

Social inclusion software to address complex needs : a user centric approach

Project Team

- **Co-researchers at Neporendi**
- **Jon Deakin** - PhD Student, Governance & Public Management
- **Dr Denise DeVries** – Researcher, informatics and engineering.
- **Assoc Prof Janet McIntyre** - Chief investigator, policy & management, critical systemic approach.
- **Assoc Prof Doug Morgan** - Chief investigator, cultural studies and Aboriginality
- Kim O'Donnell, mentor at CRCAH, Flinders University
- **Prof Anne Roche** - Chief investigator, public health
- **Prof John Roddick** - Chief investigator. informatics and engineering
- **Bevin Wilson** – mentor at Yunggorendi

The purpose of this research

- To explore the relationships across variables more deeply with service users
- To provide a better understanding of what works, why and how,
- To inform policy decisions.

Introduction

- “Wellbeing is an idea whose time has come”
(New Zealand Public Health Advisory Committee 2007)
 - refers to social, cultural, spiritual, economic and environmental sustainability

Research Partnership

- Neporendi Forum Inc (Aboriginal NGO)
- SA Department of Health
- Flinders University
- University of SA
- Anglicare

Aim of the research

- The research is about perceptions of what works why and how
- The aim is to ensure that the service users build the capacity of the service providers, not the other way around to ensure a better match between perceived needs and service outcomes.

Research Hypothesis

- The greater the use of participatory design processes to address complex problems (such as homelessness, family violence, drug use, unemployment and social inclusion issues) the better the problem solving outcomes for both human service users and providers.

Intended project outcomes

- Capacity building of service providers by service users
- Improved outcomes for service users
- Develop and pilot a Computer Tool to inform decision making by both users and providers
- Creation of an updated data set on the areas of concern

Ethics

- All the data is de-identified as it is entered. The knowledge shared comprises processes and strategies – not people or actual community information.
- The system to support better decision-making is created by the people (both users and providers) who have told stories of what works and why and how in what context.
- The software recommends pathways, it is still up to the people to make decisions based on their experience and understanding of what is required in context. It is an add-on to assist them makes the final decision. It does not prescribe, it is just another resource on which to draw.

Research Design and Approach

- Participation in the design process ensures that service delivery is matched with need.
- The process enhances wellbeing, **because it is a complex and contextual outcome that must reflect individual variance.**
- The more the principle of empowerment is applied (people involved in the decision making at the level where the decision is to be implemented) a) the greater the match between the provider and the user and b) the level of wellbeing of the service user and the community .
- Compartmentalised thinking undermines accountability and risk management (Ackoff and Strumpfer 2003, Ackoff and Pourdehnad, 2001, Romm 2001, Wenger 1998, Wenger and Snyder 2000).

Overview of the process

- **Step 1**

- **Invitation**
- **Establishing rapport** through participatory action research project on domestic violence funded through a small grant from Community Benefit SA. Participation as volunteer.
- **Listening actively** to stories
- **Identification of the area of concern with the participants**
- An **ethics approval process** that involved all the partner organizations and the Aboriginal elders.
- **Developing relationships and trust**

Step 2

- **Data collection**
- **Creating personal meaning maps**
- **Creating shared group maps , based on weighting the number of times items identified**

Overview of the process continued

Step 3

- Use the proforma to develop the pattern language combining probability mathematics and adapting Nvivo
- Develop the computer interface with Aboriginal artists
- Record stories from men and women
- Test out the interface at Neporendi and Achieve SA

Research Theory and Methodology : Systemic approach

- Cultural studies
- Critical systems thinking
- Informatics and modelling complex systems
- Sociology and public policy
- Management systems
- Governance
- Aboriginal health

Key Concepts

- **Systemic Governance**
 - Ensuring all those who are at the receiving end of a decision are party to the decision making process (or well represented)
 - Diversity is taken into account to the extent that it does not undermine the freedom of others
- **Subsidiarity**
 - Problems are best solved at the level where they arise and with the people who are to be affected by the decisions
- **Ashby's Law of Requisite Variety**
 - Complex decisions need to reflect the complexity of the people and the system they will affect.

Systemic Approach continued

- Participatory approach that ‘involves all relevant parties in actively examining together current action in order to change and improve it’ (Wadsworth Y, 1998).
- Case Study Aboriginal Wellbeing and the Provision of Health Services to the SA Aboriginal Community.

To sum up

- Those at the receiving end of a decision should be part of the decision making process
- Complexity of the decision must match the complexity of the decision makers and the decision making context. This is vital for accountability and risk management and for matching services to perceived needs.

Step 3 : Pattern recognition and making meaning using organic analogies

- Conversations with the women of Neporendi lead to my being shown artwork that represented in both abstract and associational terms that life is about making a journey, personal growth, being rooted in culture and reaching out to others. Choices are made on the basis of learning from experience. The value of this project is that the learnings can be shared with one another.

Step 2: Data Collection with Service Users

50 self selected service users who are associated with Neporendi or Anglicare.

Data collection is by : Janet McIntyre with assistance of Kim O'Donnell, Daphne Rickett and Tracey Turnbull; Doug Morgan and Bevin Wilson on :

- What Wellbeing means personally
- What works and what doesn't work in service delivery
- Participants are invited to draw conceptual diagrams

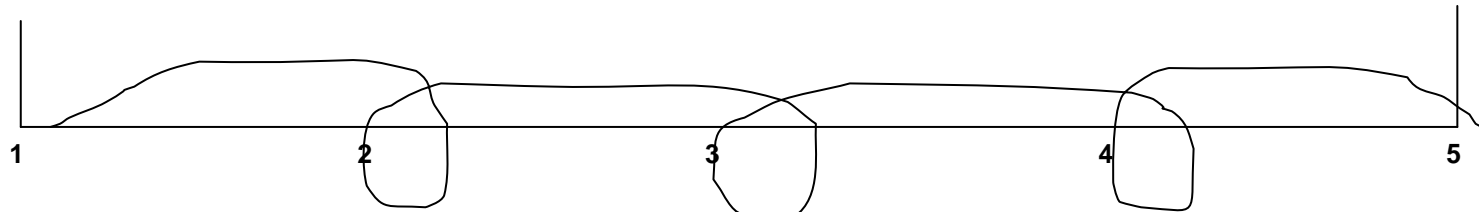
Data Collection with Service Providers

50 self selected providers of services to the Aboriginal community on :

- What Wellbeing means personally, professionally and to clients.
- Issues and combinations of issues that impact on wellbeing.
- What works and what doesn't work in service delivery.
- Participants are invited to draw conceptual diagrams



Healing Pathways



Life in balance

Not coping

In basket

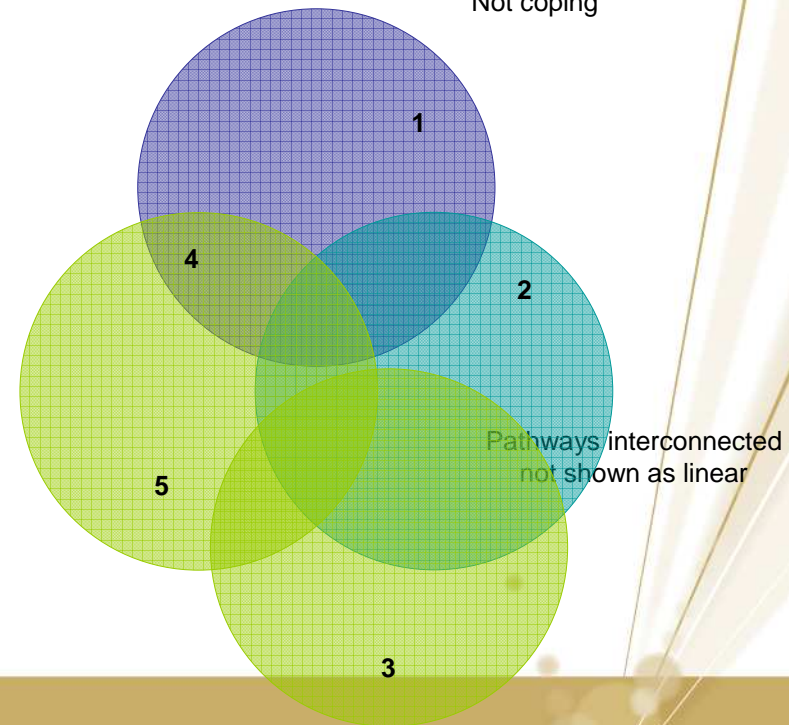
Out basket

Turning points for better

Turning points for worse

Barriers

Services that made a difference





The computer program as a means to support social inclusion

- Democracy is based on feedback and learning from diverse stakeholders.
- This technology could enable:
 - e-governance from below as a means for more regular communication between people and service providers. closer communication across organisational silos and links with the community.
 - pooling of learning in working environments where people move around from place to place and organization to organization. Contextual knowledge can be lost as people move.

Design of what works why and how

- Listen to others' narratives, then see which of the domains is closest to you. Select a domain and explore and discuss with the service provider why the domain seems relevant.
- Add more information as data to enrich the knowledge base and to help the next service user.
- Walk through the interconnected and overlapping pathways and collect items for basket (based on the drawings and stories) and select items for rubbish bin (based on the drawings and stories).
- Identify the barriers on the pathway and give them a name.

Issues

The research will address the following issues or needs identified from the data:

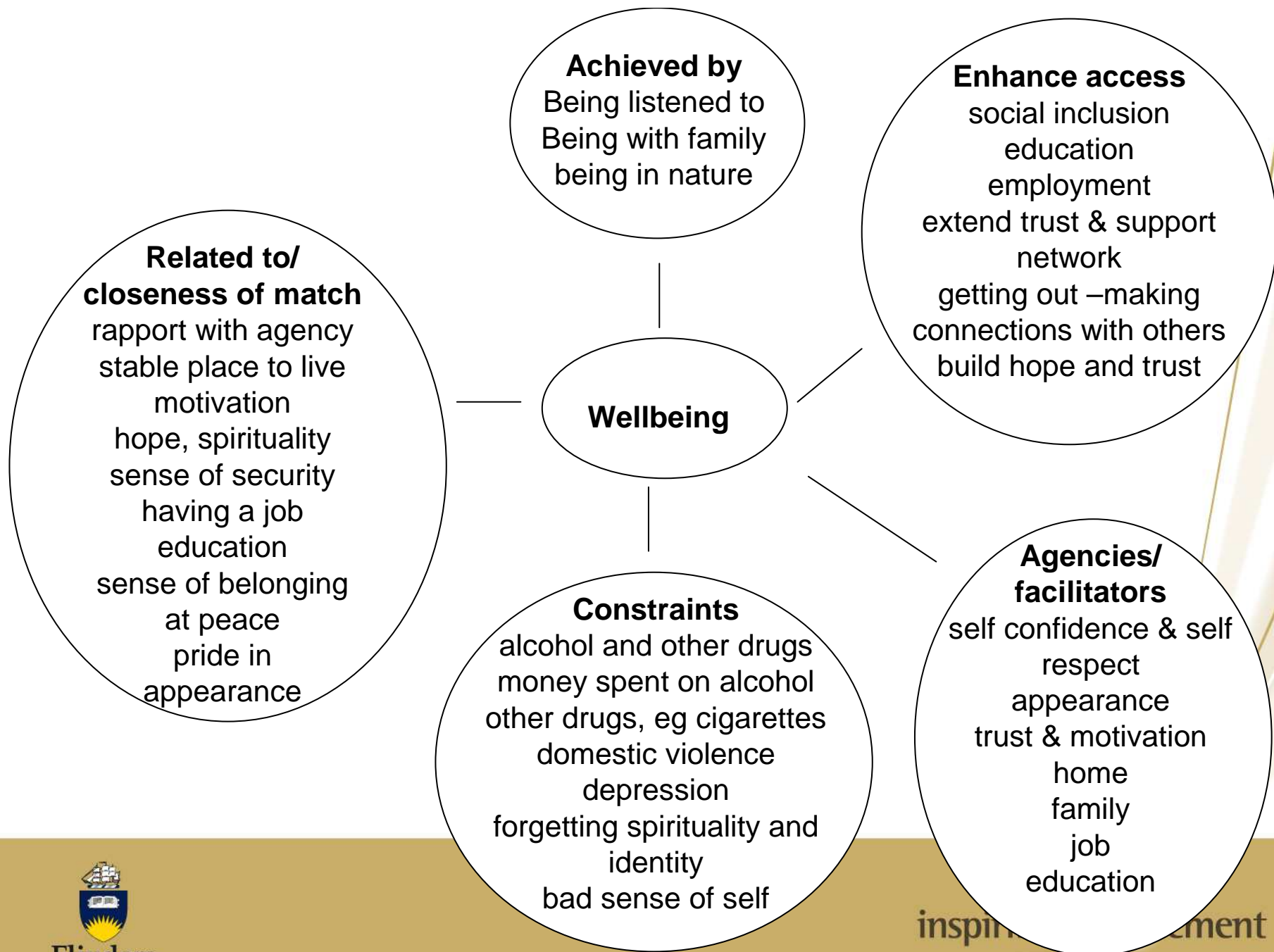
- Escaping violence or bad situation
- Housing
- Wellbeing
- Mental health
- Social inclusion
- Education
- Employment
- Poverty
- Depression
- Gambling
- Alcohol and other drugs
- Violence
- Racism
- Diabetes
- Renal dialysis
- Death, mourning and sorry business
- Moving around and travel associated with visiting or leaving a bad situation

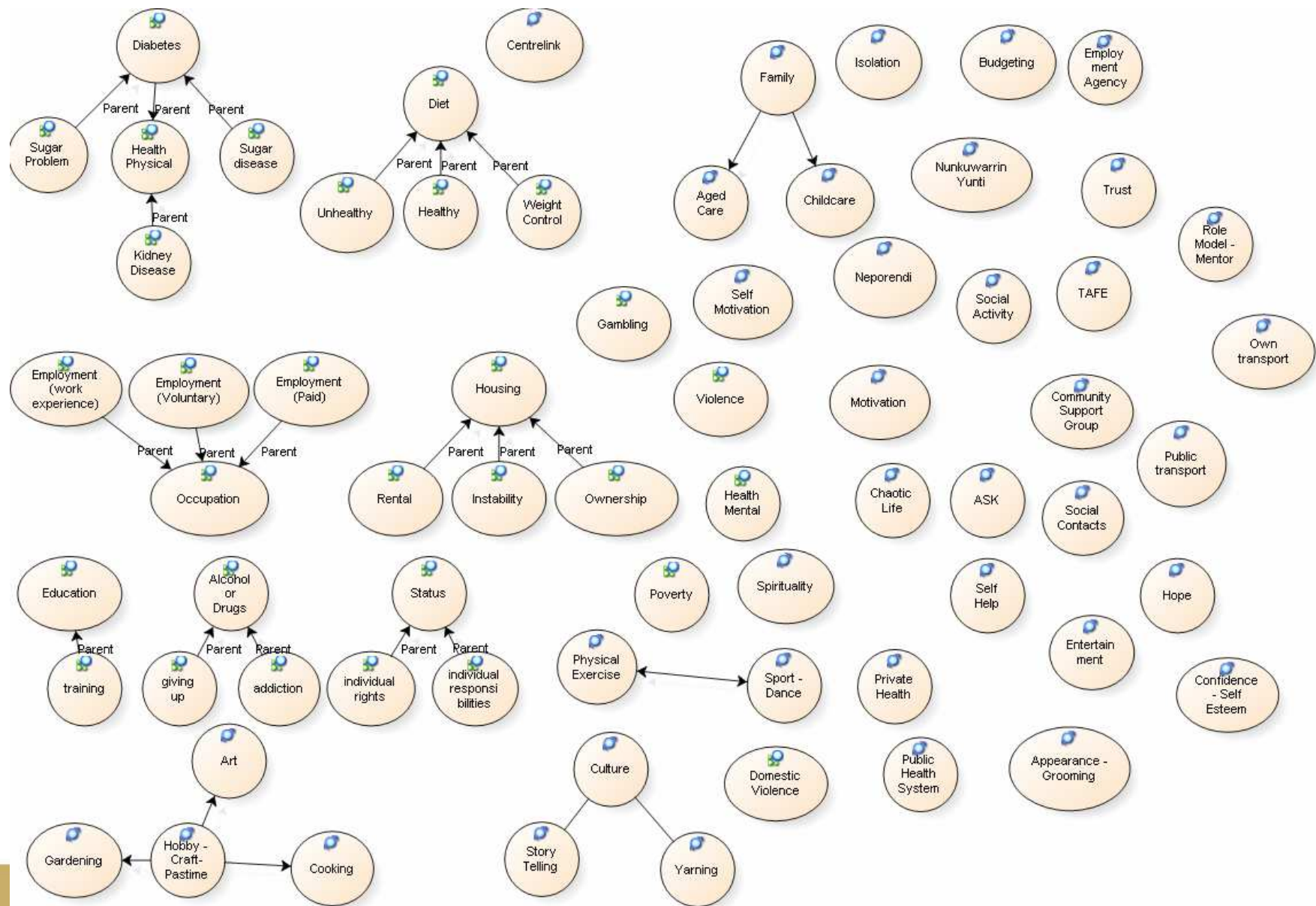
Step 3 Patterns in the data

- Aboriginal and non-Aboriginal or generic services are relevant to men and women, depending on the circumstances. The challenge is to match the type of service to the perceived need
- On a continuum of 1-5/6 where 1 = life in balance and 5/6 = life in chaos, those closer to 1 are more inclined to use *more* generic services whilst those closer to 5 are more inclined to use *more* Aboriginal services. The issue is matching needs and services and finding the right combination

Testing the design

- A ‘walk through’ based on questions and identification of factors on a map created by all the participants. Self selection of factors from the “mind map” helped to identify an archetype which is close to their experiences and perceptions.
- Personalising the ‘mind map’ by adding factors and by placing the new factor as close as possible to existing factors and describing the new factor.
- Conditional scenarios will enable participants to assess the implications for making changes in their lives





Testing the design continued (De Vries 2006)

- Please look at the drawing of the factors that influence wellbeing
- Please write under the **headings and draw your own pathways**
- I hope people will add issues/needs/solutions as they discuss and think about stuff.
- We can work as a group or alone – people can choose.
- Add as many more questions/descriptions as they/you want.
- Add balloons as well if you want to

Basis for the software design by De Vries

- How does the bubble help other aspects of life?
- How does the bubble hinder other aspects of life?
- How important is the bubble ? (use scale like one below)
not at all a bit doesn't matter quite important very important
- If I solve this problem or have this asset first, does it make solving other problems easier?
- Do these things always happen together? Or one after another?
- How do I achieve it?
- How do I avoid it?
- Where can I get help for it?
- Who can I help and how, if they need this or have this problem?
- Is it sometimes good and sometimes bad – in what situations?
- Are there other names/terms for the same thing?
- What can stop me from (or make it really hard) getting/achieving it?
- Are there conditions I have to meet to achieve/get it? (Such as age, sex, children, income, employment etc etc)
- Is this a smaller or larger part of another issue? (like Physical Health is parent of diabetes)
- If one thing happens, does another thing usually follow? Both good and bad.

Combinations of 5 axial factors

- **Home safety** (and being free of violence)
- **Health** (physical and mental health – appearance, energy)
- **Purpose** (Formal Employment or preparation for employment /profession employment/CDEP/training/education)
- **Connection/belonging** (people and place), volunteering, community leadership and cultural spirituality
- **Self respect and confidence** feeling good about oneself (not shamed by clothing or appearance) which is linked with being able to access services, work, study, maintain a stable home for children.

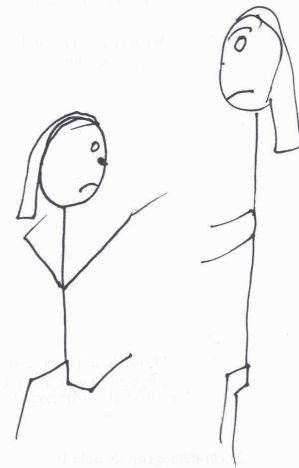
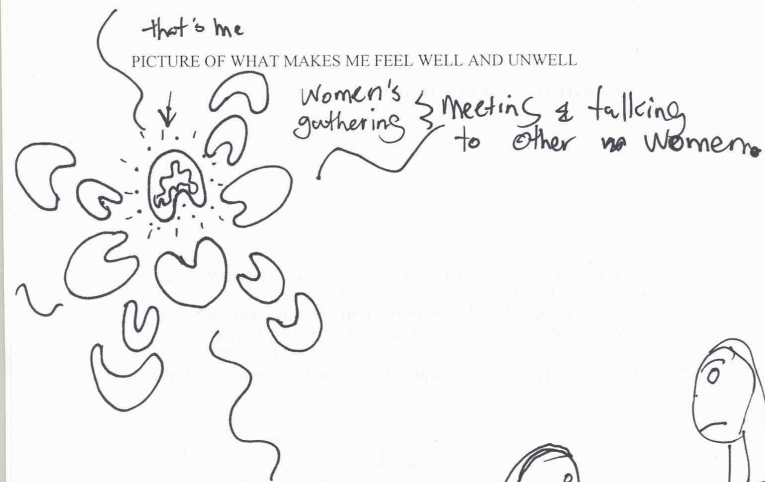
Findings

All the participants in the study stressed that the following are the most important aspects of **what works**:

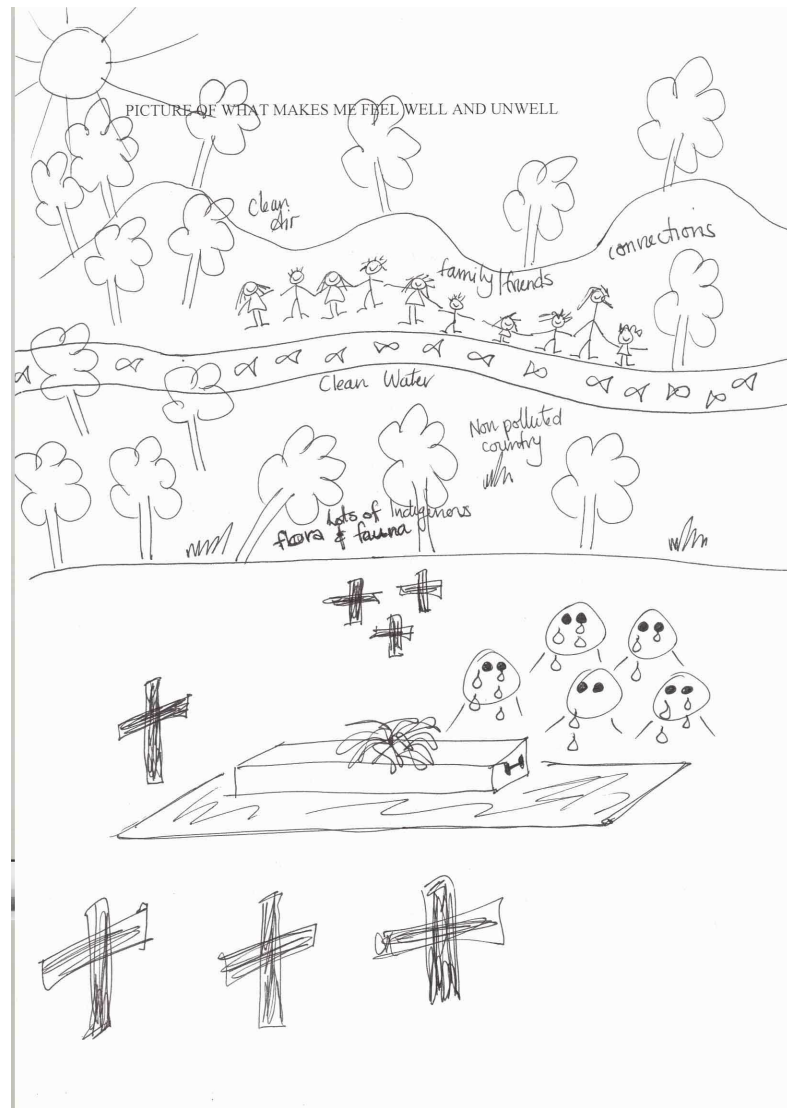
- Being friendly, Caring, Going the extra mile, Co-location,
- Tracking and helping people through the system,
- Following through communication to ensure the messages get through – e.g. the note to do maintenance on a house being muddled and all the possessions being removed from someone's home whilst in hospital.

What does not work?

- Unfriendly people, Being told to go elsewhere, Being late and told to come back another day, Not just a problem that services can deal with – it is about housing, jobs and employment.
- Knowledge management is important to wellbeing. The research process enables people to give details about the quality of the service and details about what works for them, how and why. The context and the match between service provider and user determines the success of the outcome.
- Age, gender, level of education and the number of health and social problems of the service users determines how well they use the system.
- A range of service providers is needed to address complex issues



centerlink.
Walking in to a office
and not being greeted
in a nice way, & can
put you off going back to
to the service you need.



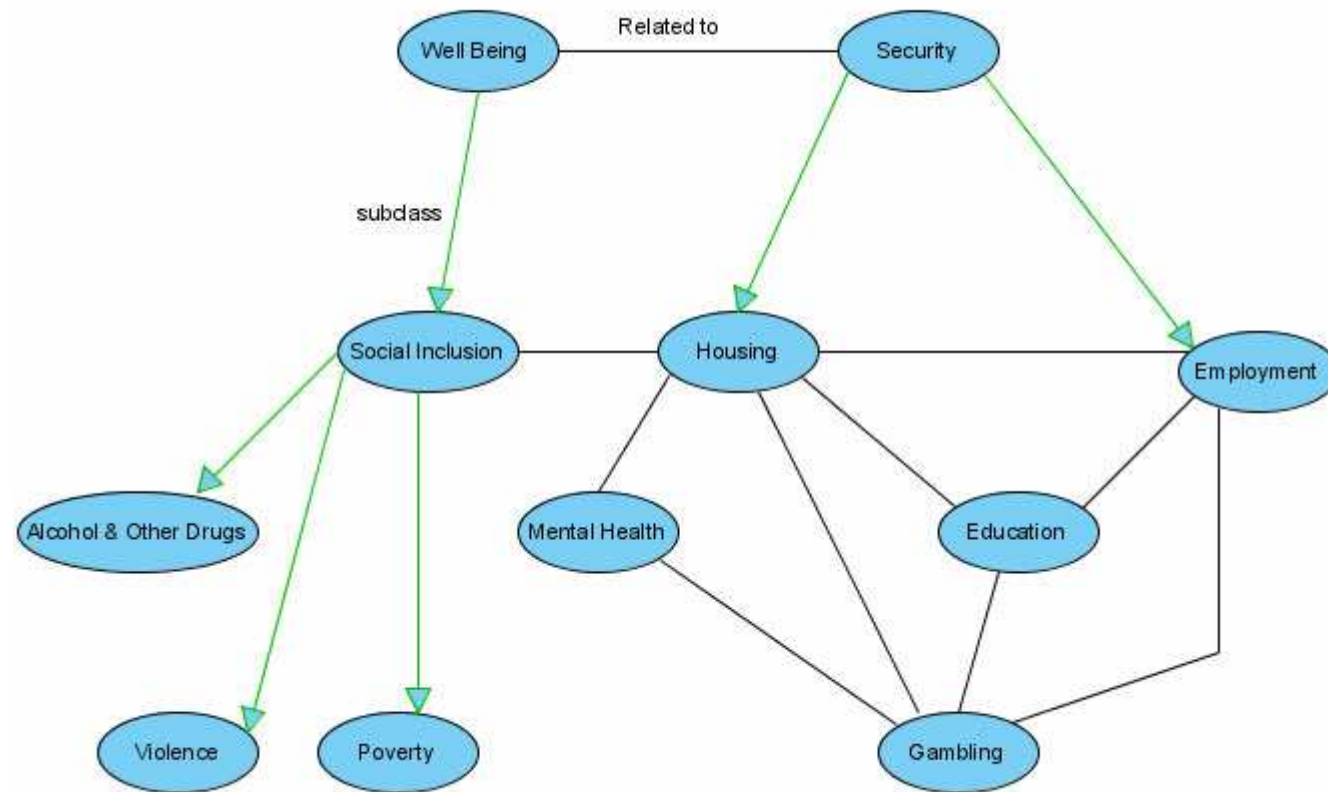
Comparison across gender

<i>Female</i>	<i>Male</i>
Use a wide range of services regularly which enables them to maintain their level of wellbeing even if they do not manage to rebuild and undertake major transitions in their lives.	Men used a narrower range of services and tended to focus on housing, social wage and finding a job.
Emphasis on physical, emotional and spiritual wellbeing	Men tended to wait until they could no longer function before seeking assistance from physical or mental health services. A gap exists between those in control and those out of control, because of the minimal use of services.
Leaving abusive relationships is a first step towards healing	Loss of partners was a trigger for grief, self harm and risk taking
Woman hit rock bottom as a result of using alcohol and drugs as a way of life and to deal with grief and loss.	Men hit rock bottom because they use alcohol as a way of life and when they cannot control people and events in their lives.

Findings continued

- With greater levels of security (achieved by having a job, a home, a sense of purpose and place, supportive family, friends and agencies), the problems associated with sadness/depression, decrease and there is more resilience to deal with the 'knocks of life', such as racism, deaths in family. Perceptions and emotions come into play. A combination of a few or many factors can lead to an increased sense of insecurity.

Issues are inter-related (De Vries 2006)



Analysis

- Recognition of non linear relationships is a first step for developing integrated policy responses.

**Conclusion: Participatory process enables democratic process
and governance**

- Better communication
- Better understanding of what works, why and how from the point of view of service users
- Better storing and sharing of knowledge

is essential for matching services to need.