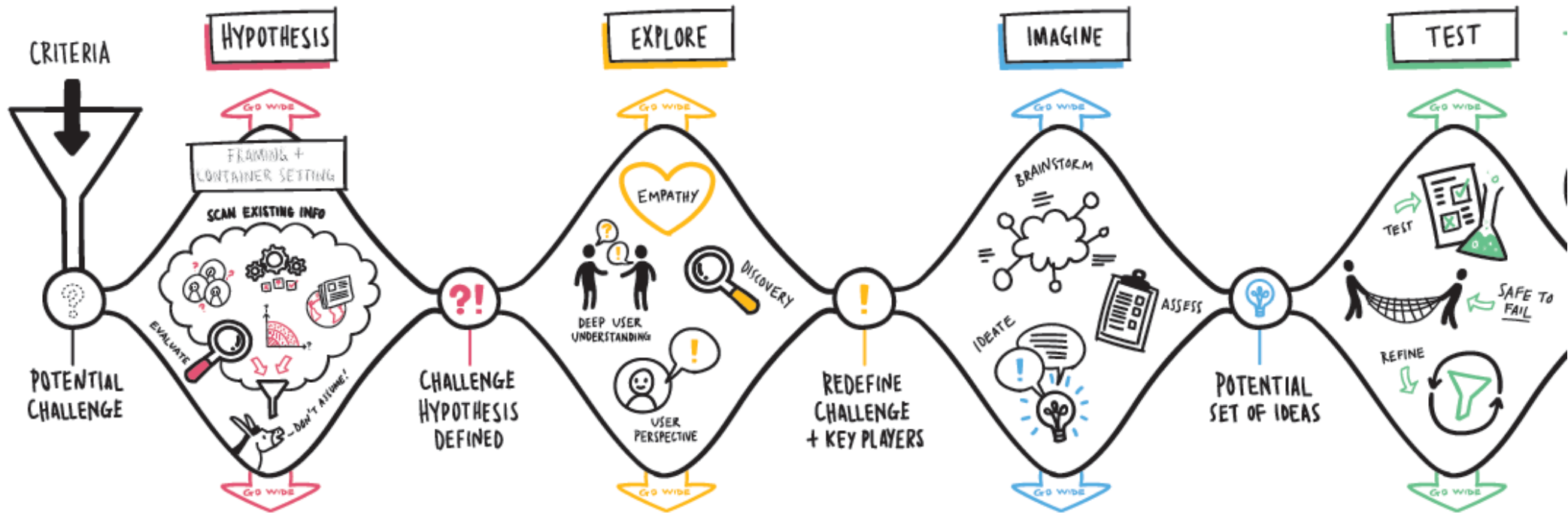




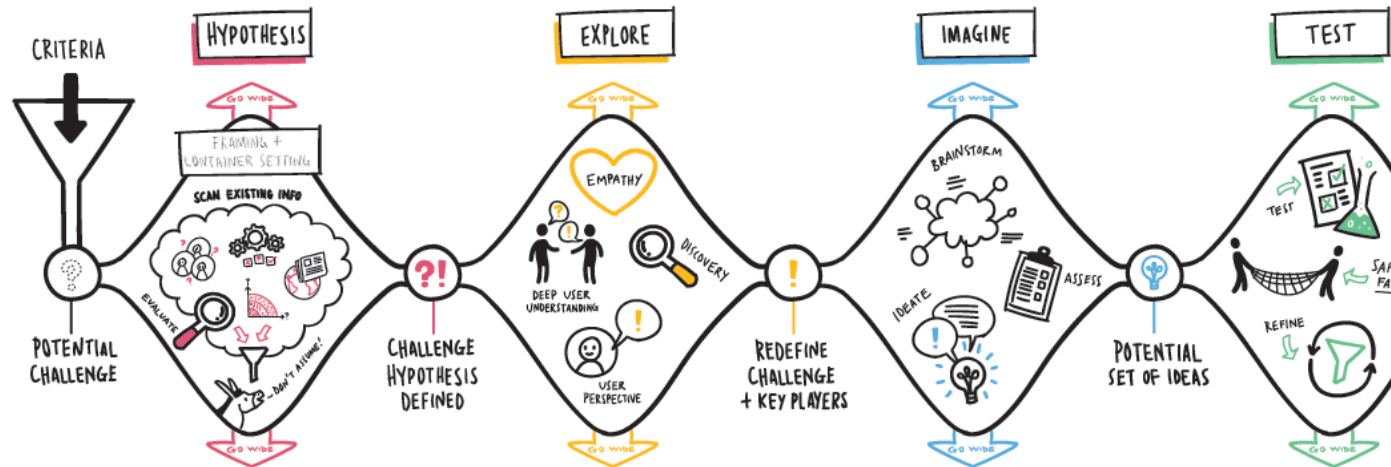
THE
AUCKLAND
CO-DESIGN
LAB

TOGETHER WE DISCOVER

Human centred-design methodology



Human centred-design methodology



Forming hypothesis/framing - literature and practice review, stakeholder identification and interviewing, data analytics, synthesis to create hypothesis

Explore – qualitative/ethnographic research, insight and theme identification, problem redefinition
- Partner with most affected to **co-decide, co-design and co-create**

Imagine - ideation to generate and prioritise new ideas and opportunities

Test - Low risk, low cost iterative **prototyping and refinement** of new ideas

Implement – implement system and local cases for change



Example: Early Years Challenge

“How might we support parents (in South Auckland) to give tamariki the best start in life”



A collaboration between Auckland Council’s the Southern Initiative team and the Auckland Co-design Lab , driven by TSI’s first priority under the Auckland Plan, with additional sponsorships from Skip (Ministry for Social Development).

Example: Early Years Co-design

- **Frame:** Literature and practice review
- **Explore:** ethnographic research
- **Imagine:** Community based participatory research, based on whānau-centric principles and co-design tools
 - Two strands: co-designed insights, ideas, prototypes, implementation
 - Whānau capability building
- **Test:** Iterative prototyping, triangulate against data and analytics
- **Implement:** Council family, Plunket, Health



Literature and practice review

THE NUMBER OF RISK FACTORS A CHILD IS EXPOSED TO INCREASES THEIR VULNERABILITY



Vulnerability is not fixed; children move in and out of vulnerability as risk factors change

Source: Growing Up in NZ

THE FIRST 1000 DAYS

HIGH VULNERABILITY IS STRONGLY LINKED TO POOR OUTCOMES

Only 8% of children with low vulnerability (exposure to no risk factors) are classified as having abnormal behaviour issues

Conversely, 44% of children in the high vulnerability group (exposed to 4 or more risk factors) are classified as having abnormal behavioural issues

SDQ* category	Low	Medium	High
Low risk behaviours	79%	63%	37%
Borderline behaviours	12%	18%	19%
Abnormal behaviours	8%	19%	44%

*The Strength and Difficulties Questionnaire (SDQ) assesses positive and negative behaviours such as prosocial behaviour, conduct problems, emotional symptoms etc. It is widely used to screen for behavioural difficulties.
Source: Growing Up in NZ

Hoki ki te Rito – Oranga Whānau Mellow Dads in Aotearoa (NZ)

AIM Parenting programmes have been shown to improve children's relationships with their parents/caregivers and reduce problem behaviours, however little research has focused on outcomes for indigenous fathers. The aim of this study was to evaluate the acceptability and effectiveness of Hoki ki te Rito/Mellow Parenting programme, for Māori (Indigenous peoples) and Pacific fathers in Auckland, New Zealand.

DESIGN A repeated measures, stepped wedge design methodology was used, comparing a waitlist control condition, pre and post intervention, 3 month and 12 month follow up of the intervention group.



SETTING Ohimatarangi Trust, an Indigenous Kaupapa Māori focused provider, delivered the programme to over 30 Māori and Pacific fathers in South Auckland, New Zealand.

PARTICIPANTS Fathers from socially disadvantaged areas, with children aged between 0-5 years, whose relationship difficulties along with child behaviour difficulties were present.

INTERVENTION A culturally adapted version of the Mellow Parenting Programme - Hoki ki te Rito - Oranga Whānau for Māori parents.

MAIN OUTCOME MEASURES Father's wellbeing, and coping with parenting, and children's behaviour and development, were assessed using fathers' self reports on General Health-Questionnaire - 30 (GHQ-30); Parent Daily Hassles Scale (PDH); Agn and Stages Questionnaire (ASQ) and Strengths and Difficulties Questionnaire (SDQ).

RESULTS Fathers attending Hoki ki te Rito-Oranga Whānau parenting programme reported a significant increase in their own well-being, their ability to cope with their parenting role and their children's behaviours, their feelings of self esteem and ad equiry. Reductions in unwanted problematic behaviours from their children, and an increase in children's social skills were also found. The programme also led to greater movement from the clinical range to the non-clinical range for mean child behaviour scores on all measures. Qualitative data showed extremely positive responses to the programme resources, content and process.

Table 1. Pairwise comparison analysis results for outcome measures for fathers between two consecutive time points

	Waitlist (n=10)	Intervention (n=20)	Waitlist (n=10)	Intervention (n=20)
GHQ-30	1.00	1.00	1.00	1.00
PDH	1.00	1.00	1.00	1.00
ASQ	1.00	1.00	1.00	1.00
SDQ	1.00	1.00	1.00	1.00

Table 2. McNemars test results: numbers of ASQ scores reaching clinical cut-off: Waitlist and Start

ASQ	Waitlist	Intervention
ASQ: Communication and Symbolic Use	1	1
ASQ: Gross Motor	1	1
ASQ: Language	1	1
ASQ: Personal and Social	1	1
ASQ: Fine Motor	1	1
ASQ: Total	1	1

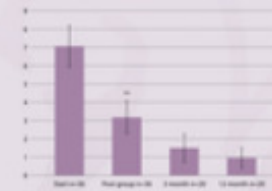
Table 3. McNemars test results: numbers of ASQ scores reaching clinical cut-off: Start and Completion

ASQ	Start	Completion
ASQ: Communication and Symbolic Use	1	1
ASQ: Gross Motor	1	1
ASQ: Language	1	1
ASQ: Personal and Social	1	1
ASQ: Fine Motor	1	1
ASQ: Total	1	1

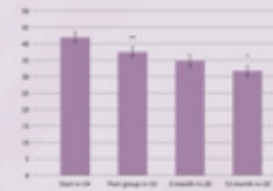
Table 4. McNemars test results: numbers of ASQ scores reaching clinical cut-off: Completion and 3 month follow up

ASQ	Completion	3 month follow up
ASQ: Communication and Symbolic Use	1	1
ASQ: Gross Motor	1	1
ASQ: Language	1	1
ASQ: Personal and Social	1	1
ASQ: Fine Motor	1	1
ASQ: Total	1	1

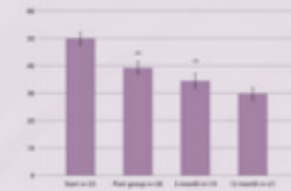
Graph 1: GHQ - 30 scores



Graph 2: PDH Frequency Scores



Graph 3: PDH Intensity scores



Graph 4: PDH - Children's challenging behaviours

Graph 5: PDH Relative Hassle of Parenting Tasks

Graph 6: Proportion of Strengths and Difficulties Questionnaire (SDQ) Scores within normal range

Whānau-centric Framework – underpinning the ethnographic research and beyond

Principle	Application for whānau centric co-design
Manaakitanga	Hosting whānau in a way that empowers them, and removes any barriers to participation. Respectful, strengths based.
Whanaungatanga	Establishing meaningful relationships in culturally appropriate ways. Engaging whānau in a way which builds trust.
Tino rangatiratanga	Whānau have the autonomy to decide how and when they will participate. Co-decide as well as co-design.
Mana	Whānau are the experts in their lives. Ensuring a balance of power.
Ako	Mutually reinforcing learning. Reciprocity.



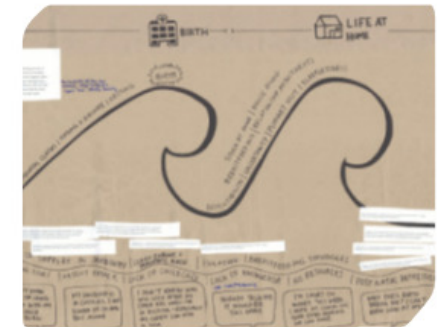
Ethnography - methodology

- **Training**
 - Material culture study
- **Ethics**
 - Auckland Council Human Participants Ethics Committee
- **Methods**
 - Observation and interviewing
 - Photo elicitation
 - Video tour
- **Approach**
 - Recruitment via trusted community partners plus whānau networks
 - Whānau-centric principles based

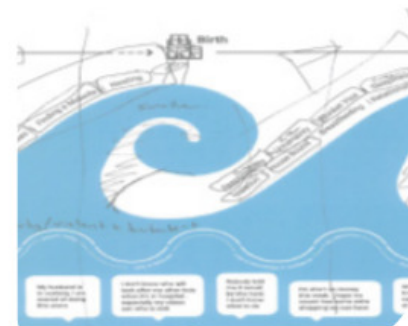
ITERATION 1



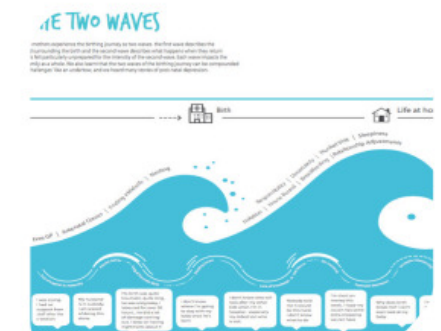
ITERATION 2



ITERATION 3



ITERATION 4



Ethnography - outputs

Inter-related themes

- **Strengths-based**
 - parents show resilience, initiative, hopes and dreams for kids
- **Connections with peers and community make or break**
- **System failure**
 - ante-natal, birth and post-natal disconnect
 - Services without empathy can be come a disservice
 - Parents suffer pressures and judgments

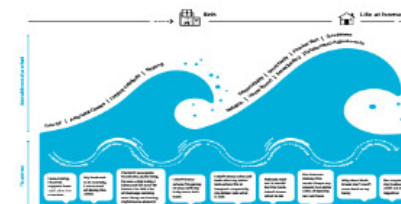
WORKING TOWARDS A BETTER FUTURE

Some of the things parents tell us they were likely to create positive futures



Parents in South Auckland are positive about their children's future

THE TWO WAVES



Mum's experience a new baby as 2 waves: the birth and then being back at home

CONNECTIONS



Connections are crucial but can be positive and negative

PRESSURE & JUDGEMENT



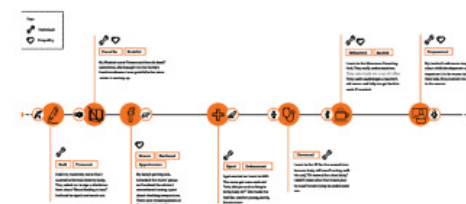
Pressures and judgments are a barrier

CREATING 'HOME'



Creating 'home' at home and away from home

SERVICE OR DISSERVICE?

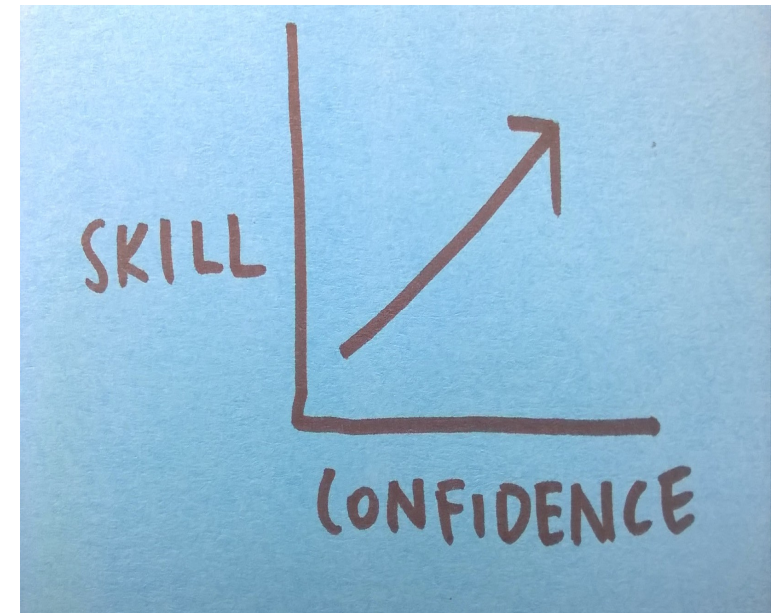


Service or disservice: professional advice without empathy is a major barrier

Community-based participatory research/co-design

principles, practice and goals are different from 'normal' research

- Partners not participants
- Outcomes around building on community assets and skills not just insights for their own sake



"I learnt more about myself than I did about the process"



Co-decide whānau hui: refining and prioritising focus areas



Co-design whānau hui: prototyping the partnership

- Honesty and transparency
- Genuine relationships
- Comfortable environment where it is easy to speak up
- Tamariki first
- Consistency – the same people
- Feedback loop
- It will make a difference

The emergence of the Co-design Mamas and Papas name



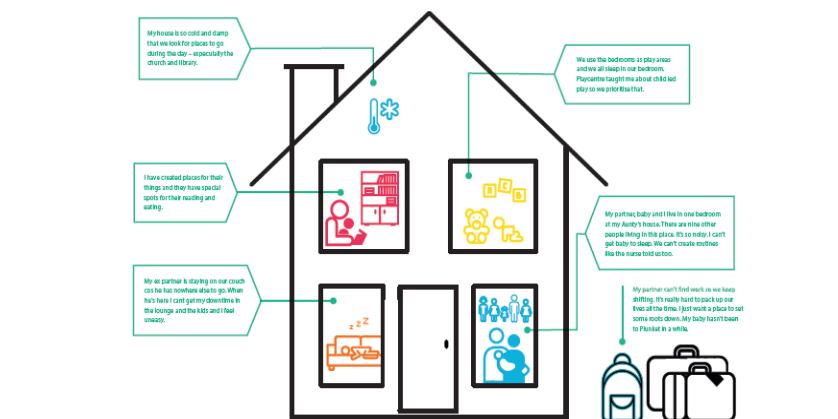
Sprint 1: Making home

- Equal numbers of whānau and agency partners
- Tamariki-friendly environment in the room with carers and kai
- Whānau empowered by preparation hui
- Three days:
 - Immersing in and creating insights
 - Idea creation
 - Concepts and prototyping
- Three prototypes, which were tested by whānau and agency teams in the weeks following the sprint in Council spaces

“At first it seemed like a lot of talking but it was amazing how fast our ideas turned into plans”

(CREATING HOME

Becoming a parent brings about many changes including how people live in their homes. Some families have less control over this if they are renting, sharing a home with disruptive partner, living in poor or overcrowded conditions or are frequently moving house. This lack of autonomy in the home can negatively impact upon the family's ability to parent. In order to cope, parents show resourcefulness by changes in how they use the space they do have, developing new routines and structures, or 'create home' in safe places outside the house such as libraries, parks, churches etc.



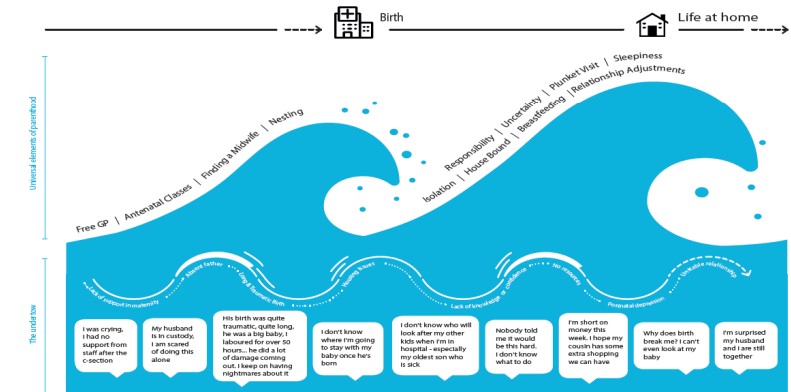
Sprint 2: Two waves

- Equal numbers of whānau and agency partners
- New whānau inviting by existing whānau
- Whānau built on skills from sprint 1
- Three days:
 - Immersing in and creating insights
 - Idea creation
 - Concepts and prototyping
- Four prototypes, which were tested by whānau and agency teams in the weeks following the sprint

“I wanted to come for one day but I came back for the three days. I loved the people and that they didn’t judge me. I love what were we learning and talking about. I’m glad that I got the chance to go along.”

THE TWO WAVES

We heard that mothers experience having a baby in two waves - the first wave describes the time up to and surrounding the birth and the second wave describes what happens when they return home. Mothers felt particularly unprepared for the intensity of the second wave. Each wave impacts the mother and family as a whole. We also learnt that the two waves of this journey can be compounded by other life 'challenges' like an undertow, and we heard many stories of post-natal depression.



What does each approach contribute?

Quantitative/longitudinal research and deep dives into data

- A snapshot of how many, where, clusters of factors
- Trends and predicted futures, points of intervention
- Revealing the hidden story behind the topline data
- Challenge and confirmation of lived experience story
- Literature and practise/evidence review: what works

What does each approach contribute?

Tikanga Maori framework creates the conditions for:

- personal and whānau empowerment
- Connectivity for - peer to peer support, community led initiatives and building social captial
- Reciprocity



What does each approach contribute?

Co-design

- **Deep empathy: to understand the lived experience - the why and the so what behind the data and how to go with the grain of people's lives**
- **Problem reframing: we thought it was about this, but what it is really about...**
- **The ability to partner with people to unleash their own desire to change**
- **Problem solving methodology - which builds executive functioning**
- **Bias to action**
- **Tactile techniques (prototyping) that iteratively test each output**

M2 segment: recent offenders

M2 Recent offenders



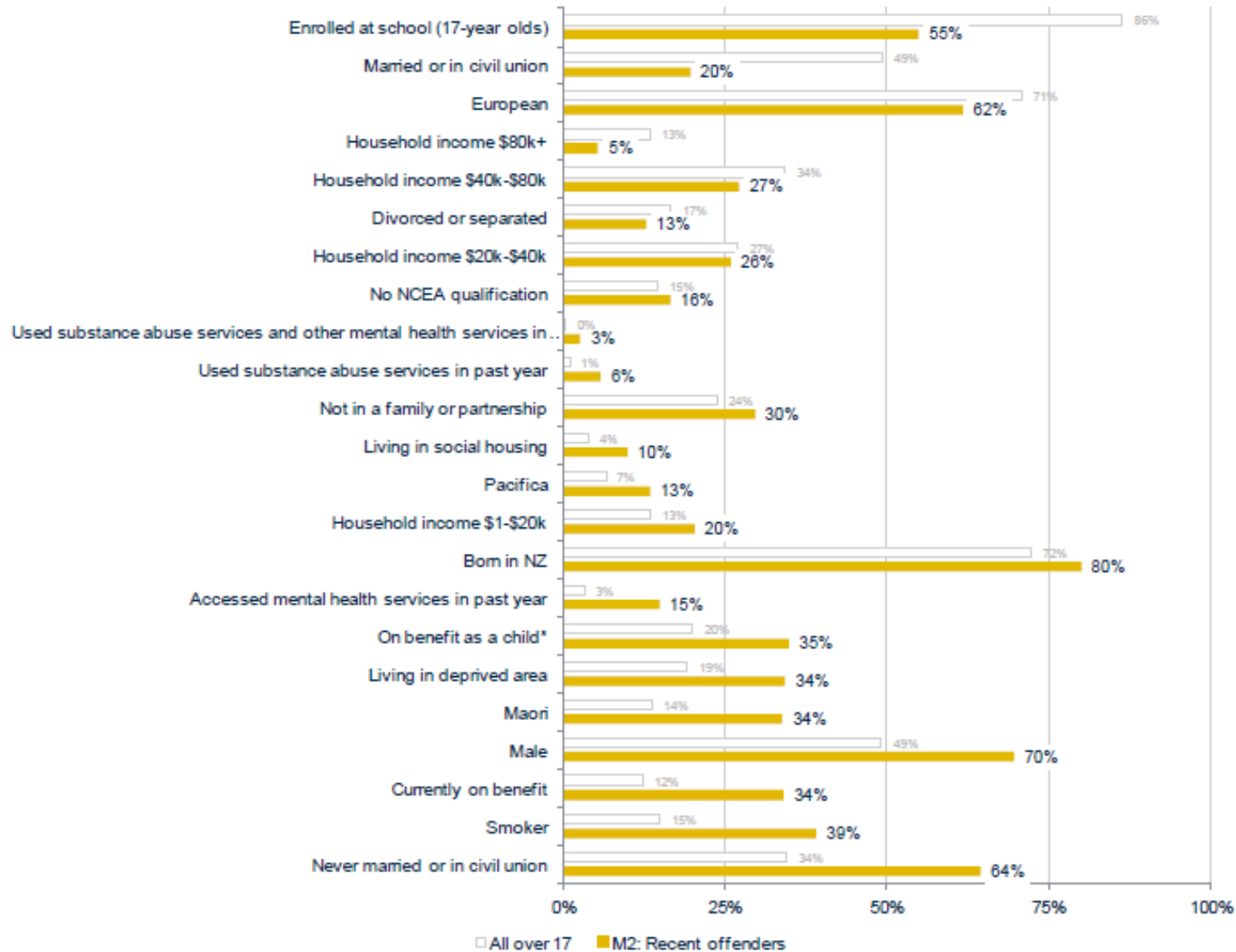
Key points

This segment is comprised of those people aged 17 and over who have been dealt with by police for an offence in the past five years, but who have not been managed by the Department of Corrections in the past year.

Key points:

- 35% of the segment is predicted to offend over the next 15 years and 45% is predicted to be victimised.
- 70% of the segment is male, 34% is Maori, and the average age is 35
- Compared to the broader group of all 17+, the segment is more likely to have been under Corrections management in the past, to smoke tobacco, and to be on benefit.

M2: different but not as extreme



* For those aged under 40 (no data for those older than 40)



Recent offenders are much more likely than the broader group of New Zealanders 17 and older **to currently be on a benefit, to smoke, and to be male.**

Henry's story

Age: 45

Ethnicity: Māori

Home: Living on his own with two kids in a housing NZ house in Papakura (Deprivation area 10, ie highly deprived)

Employment status: former aircraft engineer, now on an income tested benefit

Household income: \$20k - \$40k

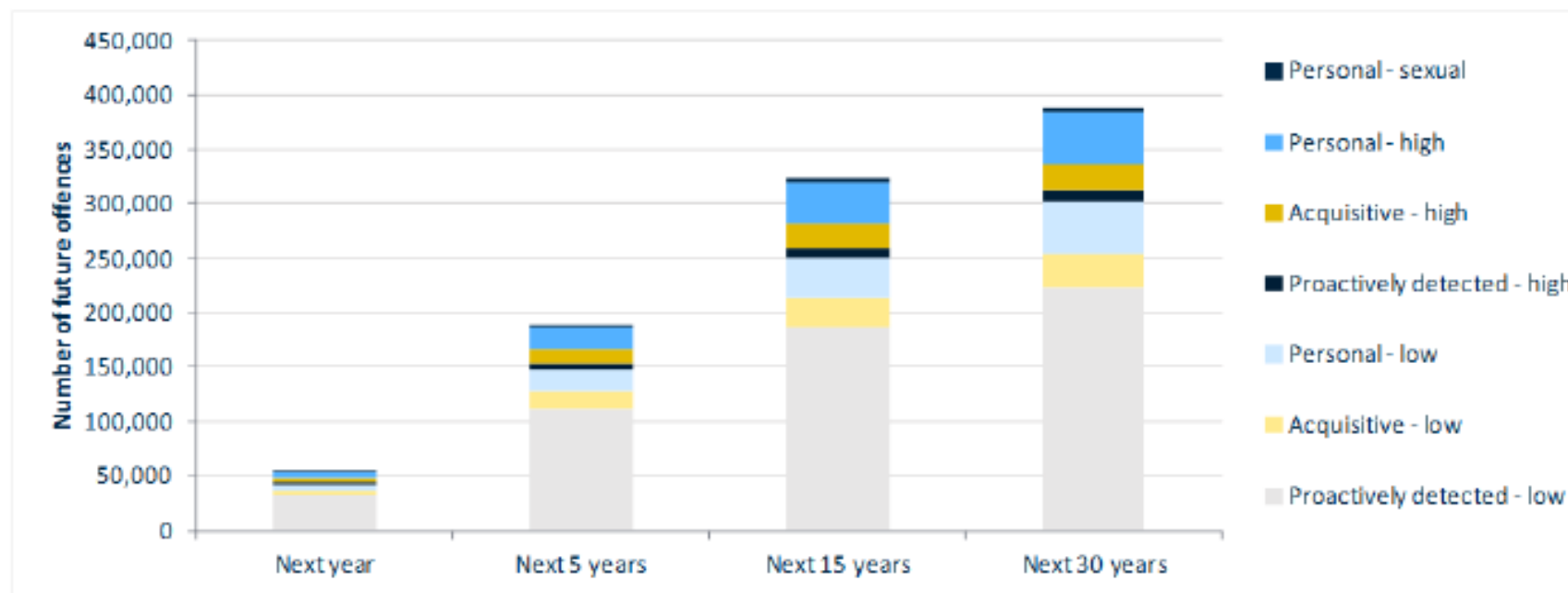
Police/Justice/Corrections involvement: multiple police interactions for family violence spanning 20 years, historical breaches of non-molestation orders, more recent protection orders, violence conviction, 20 month imprisonment for family violence five years ago, has been out of the system for over a year.

Right now:

- Caring for his whangai-ed grandson and daughter for a year
- New allegations of violence made by his ex-partner, ex parte protection order, child uplifted and in the custody of the mother in Rotorua
- Strong potential for re-offending due to trauma of losing his daughter

What does the data tell us?

Figure 2: Predicted future offences by offence type for recent offender segment (M2)



Recent offenders are predicted to offend primarily over the next 15 years, with a mix of more and less serious offending.

What does the literature tell us?

- **Lack of social, character and cognitive capital** perpetuate the lack of **economic and human capital** and vice versa (Behavioural Insights Team, Poverty and Decision Making)
- **Executive functioning** skills (aka character capital) enable people to plan, exercise self-control and make good decisions
- Executive functioning skills are negatively affected by **toxic stress** (Harvard)
- You can develop executive functioning skills **into adulthood** (Harvard)
- **Toxic stress factors are cumulative** (reducing cognitive capital/bandwidth), but even removing one can result in better outcomes for parents and children (Growing up in NZ)
- People **can and do move** between risk categories, people are not static (Growing up in NZ)
- **Connection with peers and the community** are protective factors for people living **in toxic stress** (Growing up in NZ, South Auckland Cohort)

What does practice tell us?

- **Successful community based programmes that create behavioural change share common characteristics:**
 - Calm, nurturing, listening – a respite from toxic stress/being robbed of cognitive capital
 - Culturally appropriate, local
 - No judgment, genuine relationships
 - Reciprocity – you offer and receive value
 - Peer-to-peer – someone just like me
 - Strengths based
 - Intentional skill building
- **Peer-to-peer relationships are a powerful source of learning and building life skills/executive functioning**
 - professionals' role is to provide the container, conditions and skill building.



What does the lived experience tell us?

We met M2s who hung out with a high risk cohort, especially in high deprivation neighbourhoods

We noticed that they were in danger of modelling their behaviour on these associates, and if they tried to step away, the Hs would sabotage their efforts

It would be game-changing to connect at risk M2s with new, positive peers who could inspire them to remain crime-free.

We met younger M2s who had only ever had minor run-ins with the police, and who had never been in the Justice system although they had “sailed close to the wind”.

We noticed that they felt that people in their family and neighbourhood were targeted, and that it was almost pointless to stay on the right side of the law.

It would be game-changing to create ways to encourage or reward good behaviour, and to show that justice is blind.

What does the lived experience tell us?

We met M2s who experienced violence in their childhoods and beyond

We noticed that this can lead to history repeating itself

It would be game-changing to identify M2s who are at risk of replicating violence and helping them to move beyond historical trauma before they perpetuate the cycle of violence.

We met M2s whose strongest motivation for change was their hopes and dreams for their children and for creating a safe and loving future together

We noticed that people are more likely to remain crime-free when their wider lives are leveraged in a respectful and strengths-based way

It would be game-changing if interventions built on people's non-justice related motivations for change.



What does the lived experience tell us?

We met M2s who experienced transformational change and growth and who could identify and embark on the steps they need to take to avoid re-offending.

We noticed that a non-judgmental environment that build self-worth and awareness, deliberate skill building and positive peer relationships supported by professionals, were the key catalysts of change

It would be game-changing to apply this approach to every interaction and service that M2s experience.

We met M2s who had never held down a job for more than a few months but understood that work is a way to avoid re-offending

We noticed that they realised that they lacked the confidence, self-actualisation skills and practical qualifications (like a driver's licence) to maintain work

It would be game-changing if interventions built self-esteem, routine and character capital to help build work skills as an anti-crime protective factor

Weaving the strands – reducing M2 reoffending

- What would your overall insights be given the strands?
- How would you create ideas to help M2s avoid reoffending based on that insight?
- What would your design principles include?
- What sort of ideas might come out?
- How would you test the ideas?
- Where would you be most likely to implement these ideas?



Reflection – co-design methodology

- **What will we be more certain/confident about?**
- **What is still unknown?**
- **What are the strengths and challenges of this discipline?**

