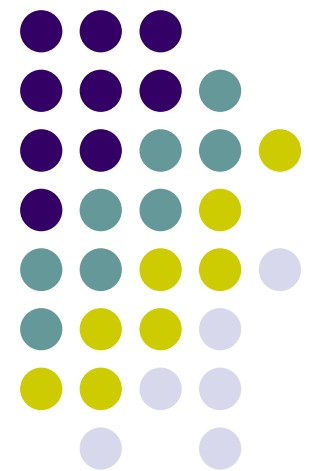
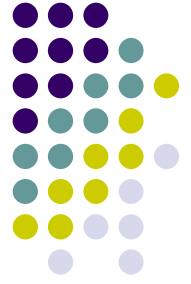


Challenges and opportunities in examining family relationship and process variables in ongoing children's longitudinal and epidemiological studies

Patricia O'Campo Ph.D.
Dalla Lana School of Public Health
University of Toronto





Goal

- 1 To capture longitudinal data on the processes by which stressors positively or negatively impact behaviors, health or development, and to simultaneously examine the role of time varying mediators or effect modifiers such as gender, socioeconomic position, culture, family and neighborhood context.

1 Simple

1 BAKING A CAKE

- 1 Recipe is essential
- 1 No particular expertise required
- 1 A good recipe produces nearly the same cake every time
- 1 The best recipes give good results everytime
- 1 A good recipe notes quantity and nature of the 'parts' needed and notes order in which to combine them but there is room for experimentation

1 Complicated

1 SENDING A ROCKET TO THE MOON

- 1 Rigid protocols or formulas needed
- 1 Sending one rocket increases the likelihood that the next will be a success
- 1 High levels of expertise and training in a variety of fields are necessary for success
- 1 Key elements of each rocket MUST be identical to succeed
- 1 There is a high degree of certainty of outcome
- 1 Success depends upon a blueprint that directs both the development of parts and the exact way to assemble them

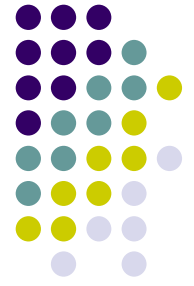
1 Complex

1 RAISING A CHILD

- 1 Rigid protocols have limited application /counter productive
- 1 Raising one child provides experience but is no guarantee of success with next
- 1 Expertise helps but only when balanced with responsiveness to the particular child
- 1 Every child is unique and must be understood as an individual
- 1 Uncertainty of outcome remains
- 1 Cannot separate the parts from the whole; essence exists in the relationship between different people, different experiences, different moments in time



Implications for data collection



1 Simple

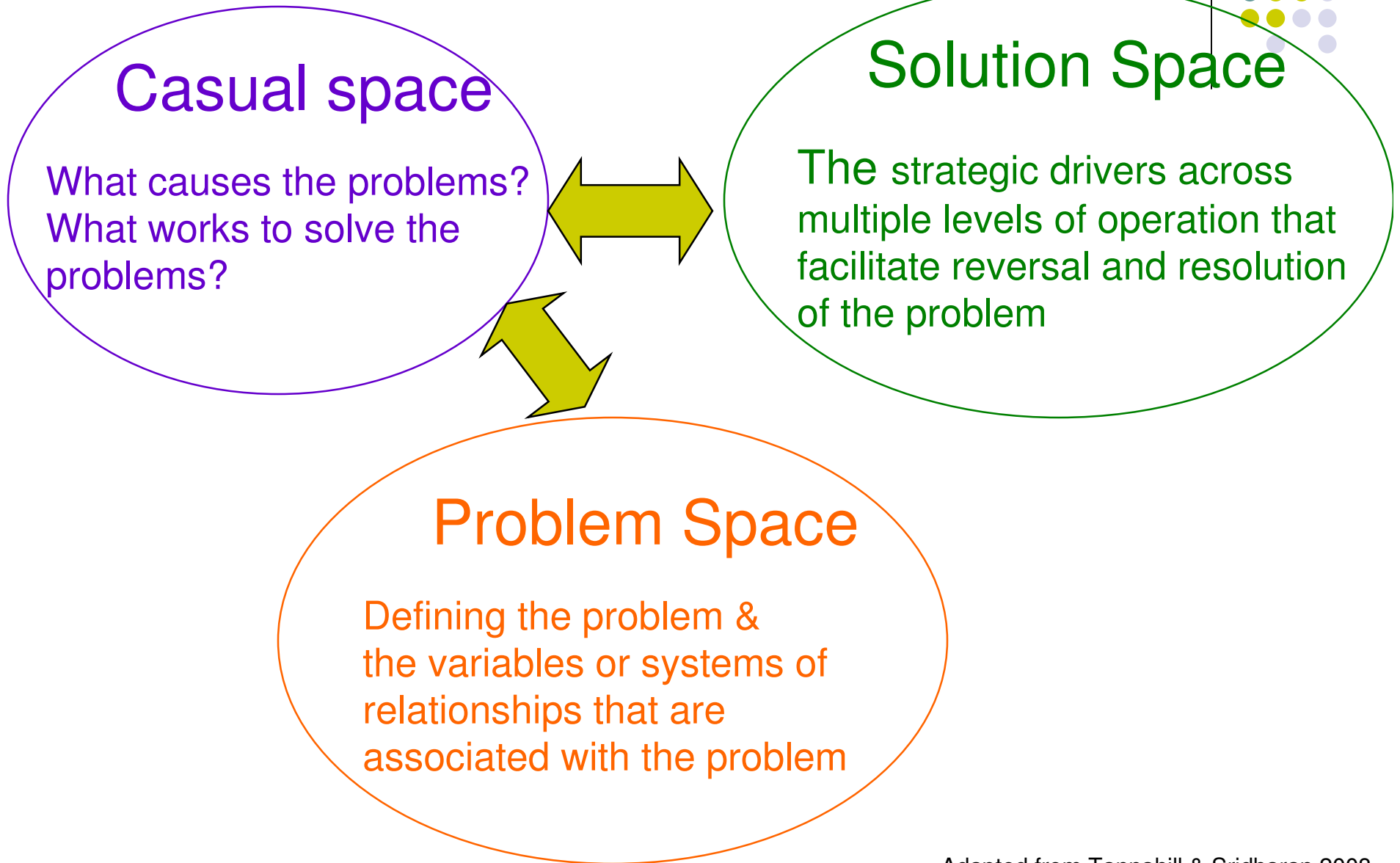
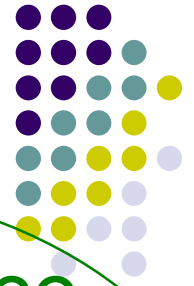
- 1 Does knowledge change as a result of HIV pre/post-test counselling and is it maintained over time?
- 1 Can get good measures of HIV risk knowledge
- 1 Pre-post test
- 1 Does this knowledge diminish over time

1 Complicated

- 1 Does risk behavior change as a result of HIV pre/post-test counseling and is it maintained over time?
- 1 Get data on risk behaviors pre-post.
- 1 Get data multiple factors influencing risk behaviors—attitudes, knowledge, partners, other ‘interventions’ (eg further tests, provider interventions, etc)

1 Complex

- 1 “Stress/risk” process over time
- 1 While intensive data can be collected, they might not capture the critical aspects of the process that uncover the pathways/mechanisms
- 1 Some processes may not be able to be specified (for a given individual) ahead of time, and the timing of critical ‘window periods’ are likely to be unknown
- 1 As has been suggested, combinations of qualitative, intensive quantitative data collection are likely required.
- 1 May need to use sub-studies with innovative methodologies to build on longitudinal structure



Studying family processes in longitudinal epidemiologic studies



- 1 Complexity is not easily captured using typical longitudinal designs
 - 1 But should take advantage of them to build in intensive data collection (qualitative & quantitative) opportunities
 - 1 Better than doing those intensive studies alone

- 1 Research studies and interventions should be more closely aligned in terms of variables so that knowledge is generated in the context of the whole cycle from research to intervention