The Sovereign New Zealand Wellbeing Index

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Abstract
This article outlines the development, methodology, and some preliminary results of the Sovereign New Zealand Wellbeing Index (SNZWI) - a web-based observational longitudinal study of 10,000 adults aged 18 years and over selected randomly from throughout New Zealand. The SNZWI is the first national representation of how New Zealanders are faring on a personal and social level. The survey provides a much needed look beyond the economic conditions of New Zealanders to how New Zealanders are coping within these economic conditions.

Background and Context
Happiness is good! Research shows that happy people have better relationships, higher incomes, better physical health and are more agreeable and likely to give to others (Diener & Seligman, 2002; Lyubomirsky, King, & Diener, 2005). As such individuals have pursued ‘happiness, wellbeing and the good life’ for many years, although the benefits of measuring and promoting national wellbeing have not been advocated until recently. Traditionally, the success of a nation has been determined using economic indicators such as Gross Domestic Product (GDP). However, such measures fail to capture how society is functioning as a whole, and fail to reflect whether peoples' lives are prospering in line with economic growth (Michaelson, Abdallah, Steuer, Thompson, & Marks, 2009). In fact, the continual drive to improve national economic measures may be negatively impacting citizens’ lives through longer working hours and rising levels of indebtedness (Michaelson et al., 2009; Stoll, Michaelson, & Seaford, 2012). Thus, there is emerging interest in capturing not just the wellbeing of individuals, but the wellbeing of populations.

Traditionally wellbeing has been the study of fixing what is wrong with individuals to make them ‘well’ (Diener, 2000). However now wellbeing incorporates what is going right with individuals and also with society. The challenge is to enable a society where people lead purposeful and meaningful lives, where their social relationships are supportive and rewarding, where they are engaged and interested in their daily activities, and they actively contribute to the happiness and wellbeing of others. In this society people would be competent and capable in the activities important to them, optimistic about their futures, consider themselves good people living good lives, and have the respect of their peers and community. Science has progressed considerably over the last decade developing robust, reliable and valid measures of wellbeing, and researching the components that contribute to wellbeing (e.g., curiosity, strengths, positive emotions, physical health, social connections).

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Over the last decade several attempts have been made to capture national wellbeing overseas (Cummins, Eckerley, Pallant, Van Vugt, & Misajon, 2003; Diener, 2006; Huppert et al., 2009; Self, Thomas, & Randall, 2012). The evidence from these surveys shows individuals with higher wellbeing (as indicated by measures of happiness or life satisfaction) tend to be more productive, have higher incomes, more stable marriages, and better health and life expectancy (Diener, 2000; Diener & Chan, 2011). Although this has provided a good start, many of these attempts have relied on a single question rating of life satisfaction or
happiness, incorporated into a social survey (Stoll et al., 2012). However, the reliability of a single item measure is questionable as a single question fails to capture wellbeing as a multi-dimensional phenomenon. To create a comprehensive measure of national wellbeing it is important to measure the many different components of wellbeing. In addition, most attempts have not followed the same individuals over time in order to assess changes in wellbeing, but have instead relied on cross-sectional research designs (i.e., single session snapshots).

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One of the most comprehensive wellbeing indices developed to date is a module included in the European two years across Europe). Like a number of other social surveys, the core survey had traditionally relied on two measures to determine wellbeing: 1) overall life satisfaction; and 2) happiness. However, in the 2005/2006 round (Round 3) of the survey, a specific and comprehensive wellbeing module was incorporated for the first time. The module was carefully constructed to measure wellbeing as a multi-dimensional construct. Specifically, the ESS now measures how people feel (e.g., experiences of pleasure, sadness, enjoyment and satisfaction) and how people function (e.g., their sense of autonomy, competence, interest, and meaning or purpose in life) (Huppert et al., 2009). The module was updated in Round 6 with the inclusion of extra questions to measure engagement and wellbeing promoting activities, and additional psychometric improvements1.

New Zealand Wellbeing

Against this international backdrop, wellbeing research in New Zealand has utilised cross-sectional designs. When life satisfaction is assessed, research reports indicate that New Zealanders are about 7-8/10 on a 11 point (0-10) scale (e.g., in the 2006 Gallup World Poll New Zealand scored 7.4, in the Legatum Institute’s annual Prosperity Index New Zealand scored 7.2 for life satisfaction), that 86% of New Zealanders are either very satisfied (32%) or satisfied (54%) with life (New Zealand General Social Survey, 2008), and that New Zealand usually ranks around 4th-7th in the world in the life satisfaction stakes depending on the particular study (e.g., in the Gallup World Poll New Zealand ranked 6th equal with Australia and Canada). In addition, the extent to which New Zealanders are flourishing, which can be conceived of as social- psychological prosperity incorporating important aspects of human functioning (self-perceived success in relationships, self-esteem, feelings of competence, purpose, engagement, and optimism), has never been measured. In essence,

Social Survey (ESS: Huppert et al., 2009). The ESS is a social survey conducted every two years and obtains approximately 1,500 respondents from each of the 25 participating European countries (i.e., a snapshot of about 35,000 participants every year).

Figure 1. The Mental Health Foundation’s Five Ways to Wellbeing campaign.

To flourish is to “live within an optimal range of human functioning, one that connotes goodness, generativity, growth, and resilience” (Fredrickson &

1 For example, removal of items that demonstrated a high ceiling or floor effect, or those highly correlated with other single item measures.
2 Usually asking about life satisfaction using a five point scale from strongly agree to strongly disagree.
3 The median score for 30 OECD countries was 6.9/10.
Losada, 2005, p. 678). International research indicating the significantly better health outcomes for flourishing individuals has already made this a popular line of academic enquiry overseas (e.g., see Dunn & Dougherty, 2008).

Wellbeing promotion in New Zealand is even more limited than wellbeing research, however recently the Mental Health Foundation has introduced a national Five Ways to Wellbeing campaign (Mental Health Foundation, 2012), as depicted in Figure 1 (see previous page).

Developed by the New Economics Foundation in the UK, the 'Five Ways to Wellbeing' is a set of evidence-based public mental health messages (Connect, Be active, Take notice, Keep learning, Give) aimed at improving the mental health and wellbeing of whole populations⁴. There is now much international evidence that the activities and ways of thinking promoted by the Five Ways to Wellbeing improve population mental health and wellbeing (for a review of this evidence which suggests the Five Ways are important for building the wellbeing of individuals, families and communities, see: Aked, Marks, Cordon, & Thompson, 2011).

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The Sovereign New Zealand Wellbeing Index: Study Aims

To better understand the wellbeing of New Zealanders, and as a base for wellbeing promotion, it is crucial to use a multi-dimensional wellbeing tool to survey people, and to track them over time. By understanding the wellbeing of New Zealanders and how this changes, we will be able to identify the people and places in New Zealand who are getting the most out of life, and who are best prepared to deal with the highs and lows (e.g., economic catastrophe, environmental catastrophe). A national wellbeing index can help show New Zealanders' perceptions of society, whether they are happy, if they are using their strengths, and how they are feeling and functioning. It will give insights into what New Zealand can change at both an individual and societal level to make New Zealand a better place to live. Such information can help the business, education and government sectors, along with communities and whānau, make decisions about our future with wellbeing in mind (rather than just wealth in mind).

Thus the long term aims of this study are to:

1. develop an overall profile of New Zealanders’ wellbeing (Wellbeing Index);
2. determine the prevalence of wellbeing among different geographic locations and various demographic groups;
3. investigate the predictors and moderators of wellbeing among New Zealanders; and
4. compare the wellbeing of New Zealanders to other nations.

Methods

Study Design and Procedure

The Sovereign New Zealand Wellbeing Index (SNZWI) is a New Zealand wide observational longitudinal study with three separate measurement time points: baseline (T1), Year 2 (T2), and Year 4 (T3). T1 data were collected 26 September 2012 to 25 October 2012. The New Zealand office of TNS global, an international market research company, was contracted to undertake the data collection via a web-based survey methodology. TNS recruited participants from the largest commercial database in New Zealand which has over 400,000 members. An email invitation was sent over three rounds. The email contained a link to the online survey information sheet where individuals could consent to taking part in the research. Individuals were given seven days to respond to the invitation. Once informed consent was given, participants proceeded to complete the online survey, which took approximately 19 minutes (median).

A national wellbeing index can help show New Zealanders' perceptions of society, whether they are happy, if they are using their strengths, and how they are feeling and functioning.

Questionnaire Design

The 134 survey questions included items on wellbeing (87), health and lifestyle (16), and socio-demographic information (31). Wellbeing questions were primarily drawn from Round 6 of the ESS Personal and Social Wellbeing module (European Social Survey, 2012; Huppert et al., 2009), which largely grouped wellbeing topics using the New Economics Foundation’s ‘National Accounts of Wellbeing Framework’, as depicted in Figure 2 overleaf.

⁴ The Five Ways were developed as the result of a commission by Foresight, the UK government’s futures think-tank, as part of the Foresight Project on Mental Capital and Wellbeing.

5 With the two further waves of the SWI planned for September 2014 and September 2016, in the first instance participants from Wave 1 will be invited to participate in the follow-up survey. Any shortfall in numbers will be made up from recruitment of new participants. 6 A duplicate copy of the survey can be viewed at: http://www.mywellbeing.co.nz
The wellbeing topics assessed included flourishing, emotional wellbeing, life satisfaction, vitality, resilience and self-esteem, positive functioning, social wellbeing, wellbeing at work, life domain wellbeing, and strengths and time use. Health and lifestyle question topics included health conditions, body size, physical activity, nutrition, alcohol, smoking, and energy. Standard demographic and socio-economic questions were also included.

**Sample and Response Rate**

A nationally representative sample of 38,439 New Zealand adults was invited to participate in T1, of which 10,009 completed the survey (26% complete response rate). Individuals aged over 18 years were eligible to participate in the survey; 47% who completed were younger than 18 years and excluded from data analysis (total sample = 9,962). There were no further exclusion criteria, and answers to each question were optional. The age, gender, and location characteristics of the sample are presented in Tables 1 and 2 (page 26).

**Results**

As of March 2013 the research team are currently analysing the results of the initial Wave 1 data. Preliminary results seem very promising and enlightening. By way of example, some initial results include:

- Older, female, and wealthier New Zealanders on average showed higher flourishing scores, and there were only small differences in average flourishing between ethnic groups (NZ European higher than Asian) and regions across New Zealand.

- About one in two New Zealanders reported meaningful depressed mood. This was higher for young people; two out of three had a depressed mood.

- Perceived social position was a powerful indicator of wellbeing with those higher on the social ladder experiencing much higher wellbeing.

- The Five Winning Ways to Wellbeing were all strongly associated with higher wellbeing. People who socially connected with others (Connect), gave time and resources to others (Give), were able to appreciate and take notice of things around them (Take notice), were learning new things in their life (Keep learning), and were physically active (Be active) experienced higher levels of wellbeing.

- We looked at the 20% of the population with the highest wellbeing scores and examined what factors defined this group (which we deemed to have 'super wellbeing') from the rest of the population. Females were 1.4 times more likely to be in the super wellbeing group than males. More older, higher income, and higher social position New Zealanders were in the super wellbeing group.

- Connecting, Giving, Taking notice, Keeping learning, and Being active were all strongly associated with super wellbeing.

- Other health measures were also strongly associated with super wellbeing and included better overall general health, non-smokers, exercisers, and those with healthier diets and weights were all more likely to experience super wellbeing.

- When compared with 22 European countries using the same population measures, New Zealand consistently ranks near
### Table 1
**Sample age and gender**

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Gender unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>108 (1.1%)</td>
<td>117 (1.2%)</td>
<td>4</td>
<td>229 (2.3%)</td>
</tr>
<tr>
<td>20-29</td>
<td>731 (7.3%)</td>
<td>1178 (11.8%)</td>
<td>3</td>
<td>1912 (19.2%)</td>
</tr>
<tr>
<td>30-39</td>
<td>681 (6.8%)</td>
<td>843 (8.5%)</td>
<td>2</td>
<td>1526 (15.3%)</td>
</tr>
<tr>
<td>40-49</td>
<td>683 (6.9%)</td>
<td>784 (7.9%)</td>
<td>1</td>
<td>1468 (14.7%)</td>
</tr>
<tr>
<td>50-59</td>
<td>715 (7.2%)</td>
<td>648 (6.5%)</td>
<td>0</td>
<td>1363 (13.7%)</td>
</tr>
<tr>
<td>60-69</td>
<td>705 (7.1%)</td>
<td>661 (6.6%)</td>
<td>1</td>
<td>1367 (13.7%)</td>
</tr>
<tr>
<td>70-79</td>
<td>322 (3.2%)</td>
<td>179 (1.8%)</td>
<td>0</td>
<td>501 (5.0%)</td>
</tr>
<tr>
<td>80+</td>
<td>51 (0.5%)</td>
<td>3 (0.0%)</td>
<td>0</td>
<td>54 (0.5%)</td>
</tr>
<tr>
<td>Age unknown</td>
<td>698 (7.0%)</td>
<td>789 (7.9%)</td>
<td>55</td>
<td>1542 (15.5%)</td>
</tr>
</tbody>
</table>

Total 4694 (47.1%) 5203 (52.2%) 66 (0.1%) 9962 (100%)

### Table 2
**Sample gender and location**

<table>
<thead>
<tr>
<th>Location</th>
<th>Male</th>
<th>Female</th>
<th>Gender unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northland</td>
<td>153 (3.3%)</td>
<td>148 (2.8%)</td>
<td>1</td>
<td>302 (3.0%)</td>
</tr>
<tr>
<td>Auckland</td>
<td>1544 (32.9%)</td>
<td>1609 (30.9%)</td>
<td>16</td>
<td>3169 (31.8%)</td>
</tr>
<tr>
<td>Waikato</td>
<td>369 (7.9%)</td>
<td>403 (7.7%)</td>
<td>2</td>
<td>774 (7.8%)</td>
</tr>
<tr>
<td>Bay of Plenty</td>
<td>281 (6.0%)</td>
<td>290 (5.6%)</td>
<td>1</td>
<td>572 (5.7%)</td>
</tr>
<tr>
<td>Gisborne</td>
<td>23 (0.5%)</td>
<td>49 (0.9%)</td>
<td>0</td>
<td>72 (0.7%)</td>
</tr>
<tr>
<td>Hawkes Bay</td>
<td>166 (3.5%)</td>
<td>166 (3.2%)</td>
<td>0</td>
<td>332 (3.3%)</td>
</tr>
<tr>
<td>Taranaki</td>
<td>99 (2.1%)</td>
<td>99 (1.9%)</td>
<td>1</td>
<td>199 (2.0%)</td>
</tr>
<tr>
<td>Manawatu - Whanganui</td>
<td>261 (5.6%)</td>
<td>340 (6.5%)</td>
<td>2</td>
<td>603 (6.1%)</td>
</tr>
<tr>
<td>Wellington</td>
<td>596 (12.7%)</td>
<td>658 (12.6%)</td>
<td>5</td>
<td>1259 (12.6%)</td>
</tr>
<tr>
<td>Tasmam</td>
<td>76 (1.6%)</td>
<td>105 (2.0%)</td>
<td>0</td>
<td>181 (1.8%)</td>
</tr>
<tr>
<td>Marlborough</td>
<td>59 (1.3%)</td>
<td>68 (1.3%)</td>
<td>1</td>
<td>128 (1.3%)</td>
</tr>
<tr>
<td>West Coast</td>
<td>27 (0.6%)</td>
<td>45 (0.9%)</td>
<td>1</td>
<td>73 (0.7%)</td>
</tr>
<tr>
<td>Canterbury</td>
<td>635 (13.5%)</td>
<td>729 (14.0%)</td>
<td>3</td>
<td>1367 (13.7%)</td>
</tr>
<tr>
<td>Otago</td>
<td>284 (6.0%)</td>
<td>364 (7.0%)</td>
<td>0</td>
<td>648 (6.5%)</td>
</tr>
<tr>
<td>Southland</td>
<td>81 (1.7%)</td>
<td>107 (2.1%)</td>
<td>0</td>
<td>188 (1.9%)</td>
</tr>
<tr>
<td>Region unknown</td>
<td>41 (0.9%)</td>
<td>23 (0.4%)</td>
<td>31</td>
<td>95 (0.9%)</td>
</tr>
</tbody>
</table>

Total 4695 (47.1%) 5203 (52.2%) 64 (0.64%) 9962 (100%)
the bottom of the ranking in both personal and social wellbeing. New Zealand is well behind the Scandinavian countries that lead these measures.

• New Zealand ranks 17th in Personal wellbeing and 22nd in Social wellbeing.

• Further exploration of our worse ranked social wellbeing indicator “Feeling close to people local area” showed considerable variation across the country with the major cities scoring worst with Auckland at the top. Regional areas fared somewhat better. Younger people and NZ European New Zealanders scored lowest.

By the time of this publication of Psychology Aotearoa, a full overview of these results will be available in SNZWI the executive report available at http://www.mywellbeing.co.nz

Females were 1.4 times more likely to be in the super wellbeing group than males. More older, higher income, and higher social position New Zealanders were in the super wellbeing group.

Into the Future

New Zealanders make choices everyday about their wellbeing. These are both personal choices as well as democratic choices about public policy and action at the local and national levels. It is our vision that the SNZWI can help frame both personal choices and public policy and action in New Zealand. This underpins the idea that psychological wealth and personal resources can be utilised to improve these determinants of our wellbeing.

The Sovereign Wellbeing Index will continue to monitor the wellbeing of New Zealanders over the next four years. We plan to follow up some of the participants in this nationally representative cohort to see how their wellbeing changes with time as well as continue to run this national index and benchmark indicators against European countries. As such, the research team are keen to develop partnerships and collaborations that can make the most use of this data – both in an academic sense, and in an applied ‘real world’ sense. If you are interested, please email: kate.white@aut.ac.nz

Acknowledgments

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References


