, tremor)
- Reduced stress (for individuals with Parkinson’s as well as their care-partners and caregivers)
- Deepened social connections
- Enhanced artistic expression
- Evidence that DWP is working

IMPACTS
- Increased sustainability through new sources of funding
- Enhanced evidence base of dance as a necessary intervention for Parkinson’s patients
- Greater dialogue around Parkinson’s
- Improved quality of life for those living with Parkinson’s and their care-partners
- Fewer people relying on the health care system, resulting in progressive savings to Canada’s health care system

Evidence that DWP is working
Is this making a difference for participants? Are the DWP classes working for participants?
**ACTIVITIES**

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**initial outcomes**

**Impacts**

**Evaluation Questions**

- How does music influence the class experience for participants? What types of music are most/least beneficial? *(Freedom, Joy, Vitality)*

- Are certain types of dance and movement more beneficial than others at providing relief from PD symptoms (e.g., ballroom vs. disco, improvisation vs. structured choreography)? *(Freedom, Joy, Vitality)*

- How are participants’ affected by seeing other students at varying degrees of Parkinson’s disease (e.g., emotional well-being, enjoyment of class)? If there is a negative impact, how can we construct the classes to minimize this? *(Hope, Joy, Connection)*

- Should we offer tea and cookies after each class? Is it worth the extra expense?
**ACTIVITIES**

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**EVALUATION OF DWP**

**MECHANISMS**

**Influences**
- Increased awareness of DWP
- Enhanced partnerships with other organizations and medical community
- Greater knowledge of dance as a critical intervention into Parkinson’s disease

**Evaluation Questions**
- Are there advantages to taking more than one class per week? If so, what are the advantages (e.g., alleviation of physical symptoms, enhanced mood, establishing stronger friendships or connections)?
- What is the ideal length for this class? Is 1 hour long enough?
- When it comes to in-class assistance, are we supporting participants effectively? Should we provide more/less hands-on assistance during the class?
- Are there aspects of the class instruction/teaching that participants particularly enjoy/dislike?
- Is there something specific about the dance instructors and dance class assistants that helps students get the most out of the class? (Or is it more about the exercises themselves, the music, the other participants, and so on?)

**Inspirational Themes**
- **Hope:** “She lived Wednesday to Wednesday, class to class” (Monika)
- **Freedom:** “[It’s] the only time I’m unaware of my Parkinson’s limitations” (Andy)
- **Joy:** “It’s FUN and exciting” (Graeme)
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**INITIATION**

Evidence that DWP is working
- Improved ability to expand/replicate the program
- Increased ability to recruit and retain participants
- Establish DWP as the Canadian authority on dance interventions into Parkinson’s disease
- Improved mood
- Reduced energy
- Reduced falls & physical symptoms (e.g., freezing, tremor)
- Reduced stress (for individuals with Parkinson’s as well as their care-partners and caregivers)
- Deepened social connections
- Enhanced artistic expression
- Increased sustainability through new sources of funding
- Enhanced evidence base of dance as a necessary intervention for Parkinson’s patients
- Greater dialogue around Parkinson’s
- Improved quality of life for those living with Parkinson’s and their care-partners
- Fewer people relying on the health care system, resulting in progressive savings to Canada’s health care system
**Evaluation Questions**

- What mechanisms kick in for different participants?
- What studies have been done in relation to Parkinson's and dance or other activities? Are there clues in the literature as to why physical symptoms characteristic of Parkinson's (such as, tremors, freezing, balance, and coordination) seem to be lessened while dancing?
**Evaluation Questions**

- **Is there a difference between the trajectory of the disease, trajectory of health outcomes, coping skills, and sense of wellbeing for dancers versus non-dancers?**

- **What differences in outcomes, if any, are there between dance and other physical activities?**
ORGANIZATIONAL LEVEL

• Holiday open house
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SPECIAL ACTIVITIES (Individual)

• Visiting guest artists
• Workshops/seminars
• Organized Social Outings

EVALUATION OF DWP

• # of new DWP affiliate programs in Canada
• # of new participants and # of returning participants each year

INITIAL OUTCOMES

Elevated mood
• Improved energy
• Reduced falls & physical symptoms (e.g., freezing, tremor)

Reduced stress (for individuals with Parkinson’s as well as their care-partners and caregivers)

Deepened social connections

Enhanced artistic expression

Evidence that DWP is working

IMPACTS

Increased sustainability through new sources of funding

Enhanced evidence base of dance as a necessary intervention for Parkinson’s patients

Greater dialogue around Parkinson’s

Improved quality of life for those living with Parkinson’s and their care-partners

Fewer people relying on the health care system, resulting in progressive savings to Canada’s health care system
**Measures**

- # of DWP participants demonstrating elevated mood and improved energy? (self-reported)
- # of reported falls before starting the dance class and # of falls 6 months-1 year after weekly participation (self-reported or care-partner/caregiver reported)
- # of PD dancers reporting relief from symptoms or # of PD dancers demonstrating reduced symptoms (participant observation before and after class)
- # of PD dancers and caregivers/care-partners reporting less stress since they started attending classes
- # of DWP participants reporting high rankings on a “social connectedness” questionnaire. Or # of DWP participants seen talking with other participants before/after class, sharing stories, hugs, etc. (participant observation)
- Qualitative data through surveys/interviews (eg. elevated mood, enhanced artistic expression)

**INITIAL OUTCOMES**

- Improved ability to expand/replicate the program
- Increased ability to recruit and retain participants
- Establish DWP as the Canadian authority on dance interventions into Parkinson’s disease

**IMPACTS**

- Increased sustainability through new sources of funding
- Enhanced evidence base of dance as a necessary intervention for Parkinson’s patients
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**EVALUATION OF DWP ACTIVITIES**

**Channels of Change**

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**Outside Influences**

- Increased awareness of DWP
- Enhanced partnerships with other organizations and medical community
- Greater knowledge of dance as a critical intervention into Parkinson’s disease

**Inspirational Themes**

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- Freedom: “[It’s] the only time I’m unaware of my Parkinson’s limitations” (Andy)
- Joy: “It’s FUN and exciting” (Graeme)
- Vitality: “I am revitalized by the dancing” (Malcolm)
- Connection: “[I can] share personal experiences – frustrations, triumphs, hopes and dreams” (Allan)

**Evidence that DWP is working**

- Elevated mood
- Improved energy
- Reduced falls & physical symptoms (e.g., freezing, tremor)
- Reduced stress (for individuals with Parkinson’s as well as their care-partners and caregivers)
- Deepened social connections
- Enhanced artistic expression

- Improved quality of life for those living with Parkinson’s and their care-partners
- Fewer people relying on the health care system, resulting in progressive savings to Canada’s health care system
<table>
<thead>
<tr>
<th>Context</th>
<th>Mechanism</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals who danced regularly before symptoms of Parkinson’s disease</td>
<td>Dancing at a lowered capacity reminds them of how they have deteriorated</td>
<td>They avoid attending classes and therefore don’t get health benefits of participation</td>
</tr>
<tr>
<td>Individuals who have never danced regularly before DWP</td>
<td>While dancing they experience the feeling of freedom from their symptoms and relief from stress and depression</td>
<td>They feel better, have an incentive to attend classes regularly, and therefore gain health benefits</td>
</tr>
<tr>
<td>Individuals who live alone</td>
<td>Social connection with other participants, teachers and volunteers, physical contact, and creative and emotional expression</td>
<td>Deepened social connections, enhanced artistic expression, improved quality of life</td>
</tr>
<tr>
<td>Individuals with care-partner or caregiver</td>
<td>1+ hour that person with PD is engaged in dancing in a safe environment with others with PD</td>
<td>Enhanced care-partner/caregiver relief and support</td>
</tr>
</tbody>
</table>
Studying Variations over time: Daily journal for existing cohort (Monday – Saturday)

Measuring self perception of general well-being

Tracking changes in well-being over the course of the summer

Some clients were continuing with dance classes during the summer break; other clients were not dancing for 2 months.
Sunday journal entry
(once a week)

Measuring self reports over the week in: general well-being, energy level, how their body felt (from “very much worse than usual” to “very much better than usual”), most frequent mood, perception of social support/connection, clear thinking or cognition, and type of exercise engaged in during past week if any.
Caregiver/ partner weekly journal

Tracked measures of:
• Caregiver/care-partner’s general well-being
• Caregiver/care-partner’s energy level
• Their observation of the person with PD’s:
  – Energy level
  – General mobility and physical functioning
  – Whether person danced during that week with DWP
  – Any other dancing or exercising that week
  – Which days and approximately how many minutes

Journal intended to track changes in caregiver/care-partner’s well-being and energy levels over the course of the summer

This would be matched with the person that they care for to see if there are any patterns between people who continue to dance over the summer and those who are less active, whether well-being and energy levels of both people go down or up depending on activity level, and to help corroborate self reports from the journals of the persons with PD
Qualitative Longitudinal Focus: New client cohort

- Baseline survey given on first day before starting the DWP classes.
- Establishes their general health, mood, energy level, confidence in their mobility, confidence in communicating, physical activity level, and whether new to dancing. Also gathers learning on why people decide to attend, what they hope to gain, and their music preference.
- Plan to follow them over time and ask qualitative questions (QLR) to learn what are mechanisms that motivated them to attend, keeps them coming back, contributes to their feeling better, improvements in health, mobility, functioning, mood, etc.
New client baseline survey questions

1. How did you hear about the Dancing with Parkinson's classes?
2. What was your motivation for coming to Dancing with Parkinson’s?
3. What are your goals in taking the DWP dance classes?
4. Had you danced regularly before joining DWP?
5. If so, when did you dance and for how long (months or years)?
6. What are your favorite types of music (genre), favorite songs, pieces?
7. How would you describe your general health currently?
8. How would you describe your functional mobility currently? (e.g. Walking, wheelchair, stairs, standing up, getting into the shower/bath)
9. How much of the time during the past 4 weeks ...
   a) Have you felt calm & peaceful?
   b) Did you have a lot of energy?
   c) Have you felt down-hearted and blue?
   d) Have you felt bored, apathetic, disinterested?
10. In the next month, how confident are you that you will not lose your balance or become unsteady as you walk around the house?
11. How comfortable are you expressing yourself or communicating with others?
12. How many hours a week do you spend exercising?
13. Do you currently participate in any other physical activity programs?
14. If so, what are they and how long have you been doing them?
Why is a qualitative approach useful?

• Understand mechanisms of change

• Understand heterogeneities in the mechanisms of change.
  – Understand mechanisms across contexts

• Develop an enhanced theory of change as a result of understanding patterns: this of course is LEARNING
A longitudinal, qualitative focus

• Understand sequencing in services and match of the service to need;

• Explore connections between treatment (levels of services) and relate it to outcomes
Qualitative longitudinal research

- Jane Lewis (2007); Analysing Qualitative Longitudinal Research in Evaluations, Social Policy & Society 6:4, 545–556
ANOTHER EXAMPLE
• A realist evaluation of an antenatal programme to change drinking behaviour of pregnant women

(Doi et al, 2015)
The realist evaluation process and data sources

<table>
<thead>
<tr>
<th>Phase</th>
<th>Source of data and activity</th>
</tr>
</thead>
</table>
| Phase 1 – Identification of programme theory or hypotheses about Context-Mechanism-Outcome (CMO) configurations | • Two systematic reviews  
  • Interviews with four programme implementers/policy stakeholders |
| Phase 2 – Testing the programme theory      | • Interviews and a focus group with 21 midwives  
  • Interviews with 17 pregnant women                                      |
| Phase 3 – Refining the programme theory     | • Analyses and interpretation  
  • Refined Context-Mechanism-Outcome(CMO) configurations                  |
<table>
<thead>
<tr>
<th>Theory Area</th>
<th>Context</th>
<th>Mechanism</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertainties of risk</td>
<td>There are still uncertainties of risk to the fetus regarding the effects of lower levels of alcohol consumption</td>
<td>1. Midwives and pregnant women’s attitudes to risk of drinking in pregnancy may facilitate or act as barriers to change. 2. Opportunity for midwives to address issues of uncertainties bothering women.</td>
<td>1. Positive attitudes may facilitate screening and ABI delivery and negative attitudes may have contrary effect. 2. Increased opportunity to offer consistent advice to high risk women.</td>
</tr>
<tr>
<td>Antenatal appointment</td>
<td>1. Midwife-pregnant woman relationship at first appointment 2. ‘Captive’ audience and most women are motivated to change drinking behaviour 3. Period of screening and delivery of ABIs more important as effects of drinking in first trimester is more profound</td>
<td>1a. Midwives use of ‘motivational interviewing style’ or good person-centred communication skills necessary 1b. Negotiate competing priorities at first appointment 1c. Amount of information provided to women 2a. Women respected and valued midwives’ role 2b. Enquiry about alcohol use prompt behaviour change 3. Early identification and intervention more critical</td>
<td>1a. Improved identification of risky drinking 1b+c. Quality of screening and ABIs negatively affected. 2a. Increased possibility of drinking behaviour change 2b. Increased identification of risky drinkers 3. Women more likely to change drinking behaviour early</td>
</tr>
<tr>
<td>Training and support</td>
<td>Screening and alcohol brief interventions skills training</td>
<td>1. Midwives empowered with skills to change women’s drinking behaviour 2. Resistance to change 3. Provision of additional support and resources by implementing authority</td>
<td>1. Improved skills and confidence to identify and deliver ABIs 2. Overcome resistance 3. Raised awareness of risk of antenatal drinking and ABI programme Few women consuming alcohol meant few ABIs delivered ABI delivery skills rarely used Decreased in importance of ABI related activities</td>
</tr>
</tbody>
</table>
A GENERAL STRATEGY
Towards a detailed impact evaluation

**Step 1: Map what is known**
- Develop clear theories of change
- Identify mechanisms
- Identify contexts that matter

**Step 2: Map what is unknown and needs to be known**
- What aspects of the theory of change is there uncertainty in the literature?
- How will this evaluation shed light on such mechanisms? How will the mechanisms be interrogated?
- What outcomes do we plan to collect? For how long would the outcomes be collected?

**Step 3: Connect Evaluation Question directly to the theory of change**

**Step 4: Connect measures (both qualitative and quantitative) to the theory of change**

**Step 5: Develop a design and data collection plan paying attention to the following:**
- Connect to evaluation questions and theory of change
- Short and long-term changes in outcomes
- How long would changes in outcomes take
- Issues of sequencing of treatments
- Interrogate mechanisms
- Interrogate how mechanisms can enhance outcomes
- Answer bottomline questions on did outcomes improve
- Explore both variations over time and between groups

**Step 6: Explore Impacts**
- Impacts across contexts
- (Emergent) learnings about contexts and mechanisms
Step 1: Develop a broad/general Theory of change

Step 2: Develop configurations of contexts-mechanism-outcomes

Step 3: Prioritize what configurations will be explored in your evaluation

Step 4: Describe what data and design will be implemented to explore the CMO configurations

Step 5: Explore variations in outcomes across contexts and mechanisms (incorporate design)

Step 6: Learning: Re-develop your theory of change as a result of this exploration
Incorporating diversity
Features of the proposed approach

• Theory-driven approach
  – *Be clear about the roadmap of the program*

• Programs are not static. Programs themselves will change over time in response to learning about the interventions

• Pay great attention to issues of contexts and mechanisms (informed by a realist approach)

• Evaluation questions need to be connected to the theory of change

• Concerns about generalizability and spread needs to be upfront
Impacts are one important part of the overall evaluation process

A  INTERVENTION THEORY AND DEVELOPING EXPECTATIONS OF IMPACTS OVER TIME
   • The key components of the complex intervention
   • The program theory of the complex intervention
   • Learning from the Evidence Base
   • The anticipated timeline of impact

B  LEARNING FRAMEWORKS AND PATHWAYS OF INFLUENCE
   • The pathways of influence of an evaluation
   • Learning framework for the evaluation

C  IMPACTS AND LEARNING
   • Assessing the impact of the intervention: DESIGN
   • Learning about the intervention over time

D  SPREAD AND SUSTAINABILITY
   • Spreading learning from an evaluation
   • Reflections on performance and sustainability
Why does diversity matter in conducting impact evaluation?

LEARNING:
Very different learning needs of different stakeholders

VIEWS of SUCCESS:
Differing views of what constitutes success

DIVERSITY of QUESTIONS:
Heterogeneity of relevant evaluation questions

COMPLEXITY of the INTERVENTION:
Might be hard to focus on all aspects of the intervention. What to focus might depend on what stakeholders value

MIXTURES of DESIGNS:
Varieties of designs need to be integrated to answer the relevant evaluation questions

DIVERSITY of MEASUREMENT:
Diversity in views of what constitute the most important measures