UNECE Expert Meeting on Statistical Data Collection: 'Rethinking Data Collection' (12-14 June 2023)



The Relationship Approach for *Living in Aotearoa* – New Zealand's new longitudinal survey

Purpose

This paper acknowledges the unique challenge of retaining participants in longitudinal surveys and describes how Stats NZ Tatauranga Aotearoa engages and builds relationships with survey participants in *Living in Aotearoa*, New Zealand's new longitudinal survey. It outlines high-level concepts and considerations that have been identified to improve survey members' willingness and participation in the survey for its six-year duration. It then outlines the benefits and challenges associated with this approach, and the strategy for evaluating its effectiveness.

Summary

Living in Aotearoa is a new longitudinal survey in Aotearoa (New Zealand), introduced to enable Stats NZ to report on all ten measures of child poverty under the Child Poverty Reduction Act (2018). Currently, nine of ten measures can be collected through the Household Economic Survey (HES), but the final measure, that of persistent poverty, requires longitudinal data.

Many longitudinal surveys find, that after just a few waves of interviewing, members of the responding sample from the initial wave are no longer participating^{1,2}. The primary concern is that the loss of participants, also known as sample attrition, can be systematic rather than random. Evidence from longitudinal studies shows that establishing and maintaining a meaningful relationship between the survey administrators and survey participants is fundamental to achieving high retention rates^{3,4}.

The Respondent Relationship Approach (RRA) represents a new approach to engaging with survey participants to help manage attrition within *Living in Aotearoa*. Aotearoa is a bicultural nation, built upon a founding treaty document between its indigenous Māori population and the British Crown. In the Māori worldview, *te ao Māori*, investing in relationships is key to building trust and confidence, and this has been shown to be effective in ensuring Māori have this trust and confidence in survey processes and outputs produced⁵. The RRA has been designed to develop a sense of collective

¹ Watson, N., & Wooden, M. (2009). Identifying factors affecting longitudinal survey response. In: Methodology of Longitudinal Surveys (ed. P. Lynn)

² Satherley, N., Milojev, P., Greaves, L., Huang, Y., Osborne, D., Bulbulia, J., et al. (2015) Demographic and Psychological Predictors of Panel Attrition: Evidence from the New Zealand Attitudes and Values Study. PLoS ONE 10(3): e0121950. doi:10.1371/journal.pone.0121950

³ Estrada, M., Woodcock, A., & Schultz, P. W. (2014). Tailored panel management: A theory-based approach to building and maintaining participant commitment to a longitudinal study, Evaluation Review, 38(1), 3-28

⁴ Poulton, R., Moffitt, T. E., & Silva, P. A. (2015). The Dunedin Multidisciplinary Health and Development Study: overview of the first 40 years, with an eye to the future, Social Psychiatry and Psychiatric Epidemiology, 50(5), 679-693.

⁵ Jones1, B., Ingham, T., Cram, F., Dean, S., & Davie, C. (2013). An indigenous approach to explore health-related experiences among Māori parents: the Pukapuka Hauora asthma study, BMC Public Health, 13:228

responsibility, known as a shared *kaupapa* (purpose or topic), so that people are more inclined to participate and contribute their information for the 'greater good'.

Development of *Living in Aotearoa* began in mid-2020 and the RRA is an integral part of its design. *Living in Aotearoa* began its second year of data collection in April 2023 and early feedback has been received about the RRA. Evaluation criteria and a two-phase evaluation process have been established, enabling Stats NZ to gather baseline data for analysis from multiple sources. This will lead to an annual evaluation of the RRA starting in 2024.

Introduction to Living in Aotearoa

In 2018, the New Zealand government introduced the Child Poverty Reduction Act. The Act is designed to help achieve a significant and sustained reduction in child poverty in New Zealand. It requires annual reporting on ten measures of child poverty - nine of which have been reported from the *Household Economic Survey* (HES) since February 2020. One measure however, persistent child poverty, is unable to be reported from existing annual Stats NZ surveys because it requires longitudinal data, and HES is an annual survey.

To enable Stats NZ to deliver all ten child poverty measures, including persistent poverty, HES is being transformed into two new surveys: a longitudinal survey called *Living in Aotearoa* (LiA) and an annual survey called *Household Expenditure and Wealth* (HEW). *Living in Aotearoa* is a rotating panel survey that will enable us to report on all ten child poverty measures as well as continue to meet reporting needs for income, housing costs and material wellbeing (currently met by HES). HEW will meet the remaining needs for expenditure and net worth.

Living in Aotearoa will interview respondents every year for six years. Once fully implemented, more than 20,000 households will be participating in the survey at any given time. Cross-sectional (annual) and longitudinal data from Living in Aotearoa, including the provision of Official Statistics on all ten child poverty measures, will be available from early 2026.

We are here 2022 2023 2024 2025 2026 2027 2028 2030 Panel A Wave 1 Wave 2 Wave 4 Wave 1 Panel B Wave 1 Wave 2 Wave 1 Wave 2 Wave 3 Wave 3 Wave 5 Wave 6 New 7200 households Panel C Wave 1 Wave 2 Wave 3 Wave 4 Wave 5 Wave 6 Wave 1 Wave 2 New 7200 7200 households Panel D Wave 1 Wave 2 Wave 3 Wave 4 Wave 5 Wave 6 Wave 1 7200 New 7200 households Panel E Wave 1 Wave 2 Wave 3 Wave 4 Wave 5 Wave 6 7200 households Panel F Wave 1 Wave 2 Wave 3 Wave 4 Wave 5 7200 households

Figure 1 – Rotating panel survey design for Living in Aotearoa

Wave 1 is the first interview for the household, and so on. Green text shows the data used to form cross-sectional measures. Yellow shading shows the data used to form longitudinal measures.

Why the Respondent Relationship Approach?

Many longitudinal surveys find, that after just a few waves of interviewing, members of the responding sample from the initial wave are no longer participating.^{6,7} The primary concern is that the loss of participants, also known as sample attrition, can be systematic rather than random. For example, people with lower incomes may be less likely to own their own home and therefore more likely to move to a new house, meaning they are more difficult to maintain contact with and retain in the survey. This pattern would result in selective attrition where people with lower incomes are lost from the survey at higher rates than people with higher incomes. As a result, the sample would become less representative over time, introducing systematic bias to the estimates and threatening the validity of the statistics generated.

A robust relationship approach to minimising attrition is critical to the success of *Living in Aotearoa*, particularly so that priority groups such as Māori, Pacific Peoples, migrant communities and people with disabilities can be accurately represented in the survey.

The current approach to collection of annual social survey data used by StatsNZ is called the "persistence approach". This approach makes use of a series of notifications, by mail or email, that inform the participant of their mandated obligation to take part in the survey if chosen in a sample under the Data and Statistics Act 2022. This approach, while accepted and common internationally particularly for annual or one-off surveys, is less focused on ensuring willingness to participate, engage and interact in an ongoing way which is essential for longitudinal surveys.

The development of the Respondent Relationship Approach (RRA) drew on the collective expertise of the Stats NZ Collection Operations team, Te Ao Māori (New Zealand indigenous world view) perspectives, academic literature, and evidence from other longitudinal studies including the *Dunedin Study*, *Growing Up in New Zealand* (GUINZ), *New Zealand Attitudes and Values Study* (NZAVS) and *Household, Income and Labour Dynamics in Australia* (HILDA).

Conceptual framework

Aotearoa New Zealand is a bicultural nation founded on Te Tiriti o Waitangi | the Treaty of Waitangi — a treaty between the indigenous Māori population and the British Crown. Within the Māori worldview, known as Te Ao Māori, establishing and nurturing strong relationships is immensely important to fostering trust and community.

The Relationship Respondent Approach (RRA) is centered in te ao Māori. It is specifically designed to foster a sense of collective responsibility, referred to as a shared *kaupapa* (purpose or topic), where individuals are more inclined to actively participate and contribute their information for the betterment of the whole community. While build around te ao Māori principles, the approach and components within it are good practice and extend beyond the New Zealand context.

Further, honouring the Government's commitment to improving issues of systemic inequity for Māori in Aotearoa requires deliberate survey design with Māori as a priority group. By clearly prioritising

⁶ Watson, N., & Wooden, M. (2009). Identifying factors affecting longitudinal survey response. In: Methodology of Longitudinal Surveys (ed. P. Lynn)

⁷ Satherley, N., Milojev, P., Greaves, L., Huang, Y., Osborne, D., Bulbulia, J., et al. (2015) Demographic and Psychological Predictors of Panel Attrition: Evidence from the New Zealand Attitudes and Values Study. PLoS ONE 10(3): e0121950. doi:10.1371/journal.pone.0121950

relationships with survey respondents, StatsNZ hopes to improve participation in the survey, as well as confidence and trust in the survey processes, for Māori.

The Relationship Approach for Living in Aotearoa can be synthesised into the conceptual framework shown in figure 2. It focusses on building relationships with people that are *mana-enhancing*⁸, based on trust, and show reciprocity.

The approach seeks to provide a framework for decision making about the engagement methods and tools employed. The components of the framework are:

- People first
- Building trust
- Being mana-enhancing
- Showing reciprocity
- Shared kaupapa, collective responsibility

Figure 2 – Respondent Relationship Approach conceptual framework



⁸ *Mana* is a multi-faceted Māori concept that can mean dignity, authority, prestige, or power.

People first

People and relationships sit at the heart of the framework, recognising the need to work with people and communities to establish a trusting relationship first and foremost. The approach is aligned to the concept of *whanaungatanga*: the process of establishing links, making connections and relating to the people one meets by identifying in culturally appropriate ways, *whakapapa* (line of descent) linkages, past heritages, points of engagement, or other relationships.

In the survey context, whanaungatanga requires a focus on the integrity and authenticity of the survey interviewer/survey participant relationship and interactions.

The focus on establishing a relationship first and foremost is not significantly different from current practice. However, there is increased emphasis on the development of a relationship which can support a longitudinal relationship rather than a one-off engagement, and ways of engaging that are appreciated by and culturally safe for Māori.

In practice, the 'people first' approach means:

- A focus on building a meaningful relationship, first and foremost
- Working with survey participants to understand and work through any barriers to participation and cater to individual needs; this could mean:
 - o Returning to a household on a different day
 - Being flexible around times
 - Being flexible about the meeting place
 - Making the survey available in different modes
 - Making the survey available in different languages
 - Ensuring the participant knows they may have a support person with them
 - Having activities to help entertain children so that caregivers can focus on the survey
 - Switching survey interviewers based on experience, gender and/or cultural or community connections where a survey participant relationship is proving challenging to establish

Building trust

Trust is essential for survey participants to feel comfortable sharing their information over consecutive years. The information collected in *Living in Aotearoa* is sensitive and survey participants must feel confident in the survey processes and how their information is stored, protected, and used to produce outputs.

This component places increased emphasis on trust required to support a longitudinal relationship with survey participants. This will involve development of different survey collateral and may involve more survey interviewer time invested into explaining the survey processes and implications of being selected to participate. It will also require increased focus on community engagement to build awareness of household surveys and identify opportunities to improve survey experience and access for priority groups.

In practice, building trust with survey participants means:

- Building community awareness and acceptance of household surveys
- Utilising survey interviewers that are known and respected in their local community
- Clearly explaining the survey processes including any risks and benefits of participating
- Being open and honest about the legislative requirements

- Being open and honest about how data is sourced, stored and used including the use of administrative data and data to maintain contact with survey participants
- Ensuring people's information is kept secure and confidential
- Ensuring survey participants remain at the centre of all decision making around the collection approach

Being mana-enhancing

In *te ao* Māori, *mana* is a multi-faceted concept that can mean dignity, authority, prestige, or power. There are different types of *mana*:

- Mana a person is born with, their whakapapa
- Mana given to a person by others
- Mana of a grouping

In the survey context, upholding and enhancing the *mana* of participants refers to the realisation that everything the survey participant shares with StatsNZ is *tapu* (sacred), as it is their personal information. It is a *taonga* (treasure) which they give to StatsNZ. The RRA recognises that the personal information and data that survey participants share is *tapu* because it belongs to them. By upholding participants' *mana*, the *mana* of StatsNZ is also upheld.

In practice, being mana enhancing means:

- Being culturally aware and responsive
- Being respectful of survey participants; listening and validating but not judging or assuming
- Considering the needs of survey participants and adapting the approach to suit: for example, allowing choice in the meeting time and place and working with them to resolve barriers to participation
- Embracing reciprocity: ensuring that survey participants feel valued as individuals not merely a source of data
- Using language and explanations that people can understand and feel empowered by
- Ensuring survey participants remain at the centre of all decision making around the collection approach.

Showing reciprocity

Showing reciprocity refers to a social norm that involves in-kind exchanges between people. It recognises that relationships are strengthened when contributions are acknowledged and returned in-kind. In practice, showing reciprocity means:

- Practicing whanaungatanga
- Saying thank you and expressing gratitude in all exchanges
- Affirming the feelings and experiences of survey participants
- Sharing how the survey data is being used for good
- Offering genuine *koha* (donation or gift)

Reciprocity must be woven throughout the RRA, during every point of contact with survey participants. We acknowledge that each action builds on the action before it and contributes to the development and maintenance of the relationship.

The exchange of *koha* is one way that StatsNZ can give meaningful expression to the reciprocal relationship with survey participants. *Koha* is a rich concept in te ao Māori. It acts to initiate and then maintain the balance of the relationship. It is not given with the intent of changing a person's mind or

incentivising participation. By offering *koha*, StatsNZ can enhance the reciprocal nature of the relationship with the survey participant and uphold their *mana* in the exchange.

Shared *kaupapa*, collective responsibility

Survey participants will be motivated to participate by different things depending on their personal circumstances, life experiences, history, and beliefs. Survey interviewers need to be skilled in telling a compelling story that can draw people together and create a sense that participation in the survey is contributing to the betterment of New Zealand.

Strategies to develop a shared *kaupapa* and sense of collective responsibility can be woven through each stage of the approach. This can be further enhanced through community engagement, for example, partnering with community organisations to improve survey experience and access for priority groups e.g. Māori, Pacific Peoples, migrant communities and people with disabilities.

This component of the approach is not significantly different from current practice, however, there is increased emphasis on the need to build a strong sense of community to retain people for the duration of the longitudinal survey. Development of survey collateral with consistent branding and a robust, localised community engagement approach are required to support the work of survey interview teams.

Implementation – opportunities and challenges

In implementing the Respondent Relationship Approach (RRA) within the *Living in Aotearoa* survey, several opportunities and challenges have been identified.

Opportunities

One key opportunity lies in redesigning the survey collateral to enhance its visual appeal and content. This includes providing versions in *te reo Māori* (the Māori language) to ensure the survey is inclusive and culturally relevant. By incorporating *te ao Māori* perspectives, the survey materials can resonate with participants and foster a stronger connection.

To support the RRA, increasing *Te Ao Māori* and cultural awareness among frontline staff through training opportunities is essential. Implementing this approach initiates quality professional development of our workforce, equipping staff with a deep and authentic understanding of Māori culture.

Another opportunity lies in sharing "data value stories" with participants. Highlighting how national and community organisations like Kidscan, Variety, and Plunket utilise the survey data to develop impactful programs can demonstrate the real-world significance of participant contributions. This approach helps participants recognize the value of their involvement and the positive change it can bring to their communities.

Furthermore, taking the time to explain the purpose and importance of the survey, as well as addressing any concerns, strengthens participants' commitment, motivation, and trust in StatsNZ surveys and processes as a whole. It generates increased community engagement at a time when cohesiveness is being challenged worldwide.

Challenges

Implementing effective "staying in contact" approaches that align with the relationship approach framework presents a notable challenge. It has been acknowledged already that the RRA signals a move away from the "persistence approach", which relies on communicating the obligation to participate under the law. Balancing regular and clear communication while respecting participants' privacy and boundaries requires careful consideration. Developing strategies that maintain engagement without overwhelming participants is crucial for long-term retention.

Supporting frontline staff in adjusting their approach to align with the nuanced differences of the relationship approach can be demanding. Providing guidance, training, and resources to help staff navigate these subtleties is essential for successful implementation.

Lastly, understanding the impact of the survey's approach versus external environmental factors on response rates can be complex. Differentiating between the effects of the relationship approach and other influences requires thorough analysis and evaluation.

Addressing these challenges and capitalising on the identified opportunities will contribute to the successful implementation of the RRA within the Living in Aotearoa survey. By prioritising cultural relevance, community engagement, and personalized interactions, Stats NZ aims to enhance participant retention and ensure the long-term success of the survey.

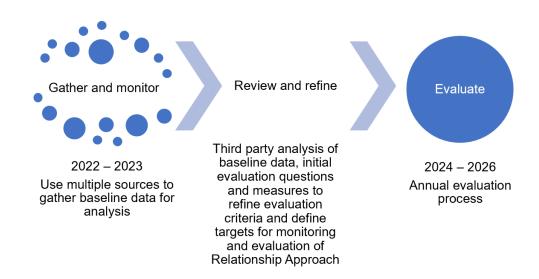
Evaluating the Respondent Relationship Approach

Guiding principles

The following guiding principles inform the evaluation approach, topline evaluation questions, and the granular key performance indicators.

A two-phase evaluation process

There is no baseline data to use to differentiate the impact of the RRA from that of the standard data collection process. Therefore, monitoring and evaluation is structured into two phases:

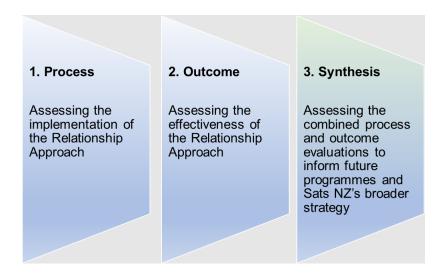


An annual evaluation cadence

After baseline data creation, evaluation is to be undertaken at the end of the collection period each calendar year. This will allow reflections to be captured in a timely way, maximising available time to implement identified necessary changes before the next collection.

Three components for evaluation

Acknowledging the complexity of the collection approach and the longitudinal nature of the survey, evaluation is focussed into three categories:



Factoring in broader experience

It is recognised that *Living in Aotearoa* is operating in a changing macro socio-economic environment and that this and other surveys are experiencing specific challenges. For this reason a collaborative learning approach has been taken with ongoing collection monitoring metrics collected on the performance of all surveys and work in New Zealand and internationally happening to better understand falling survey response rates and how to address these.

Align with strategic priorities

To ensure that the RRA appropriately delivers on its objective, delivery and evaluation are aligned with *Living in Aotearoa's* committed benefits; in particular, "Improved confidence that survey processes and outputs deliver for Māori and for all" and Stats NZ's overarching strategic priorities, including alignment of its approach with *te ao Māori* and its intention to pursue an integrated roadmap approach across all bodies of work.

Evaluation questions

Three high-level evaluation questions are given below, along with examples of "measurable" components and potential sources of data to address these.

Process Evaluation Question: How well is the implementation and delivery of the Respondent Relationship Approach working?

This question may be answered by looking at the organisation's internal systems readiness to support the implementation of the RRA, and the extent to which survey interviewers are supported in their application of the RRA. Available measures or sources of data include recruitment monitoring data, survey interviewer retention, survey interviewer confidence and feedback, training design, training participation and feedback, and development of supporting collateral materials.

Outcome Evaluation Question: How well is the Respondent Relationship Approach contributing to survey participants being willing and able to participate in the survey for its full six-year duration?

This question seeks to understand both the extent to which the RRA is fostering a positive and enduring relationship with respondents, as well as the more general success of *Living in Aotearoa* in delivering quality data on child poverty. Measures to assess the direct effectiveness of the RRA include the practical processes developed to stay in contact with respondents, the percentage of respondents proactively staying in contact with StatsNZ, respondent feedback on the collection approach, and analysis of refusal comments or complaints. Measures to assess the more general success of *Living in Aotearoa* as above include the stability and retention rate of samples, data quality, and demographical gaps analysis.

Synthesis

Process and outcome question insights are combined to inform lessons learned and next steps for *Living in Aotearoa*. In the final year of the evaluation process, the following question is applied.

Synthesis Evaluation Question: What has been learned from the utilisation of the Respondent Relationship Approach?

This question seeks to identify specific lessons for the design and delivery of future surveys and the critical factors to the success of quality data collection in a dynamic environment. These are informed by the process and outcome evaluation activities, respectively.

Conclusion

This paper highlights the unique challenge of participant retention in longitudinal surveys and presents the approach employed by Stats NZ in the *Living in Aotearoa* survey to address this issue.

Recognising the cultural context of Aotearoa as a bicultural nation, the RRA draws upon *te ao Māori* principles of *whanaungatanga* and building trust and confidence through investing in relationships. Creating a shared *kaupapa* fosters a sense of collective responsibility, motivating individuals to actively participate and contribute their information for the greater good.

By engaging and building relationships with survey participants, *Living in Aotearoa* strives to enhance the quality and longevity of longitudinal data, ultimately contributing to a better understanding of child poverty and supporting evidence-based policy decisions in Aotearoa, New Zealand.