



Provided by the author(s) and University of Galway in accordance with publisher policies. Please cite the published version when available.

Title	Consulting with citizens in the design of wellbeing measures and policies: lessons from a systems science application
Author(s)	Hogan, Michael; Duggan, Jim; Leyden, Kevin M.; Domegan, Christine; Mc Hugh, Patricia; Hogan, Victoria; Harney, Owen; Groarke, Jenny; Noone, Chris; Groarke, Ann Marie
Publication Date	2014-09-20
Publication Information	Hogan, M. J., Johnston, H., Broome, B., McMoreland, C., Walsh, J., Smale, B., ... Groarke, A. M. (2014). Consulting with Citizens in the Design of Wellbeing Measures and Policies: Lessons from a Systems Science Application. Social Indicators Research, 123(3), 857-877. 10.1007/s11205-014-0764-x
Publisher	Springer Verlag
Link to publisher's version	http://link.springer.com/article/10.1007%2Fs11205-014-0764-x
Item record	http://hdl.handle.net/10379/5659
DOI	http://dx.doi.org/10.1007/s11205-014-0764-x

Downloaded 2024-04-16T22:30:03Z

Some rights reserved. For more information, please see the item record link above.



Consulting with citizens in the design of wellbeing measures and policies

Michael Hogan¹
Helen Johnston²
Benjamin Broome³
Claire Mc Moreland¹
Jane Walsh¹
Bryan Smale⁴
Jim Duggan⁵
Jerry Andriessen⁶
Kevin M. Leyden⁷
Christine Domegan⁸
Patricia Mc Hugh⁸
Victoria Hogan⁹
Owen Harney¹
Jenny Groarke¹
Chris Noone¹
AnnMarie Groarke¹

¹ School of Psychology, NUI, Galway, Ireland.

² National Economic and Social Council, Dublin, Ireland.

³ School of Communications, Arizona State University, U.S.A.

⁴ School of Recreation and Leisure Studies, University of Waterloo, Canada.

⁵ School of Information Technology, NUI, Galway, Ireland.

⁶ Wise & Munro Learning Research, The Netherlands.

⁷ School of Political Science and Sociology, NUI, Galway, Ireland

⁸ School of Marketing, NUI, Galway, Ireland.

⁹ School of Health Promotion, NUI, Galway, Ireland

Address correspondence to:

Michael J. Hogan, PhD, School of Psychology, NUI, Galway, Ireland.

Email: michael.hogan@nuigalway.ie

Abstract

Internationally, there is increasing interest in, and analysis of, human wellbeing and the economic, social, environmental, and psychological factors that contribute to it. Current thinking suggests that to measure social progress and national wellbeing we need more than GDP. Experts across a range of disciplines have increasingly highlighted a number of key values and domains of measurement that are influencing the way governments in different countries are thinking about wellbeing measures and policies. Most agree that it is important to involve citizen consultation in the design of wellbeing measures and policies. There is no real consensus on how to best do so. There are, however, the warnings of recent case studies that underscore the dangers of failing to consult with citizens adequately. The current paper examines the value of citizen consultations and considers how best to optimize deliberation and co-design by experts, citizens, and politicians using systems science tools that facilitate collective intelligence and collective action. The paper opens with an overview of the international wellbeing movement and highlights key issues in the design and application of wellbeing measures in policy practice. Next, an applied system science approach to citizen consultations in relation to wellbeing measurement and policy is described. A recent application of our applied system science methodology to the design of a notional national wellbeing index for Ireland is outlined. The paper closes by highlighting the importance of adopting a wider social science toolkit to the challenge of facilitating social progress.

Internationally, there is increasing interest in, and analysis of, human wellbeing and the economic, social, environmental, and psychological factors that contribute to it. Current thinking suggests that to measure social progress and national wellbeing we need something more than GDP, especially as the link between economic growth and psychological and social wellbeing is not always positive (Easterlin, 1974; Layard, 2005; Wilkinson & Pickett, 2009). Wilkinson and Pickett (2009) argue that the emphasis on GDP growth internationally has led to societies becoming more unequal; and increased inequality has been linked in turn to a variety of social and environmental problems including physical ill health, mental illness, increased levels of violence, and decreased levels of social capital. Citizens, politicians, and academics across a broad range of disciplines are re-focusing on the wider question of what matters in life, and the ongoing debate about how best to measure and foster individual and societal wellbeing.

When the Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), chaired by Joseph Stiglitz, reported in September 2009 they not only proposed a range of wellbeing domains that should be the focus of national accounting, they also proposed a strategy for the development of wellbeing measures. Specifically, the Stiglitz Commission proposes that “at the national level, round-tables should be established, with the involvement of stakeholders, to identify and prioritise those indicators that carry the potential for a shared view of how social progress is happening and how it can be sustained over time” (Stiglitz et al., 2009, p. 18).

Since the Stiglitz report was published, different countries have taken a variety of different approaches to the design of wellbeing measures. While a number of countries have adopted the national round-table approach to deliberation and design, the range and scope of stakeholder inputs has varied from country to country. For example, in Germany, the Parliamentary Commission of Inquiry on *Growth, Prosperity, Quality of Life – New Ways towards Sustainable Production and Social Progress in the Social Market Economy* includes 17 MPs and 17 experts that function as a national round-table to explore new ways of measuring wellbeing (Kroll, 2011). The group has a number of important jobs, including evaluating the importance of growth in the economy and society; the development of an integrated indicator of wellbeing or progress; discussion of the limitations and possibilities of breaking the link between growth, resource consumption and technical progress; outlining a sustainable regulatory policy; and examining the influence of the world of work, consumer behaviour, and lifestyles on possibilities of sustainable production. Given the complexity of the task, the merger of academia and cross-party politics in the round-table in Germany seems reasonable as their analysis and synthesis will combine, in principle, both technical expertise and democratic legitimacy.

In Northern Ireland, a high level Roundtable on Measuring What Matters has been established. The aim of this Roundtable is to create a route-map for measuring wellbeing and for achieving wellbeing for citizens and communities. Part of the remit of this group is to explore an appropriate performance framework for government in Northern Ireland, drawing on lessons identified from international best practice. The 18 members comprise senior civil servants and individuals from business, the third sector, youth, academia and local government. In addition, there will be opportunities for the main political parties in Northern Ireland to be briefed by the Secretariat and to make inputs. The Roundtable will also take evidence from other stakeholders. The Roundtable is co-chaired by a member of a charitable trust and an ex-senior civil servant, with university staff providing the secretariat. It is due to report at the end of 2014.

Other countries have designed round-tables that include either a narrower or broader range of stakeholder inputs. In the United States, President Barack Obama signed the Key National Indicators Act in March 2010, which provides for the creation of a Key National Indicator System (KNIS) that will provide US citizens with both national and local information on wellbeing across a range of dimensions. While this initiative is undertaken in the hope of creating a more informed and accountable democracy, the Key National Indicators Commission is composed of just eight academics. While it is currently unclear what impact, if any, the absence of cross-party political input will have on the future success of KNIS, a recent case study analysis of the international wellbeing movement (Wallace & Schmueker, 2012) suggests that limited stakeholder engagement may prove problematic for the United States moving forward. Notably, Wallace and Schmueker (2012) evaluated six case studies with a view to identifying what needs to happen to ensure that measuring wellbeing is made to matter in policymaking practice. The study found that wellbeing measures are at their most effective when they are supported by a combination of strong leadership, technocratic policy processes, and wide buy-in from civil society, citizens, and the media. Ensuring buy-in from civil society and consulting with citizens in the design of measures was argued as critical for the sustained success of any national wellbeing agenda. However, the report did not specify how best to approach citizen consultations nor how best to use consultation data in the design of wellbeing measures and policies.

While debate continues in relation to the dimensions of people's wellbeing, the discourse tends to include the following domains: economic resources, work and participation, relationships and care, community and environment, health, and democracy and values (CMEPSP, 2009; NESC, 2009).

Most of this discourse recognises the importance of economic resources, both to meet basic needs and to participate in society. Income and material goods are also elements of social comparison, where income is associated with status, power, and worth, so that its distribution and its value impact on an individual's wellbeing (Bruni & Porta, 2005; Kahneman, 1999; NESC, 2009). Conversely, poverty, financial insecurity, and debt have negative effects on wellbeing. However, as both Richard Easterlin (1974) and Richard Layard (2005) have argued, happiness and life satisfaction do not necessarily increase in line with personal or national income. Layard (2005) has reported that income has more of an effect on happiness levels in poorer countries than in richer countries. Income is important to meet basic needs and it also provides people with opportunities for a better and more meaningful life, for example, through better education, health and housing (NESC, 2009). However, once people and/or countries become relatively well off, the evidence suggests that their reported levels of happiness remain the same. This phenomenon has been referred to as the 'Easterlin Paradox', after Richard Easterlin, who described the 'paradox' of substantial income growth in western societies over the last 50 years without a corresponding rise in reported happiness levels (Easterlin, 2005).

A central component in people's wellbeing is the opportunity to develop and utilise their capabilities through engagement in meaningful activities (Sen, 1999). Education and work enable people to flourish (Flanagan, 2007) by optimising their capabilities, as well as providing an income, contributing to a sense of purpose, and providing social interaction and status. This is why unemployment is so detrimental to wellbeing (Layard, 2005). As well as forcing people to live on a low income, unemployment undermines self-respect and social relationships (Layard, 2005).

Furthermore, it is widely recognised that the quality and stability of relationships are central to wellbeing. Loving, secure, and consensual relationships have a positive effect on people's wellbeing while loss of a family member/friend or conflictual relationships can have a detrimental effect (Diener, Lucas, Schimmack, & Helliwell, 1999). Another aspect of relationships is the provision and receipt of care. The quality of the care and the supports available can have an important bearing on wellbeing, both for the caregiver and the care receiver (NESC, 2009). The availability of social support has been identified as one of the most important determinants of wellbeing, regardless of age or culture (Reis & Gable, 2003).

Likewise, the community and environments within which people live have an important influence on their wellbeing. The accommodation within which they live, the social capital in the community, as well as the quality of the immediate built environment all help to determine quality of life and wellbeing. Indeed, Leyden and his colleagues have founded that aspects of urban design and community maintenance can have an independent effect on happiness and well-being controlling for traditional predictors such as health, relative income, and social connections. (Leyden, 2003; Leyden et al, 2011; and Goldberg, et al, 2012). The beauty of a city, access to good schools, local shops, cafes, cultural amenities, green spaces and even good public transportation are important to people. Quality urban environments affect one's quality of life. The natural environment is also relevant. In much of the literature proposing multi-dimensional measurements of growth, the natural environment is treated as a separate domain, in the context of sustainability and the need to be aware of the consequences of the depletion of finite resources (CMEPSP, 2009; New Economics Foundation, 2009a).

In all of the discourses health is identified as a central domain of human wellbeing. Population health and life expectancy have improved throughout most parts of the world in recent years, largely due to an improvement in living conditions and medical advances. However, the growth and development of societies can be curtailed by the increasing incidence of chronic conditions and mental illness that undermine people's wellbeing. People's behaviours affect their wellbeing and there have been mounting concerns about the impact of diet, smoking, alcohol consumption, and lack of exercise on people's health and wellbeing (Barry et al., 2009; Farrell et al., 2008; Layte et al., 2007; Morgan et al., 2008; World Health Organisation, 2004). In relation to mental health, the most recent World Happiness Report cites mental health as the single most important predictor of individual happiness. This is especially relevant given the prevalence rates of the most common mental health difficulties, depression and anxiety. The World Happiness Report reports the prevalence of depression and anxiety to be one in ten globally (Helliwell, Layard & Sachs, 2013). In the UK, the Increasing Access to Psychological Therapies (IAPT) programme highlights how increased awareness of mental health problems has resulted in changes in policy and practice within the National Health Service (NHS). Specifically, in 2006, the Depression Report published in the UK highlighted the scale of mental health problems and the detrimental effects of these problems on individuals and society, and the comparable lack of talking therapies available through the NHS. Following on from this report, the IAPT programme was launched in 2008. The program has been expanded in recent years to help meet the goals of the Government's "No Health Without Mental Health" program which aims to improve societal wellbeing through addressing mental health difficulties.

The quality of government, people's involvement in a democratic society, trust, and peace are also significant features of individual and societal wellbeing, whereas crime and fear of crime undermine community connections and wellbeing. At societal level, a belief in a 'common

good', involving recognition of rights and responsibilities, empathy with others and values of citizenship, have been shown to contribute to the overall wellbeing of society (NESC, 2009).

In accepting the need for a multi-dimensional approach to progress and wellbeing involving considerations beyond GDP, there is then the challenge of measurement. How can these more complex aspects of growth and wellbeing be measured? We believe that consulting with citizens in the design of wellbeing measures and policies is fundamental to cultural and societal progress.

Consulting with citizens in the design of wellbeing measures and policies

As noted above, many countries now recognise that the consultation process is an important part of their wellbeing programme. For example, in 2006, the UK's Prime Minister David Cameron, declared that "improving our society's sense of wellbeing is, I believe, the central political challenge of our times" (see Kroll 2011). In November 2010, Cameron asked the independent Office for National Statistics (ONS), under the leadership of Jill Matheson, to survey national wellbeing as a new basis for policy. A wellbeing Advisory Forum was set up whose members included members of the Stiglitz Commission, leading representatives of the UK's civil society, academia, business community, and government administration, along with international partners from the OECD and Eurostat. A Technical Advisory Group was also established to advise on issues related to the measurement of national wellbeing.

Importantly, the UK programme started with a three-month national debate on the question 'What matters to you?', the purpose of which was to improve understanding of what should be included in measures of the nation's wellbeing. The ONS requested citizen input on the following questions: "What things in life matter to you? Of the things that matter to you, which should be reflected in measures of national well-being? Which of the following sets of information do you think help measure national well-being and how life in the UK is changing over time? Which of the following ways would be best to give a picture of national well-being? How would you use measures of national well-being?" (see Kroll 2011). More than 34,000 replies were received via questionnaires, a website, postcards, and 175 public consultation events across the country. The public consultation meetings were also conducted with specific social groups, such as school children, ethnic minorities, pensioners, and people with disabilities.

Although the National Debate did not use either a statistically representative survey method or a rigorous systems thinking consultation method, citizens did become involved in the national debate and a number of key measurement themes emerged as a result of the consultation exercise. Specifically, participants indicated that what is most important in life for them are: health, good connections with friends and family, good connections with a spouse or partner, job satisfaction and economic security, and present and future conditions of the environment. The majority of people wanted these dimensions of life experience to be used as national indicators of wellbeing, supplemented by a measure on education and training (Matheson, 2011).

On the basis of this consultation process, as well as existing social statistics and further expert roundtables, the ONS developed a provisional set of indicators in 2011 and continued the National Debate and wellbeing measurement design process further into 2012 and 2013. Furthermore, the ONS in collaboration with the civil service and the Cabinet Office are working to integrate wellbeing measurement and thinking into everyday policy work. In this context, the UK is taking a very progressive approach to wellbeing measurement and policy

decision making that involves open debate, iterative design thinking, and a willingness to experiment with different design and decision-making tools and methodologies.

In Canada, the development of the Canadian Index of Wellbeing (CIW) began in 2000 with public consultations conducted across Canada involving almost 350 participants in 40 discussion groups. Participants included members of the public, researchers and experts on wellbeing and indicator development, government officials, as well as potential users, such as not-for-profit organisations, community representatives, and policy makers. The principal objective of those discussions was to have Canadians describe those aspects of life that contributed most to their quality of life and they felt were directly related to their wellbeing. This process culminated in the identification of the most prevalent thematic areas that Canadians felt were most connected to quality of life (CPRN, 2001a) as well as some of the specific areas and indicators of quality of life as suggested by the discussion group participants (CPRN, 2001b). It was at this stage that a sense of the domains that would eventually emerge to define the CIW was realised.

In 2002 and in 2004, a roundtable discussion and then a workshop involving over 60 experts on social indicators and wellbeing with specialisations in health promotion, community development, economics, education, environmental studies, political science, and recreation, arts, and culture were organised. Practitioners and government officials, including potential users, also engaged in these discussions, and collectively, the participants sifted through all of the information with the intent of narrowing the focus on to those domains regarded by Canadians as most central to overall quality of life. Based on the initial outcomes of this work as well as previous consultations, a further series of 19 focus groups involving approximately 250 individuals in 14 communities across Canada were organised in 2006. Participants were drawn from diverse populations including the general public, Aboriginal peoples, government officials, members of the media, business leaders, and representatives of a variety of non-governmental organisations (NGOs). The participants were asked to consider and reflect on the initial conceptualisation of what was now being called the Canadian Index of Wellbeing (CIW).

Two more rounds of consultations were organised in 2007 and 2008. The first involved 13 roundtable discussion held in cities across Canada with over 180 participants drawn again from government, NGOs, and in this round, community groups from the host cities. These discussions updated participants on the progress towards finalising the eight domains that comprise the CIW, sought feedback on the conceptual framework, and seeded the start of local networks of advocates who would eventually communicate the CIW to the broader public. The consultation in 2008 involved a workshop comprised principally of policy advisors and community leaders who, in addition to being updated on the project, provided advice on how the emerging messages from the CIW could be best communicated to the media, the public, and especially to government leaders responsible for policy affecting the wellbeing of Canadians. Throughout 2008 to 2011, final work on reports focused on each of the eight domains was undertaken in earnest by research teams with an eye to identifying the most valid and reliable indicators that would eventually be used to reflect each domain. Ultimately, the entire development process was informed by and reflects the grass-roots contributions of everyday Canadians as well as the advice of experts and practitioners.

Notwithstanding some good examples of citizen consultation in the co-design of wellbeing measures and policies, it is increasingly recognised that further efforts need to be made. Given the dynamic nature of the system of influences that shape wellbeing, it is important that frameworks that promote collective systems thinking be put into place. In addition,

citizens should be consulted regularly as wellbeing measures and policies are redesigned, monitored and adapted.

One approach is the use of a multi-level systems thinking strategy derived from a citizen consultation process that allows expert groups to clarify their thinking and understandings of wellbeing and related policies. .. For example, in *Well-being 2030, A new vision for 'Social Europe'*, Dhéret, Zuleeg, Chiorean-Sime, and Molino (2011) note that:

Having a political debate on the development model Europe wants to promote is a precondition to revitalising the European social model and reconciling citizens with the European project. Key questions that have been central to the Well-being 2030 project are: What kind of societies do Europeans want to live in? What kind of growth do Europeans want and what are their perceptions of 'social progress'? What price are they willing to pay to achieve societal progress? And what is the role of the European Union in all this? In the final analysis, these are not questions that can be answered by research or by experts; they are political questions which should be debated in our political processes, at local, regional, national and European level. But there is very little public debate on such topics. Policy-makers will have to find the answers to these questions if they want to meet people's expectations, and the EU should take a leading role in fostering such a debate. This will need to be a politicised debate, including elected representatives at all levels. Only through developing Europe's political priorities in the social policy field can well-being be enhanced in the long term. (p. 26)

Consistent with Warfield's (1994, 2006) view on systems science, we argue that survey data constitute part of the science of description that can be imported into the science of design, complexity, and action that can be used as part of a broader model of systems design. Consistent with the recommendations of the Stiglitz report, we believe that the roundtable is an essential part in the design of wellbeing policies. However, the roundtable is one part of a broader group design process, the objective of which is to facilitate collective intelligence and collective action. Broader group design processes can facilitate joint actions at every level (e.g., the micro individual level, meso community level and macro policy levels), by a variety of stakeholders across and between countries. When working with groups to facilitate systems thinking we believe it is important to have: (1) a facilitation team that helps to structure group deliberations using (2) group methodologies, including software support systems, that help with generating, categorizing, structuring, and sequencing ideas and developing action agendas in the context of (3) a productive workshop space. There are a variety of different methods that can be used to facilitate systems thinking in this regard. In Ireland, we have used the systems science methodology developed by John Warfield, *Interactive Management* (IM). IM is a computer facilitated thought and action mapping technique that helps groups to develop outcomes that integrate contributions from individuals with diverse views, backgrounds, and perspectives. Established as a formal system of facilitation in 1980 after a developmental phase that started in 1974, IM was designed to assist groups in dealing with complex issues (see Ackoff, 1981; Argyris, 1982; Cleveland, 1973; Deal & Kennedy, 1982; Kemeny, 1980; Rittel & Webber, 1974; Simon, 1960). The theoretical constructs that inform IM, developed over the course of more than two decades of practice, draw from both behavioural and cognitive sciences, with a strong basis in general systems thinking. The IM approach carefully delineates content and process roles, assigning to participants responsibility for contributing ideas and to the facilitator responsibility for choosing and implementing selected methodologies for generating, clarifying, structuring, interpreting, and amending ideas. The IM process is designed to reduce the cognitive load on

participants by balancing behavioural and technical demands of group work (Broome & Chen, 1992) while honouring design laws concerning variety, parsimony, and saliency (Ashby, 1958; Boulding, 1966; Miller, 1956). IM has been applied in a variety of situations to accomplish many different goals, including assisting city councils in making budget cuts (Coke & Moore, 1981), developing instructional units (Sato, 1979), designing a national agenda for pediatric nursing (Feeg, 1988), creating computer-based information systems for organizations (Keever, 1989), improving the U.S. Department of Defence's acquisition process (Alberts, 1992), promoting world peace (Christakis, 1987), improving the Tribal governance process in Native American communities (Broome, 1995; Broome & Christakis, 1988; Broome & Cromer, 1991), and training facilitators (Broome & Fulbright, 1995).

In a typical IM session, a group of participants who are knowledgeable about a particular situation engage in: (a) developing an understanding of the situation they face, (b) establishing a collective basis for thinking about their future, and (c) producing a framework for effective action. In the process of moving through these phases, group members can develop a greater sense of teamwork and gain new communication and information-processing skills. IM utilizes a carefully selected set of methodologies, matched to the phase of group interaction and the requirements of the situation. There were five steps involved in this process: (1) generate and clarify ideas, (2) vote, rank order, and select elements for structuring, (3) structure elements using IM software, (4) evaluate graphical representation of group logic and amend if necessary, (5) transcribe group discussion and evaluate discourse and reasoning to further understand the nature of group thinking (see Figure 1).

Insert figure 1 around here

Consulting with Irish Citizens and Wellbeing Experts using Interactive Management

To provide an example of an ongoing project employing the interactive management methodology, Figure 2 illustrates a problematique generated by participants at the Wellbeing in Ireland Conference (NUI, Galway, 2012) in response to the trigger question, *What are Barriers to Wellbeing in Ireland?* The problematique is to be read from left to right, with paths in the model interpreted as 'significantly aggravates'. Boxes with two or more elements together indicate reciprocally inter-related elements. Tracing one path of negative influence through the model, conference participants identified the absence of holistic approaches to healthcare, lack of a space for dialogue on holistic views of wellbeing, lack of understanding as regards the nature of wellbeing and how to measure it, and no national measurement of wellbeing as critical barriers to wellbeing in Ireland (Hogan & Broome, 2012).

Insert figure 2 around here

We hosted a second Wellbeing in Ireland conference focused on wellbeing measurement and the design of a national wellbeing index for Ireland (Hogan & Broome, 2013). In advance of the conference, we asked participants to reflect on the broad issue of wellbeing in Ireland and

generate a list of strategic objectives in response to the following question: *In the context of developing a new national wellbeing index for Ireland, what are the strategic objectives that should guide our efforts to enhance the wellbeing of the people of Ireland over the coming decade?* We analysed the survey responses and identified ten domains of strategic objectives. Conference participants then engaged in idea-writing and discussion to further develop strategic objectives within each domain. Strategic objectives were posted on display walls and participants were given time to study all of the objectives and provide clarification before voting to select their top objectives from the full list. Selected objectives across ten wellbeing domains are listed in Table 1.

 Insert Table 1 around here

Conference participants next used the ISM software to structure interdependencies among the highest ranked objectives (see Figure 3). The figure is to be read from left to right and arrows indicate ‘significantly enhances’. As can be seen from Figure 3, participants argued that promoting leadership and governance with an emphasis on community participation is a fundamental driver in the system and promoting this objective is thus likely to increase our chances of achieving all other objectives in the system of interdependent objectives. Members of the wellbeing in Ireland conference group are now engaging with political leaders in Ireland, specifically calling for a national consultation to extend the analysis of wellbeing objectives in advance of designing a national wellbeing index.

Notably, the work of the Health and Wellbeing Cluster on Collective Intelligence and Wellbeing was published as part of a major Government Report on Citizen Engagement with Local Government. The report of the working group on citizen engagement with local government recommends that a People’s Participation Network (PPN) be established in every Local Authority area in Ireland to ensure extensive input by citizens into the decision-making process at local government level. The Working Group, which was set up in September 2013 under the chairmanship of Seán Healy, Director of Social Justice Ireland, sets out how the PPN should operate to enable the community and voluntary and environmental sectors to take an active formal role in the policy making and oversight activities of the Local Authority. It proposes a framework for public participation and formal engagement with the community and will be underpinned by regulations and guidelines from the Department. Engagement of this nature has been provided for under the Local Government Reform Act 2014 in Ireland. The regulations and guidelines, while allowing for the set-up of the framework for public participation across all Local Authorities, will also allow for more diverse engagement of citizens through other mechanisms, including the use of social media.

In an effort to pilot the type of large-scale national consultation that will be needed to fulfil the aims of the PPN and to foster a lifespan perspective in relation to wellbeing goals (NESC, 2009), we recently ran eight separate IM sessions with older adults (3 groups, total N = 26, Mean age = 69.84, 7 males, 19 females), younger adults (3 groups, total N = 21, Mean age = 31.6, 6 males, 15 females), and children (2 groups, total N = 14, Mean age = 14.7, 6 males, 8 females). Similar to our wellbeing conference we asked participants to generate and clarify strategic objectives that should guide our efforts to enhance the wellbeing of the people of Ireland over the coming decade. A total of 325 strategic objectives were identified by the eight groups and categorised into 39 categories by four expert coders. Analysis of wellbeing priorities according to hierarchies of category votes (Figures 3) indicated that *health*

infrastructure, health and wellbeing promotion, and physical activity were the highest priority wellbeing goal categories amongst older adults; *identity and perspective taking, equality of access to services, and health infrastructure* were the top three goal categories for the working age groups; and *changing the school curriculum* to support greater wellbeing amongst schoolchildren, *accepting and promoting diversity, and identity and perspective taking* were top priorities for adolescents.

A number of highly rated strategic goals from different categories were selected for structuring by each group (i.e., 10 – 12 elements were structured by each group). Subsequently, it was possible to calculate average influence scores for each wellbeing goal category based on individual influence scores for each strategic goal structured by the groups (see McMoreland, Hogan, and Walsh, 2014 for more details). While votes provide information as to the relative importance of goals and goal categories, IM structuring provides information as to the relative influence of goals and goal categories in a system of interdependent goals. These influence scores are calculated based on both their position in the structure (i.e., with elements to the left receiving a higher score compared with elements on the right) and the number antecedents and succedents they have in the structure (i.e., elements with more succedents relative to antecedents have a higher overall influence on other goals in the system). Influence scores provide an indication of the relative influence of specific goals in a system of interdependent goals and this information can be used at an aggregate level to examine the average influence scores for different categories of goals. A meta-analysis of categories based on thematic overlaps provides insight into the level of influence of clusters of categories (see Figure 4). Meta-categories with higher average influence scores are those which have the greatest potential for supporting the accomplishment of the overall set of strategic goals. Thus, achieving the strategic goals for those categories in level one will significantly enhance the ability to accomplish strategic goals in the subsequent levels. For example, drawing on the logic of participants, improving public transport in rural areas (theme one) could help to ensure that elderly people are better able to maintain their independence because of easier access to local amenities (theme two). This would help to reduce loneliness and isolation amongst this cohort (theme four), and potentially facilitate greater inclusion and involvement of the elderly in their local community (theme five). Some of the specific strategic goals in each theme identified by different age groups can be found in table 2.

Insert Table 2 around here

Insert figure 3 & 4 around here

Overall, the findings from our pilot national consultation work further emphasise the need for new methods to be introduced in order to measure a broader range of indicators of wellbeing, both for the population as a whole and for different age cohorts, who may highlight contrasting goals and hierarchies that may inform subsequent national wellbeing policy and practice.

Embedding Systems Science in the International Wellbeing Movement

As can be seen from the above example, consulting with citizens and wellbeing experts can provide valuable input that can be used to advance the wellbeing agenda. Consultations using interactive management offer a number of benefits, including:

- 1) Providing insight into the values, goals, and preferences of stakeholders;
- 2) Engaging participants in a democratic, consensus building process that facilitates buy-in and enhances the legitimacy of decision-making groups;
- 3) Facilitating transparent understanding of the reasoning that informs the systems thinking of groups;
- 4) Creating opportunities to merge data across multiple groups and analyse group differences and similarities using meta-analysis, given the standardized and structured approach used;
- 5) Providing an option to link qualitative structural models of system interdependencies to quantitative modelling efforts by drawing upon data from national surveys and other forms of national accounting;
- 6) Creating the ability to establish feedback loops between multiple working groups and multiple levels of analysis such that: (a) there is growing awareness amongst stakeholders of a diversity of perspective, and (b) quantitative models are evaluated in light of qualitative reasoning and qualitative models are considered in light of rigorous quantitative analysis;
- 7) Developing a multi-level approach that incorporates systems thinking across geographical space and demographic groupings, which can be used to inform both a synthesis and perspective at a macro-economic and societal perspective (i.e., for central government policy), while also offering a synthesis, perspective and collective input at local level that is needed to translate national wellbeing policies into local government and community group projects and practices. In other words, well-designed national consultations can facilitate better linkages between Micro- (local) and Macro- (national) level wellbeing goals grounded in a systems thinking approach to social progress.

As past president of the International Society for the Systems Sciences, John Warfield (1925 – 2009) devoted most of his career to the task of building a viable systems science. However, further work is needed to: (a) develop reliable, valid, efficient, and cost-effective strategies for importing the facts and relations of disparate descriptive sciences into group design efforts, (b) develop strategies for quantifying problematic model fit by weighting and measuring discrete relations in matrix structures and computing statistical fit indices and further integrating with system dynamics modeling tools (Maani & Cavana, 2000); and (c) facilitate the individual talents and team dynamics necessary for the optimal application of applied systems science in a variety of different contexts. Importantly, and related to their work on wellbeing, Hogan, Harney, and Broome (2014) have developed an educational framework that involves the development of tools, talents, and teams and which can be used as part of a multi-level systems thinking strategy in this context.

Insert figure 5 around here

Importantly, in order to be truly effective in practice, citizen consultations in relation to wellbeing measurement and policy implies the need for a broader view in relation to collaboration, cooperation, and social and scientific problem solving. Effective cooperative and collaborative dynamics are fundamental to successful problem solving in science and society. Research suggests that cooperative relationships are characterized by reciprocity, discussion, mutual respect, perspective taking, and a coordination of each individual's views with those of others. When people have the opportunity to share their views they are more likely to develop a stake in the process and therefore become motivated to learn and work toward common goals (Wells & Arauz, 2006). This collective approach encourages dialogical interaction (Ballantyne & Varey, 2006); mutual framing, collaborative learning and extended active participation between multiple groups *within* and *across* many levels, to scale up new shared values for national wellbeing. Research also suggests that computer-supported collaborative learning (CSCL) can facilitate creative, efficient, and effective problem solving that promotes both intellectual development and social interaction (Stahl, Koschmann & Suthers, 2006). We argue that adopting a stance in relation to citizen consultations implies thinking through these issues and working with a broader collection of social scientists in relation to the design of the process of collaboration, cooperation and social and scientific problem solving. We believe that a focus on developing tools, talents, and teams is a useful starting point and we believe that the further application of IM provides a solid methodological starting point for future work in this area.

However, we also recognise that, in the broader context of political engagement and policy change, there are many barriers to the implementation of wellbeing policies. As one part of our wellbeing in Ireland conference, we worked with a small group of four wellbeing experts, specifically, directors of the UK and Scottish wellbeing projects, chair of the Irish National Statistics Board, and a research director from the Carnegie-UK trust. The expert group worked to generate, clarify, and structure *barriers to implementing national and international wellbeing policies*. The problematique generated by this expert group (Figure 6) indicated that conceptual confusion, shortage of case studies, and failure to recognise diversified needs across gender, class, disability, and ethnicity were three primary driver barriers that significantly aggravated a number of other barriers in the system. Rather than attempting to define wellbeing directly, consistent with Sen's capability approach and the approach taken in Scotland, we suggest that working with stakeholder groups to identify capabilities and goals needed to enhance wellbeing provides a more pragmatic approach to developing consensus-based wellbeing programme agendas that may overcome some of the challenges associated with wellbeing measurement and conceptual confusion in the area. In addition, a focus on goals and goal pursuit parallels the approach adopted by governments in developing, adopting, and implementing policies. Thus, a focus on wellbeing goals allows for a shared language between citizens and politicians. A focus on strategic goals also allows for a greater correspondence between the language of citizens, politicians, and wellbeing scientists, particularly if wellbeing scientist can evaluate evidence in relation to the impact of pursuing specific goals on wellbeing outcomes and communicate the results of their work clearly to citizens and politicians.

Insert figure 6 around here

To consult or not to consult, that is the question?

Since the Stiglitz report was published, different countries have taken different approaches to the design of wellbeing measures and policies. While some countries have worked diligently to consult with citizens in a meaningful way in the deliberation and design process, other countries have not engaged with citizens in any meaningful way, and no country has adopted a collaborative, systems thinking approach to national consultations or wellbeing policy design. While this is somewhat surprising and disappointing given the broad goals of the international wellbeing movement, it is only recently that case study analyses have highlighted how limited citizen engagement may prove problematic for any national wellbeing agenda (Wallace & Schmucker, 2012). Consistent with Wallace and Schmucker (2012), who concluded that wellbeing measures will be most effective when they are supported by a combination of strong leadership, technocratic policy processes, and wide buy-in from civil society, citizens, and the media, we proposed a multi-level systems thinking approach be adopted to citizen and expert roundtable consultations to inform national and local wellbeing policy and practice. While some countries have worked to develop their wellbeing measurement strategy by drawing upon expert round tables, other countries including Canada, the United Kingdom, Italy, and Australia have also consulted with citizens in the wellbeing measurement design process. It has been suggested by Kroll (2011) that these participatory approaches can enhance collective intelligence and increase the sense of procedural justice and perceived relevance of wellbeing indicators in the population, while also increasing democratic legitimacy and amplifying the potential political attention paid to progress indicators.

The United Kingdom has been at the forefront of the debate on the measurement of wellbeing for several years. The recommendations of the Stiglitz Commission in relation to roundtable design and consultation were broadly welcomed and are being effectively put into practice. In Ireland, based on two conferences held at the National University of Galway (NUIG), we have looked to the UK model and other international models and have sought to advance upon their thinking in relation to how best to consult with citizens as we believe that this will be critical to our success moving forward. The instigation of a ‘wellbeing movement’, based on the two NUIG conferences and pilot citizen consultation work as building blocks, may have the possibility of bringing disparate interests together to progress ideas on:

- Developing a broader understanding of societal progress;
- Engaging in a broad democratic debate;
- Using appropriate methodologies such as IM and expert and citizen roundtables to facilitate this;
- Subsequently employing appropriate methodologies to collect the required information;
- Conducting analyses and disseminating the results; and
- Reviewing policies and adapting them accordingly.

This may be the ideal scenario but without such a vision we may end up repeating the mistakes of the past.

References

- Ackoff, R. L. (1981). *Creating the corporate future: Plan or be planned for*. New York: John Wiley and Sons.
- Alberts, H. (1992, March). *Acquisition: Past, present and future*. Paper presented at the meeting of the Institute of Management Sciences and Operations Research Society, Orlando, FL.
- Ashby, W. R. (1958). Requisite variety and its implications for the control of complex systems. *Cybernetica*, 1(2), 1-17.
- Ballantyne, D. & Varey, R. (2006). Introducing a dialogical orientation to the service-dominant logic of marketing. In R.F. Lusch & S.L. Vargo. (Eds.) *The Service Dominant Logic of Marketing: Dialog, Debate and Directions*. (pp. 224-235). New York: M.E. Sharpe, Inc.
- Ballantyne, D., & Varey, R. J. (2006). Creating value-in-use through marketing interaction: the exchange logic of relating, communicating and knowing. *Marketing theory*, 6(3), 335-348. doi: 10.1177/1470593106066795
- Barry, M. M., Van Lente, E., Molcho, M., Morgan, K., McGee, H., Conroy, R. M., Watson, D., Shelley, E., & Perry, I. (2009). *SLÁN 2007: Survey of lifestyle, attitudes and nutrition in Ireland: Mental health and social well-being report*. Dublin: The Stationery Office.
- Boulding, K. E. (1966). *The impact of the social sciences*. New Brunswick, NJ: Rutgers University Press.
- Broome, B. J. (1995). The role of facilitated group process in community-based planning and design: Promoting greater participation in Comanche tribal governance. In L. R. Frey (Ed.), *Innovations in group facilitation: Applications in natural settings* (pp. 27-52). Cresskill, NJ: Hampton Press.
- Broome, B. J., & Chen, M. (1992). Guidelines for computer-assisted group problem-solving: Meeting the challenges of complex issues. *Small Group Research*, 23, 216-236. doi: 10.1177/1046496492232005
- Broome, B. J., & Fulbright, L. (1995). A multi-stage influence model of barriers to group problem solving. *Small Group Research*, 26, 25-55. doi: 10.1177/1046496495261002
- Broome, B. J., & Christakis, A. N. (1988). A culturally-sensitive approach to tribal governance issue management. *International Journal of Intercultural Relations*, 12, 107-123. doi: 10.1016/0147-1767(88)90043-0
- Broome, B. J., & Cromer, I. L. (1991). Strategic planning for tribal economic development: A culturally appropriate model for consensus building. *International Journal of Conflict Management*, 2, 217-234. doi: 10.1108/eb022700
- Bruni, L., & Porta, P. L. (2005). *Economics and happiness: Framing the analysis*. Oxford: Oxford University Press.

- Christakis, A. N. (1987). Systems profile: The Club of Rome revisited. *Systems Research*, 4, 53-58.
- Cleveland, H. (1973). The decision makers. *Center Magazine*, 6(5), 9-18.
- Coke, J. G., & Moore, C. M. (1981). Coping with a budgetary crisis: Helping a city council decide where expenditure cuts should be made. In S. W. Burks & J. F. Wolf (Eds.), *Building city council leadership skills: A casebook of models and methods* (pp. 72-85). Washington, DC: National League of Cities.
- Canadian Policy Research Network (CPRN). (2001a). *Asking citizens what matters for quality of life in Canada*. Report prepared for the Canadian Policy Research Networks. Results of Public Dialogue Process, Quality of Life Indicators Project. Ottawa, ON: CPRN.
- Canadian Policy Research Network (CPRN). (2001b). *Indicators of quality of life in Canada: A citizen's prototype*. Report prepared for the Canadian Policy Research Networks. Results of Public Dialogue Sessions and Prototype of National Indicators, Quality of Life Indicators Project. Ottawa, ON: CPRN.
- Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures: The rites and rituals of corporate life*. Reading, MA: Addison-Wesley.
- Dhéret, C., Zuleeg, F., Chiorean-Sime, S., & Molino, E. (2011). Well-being 2030: A new vision for 'Social Europe'. *EPC Issue Paper*, 65(18).
- Diener, E., Lucas, R., Schimmack, U., & Helliwell, J. (2009). *Well-being for public policy*. New York: Oxford University Press.
- Durand, M. (2013). Outcomes of the 4th OECD World Forum on Statistics, Knowledge and Policy: Measuring well-being for development and policy making. *The Statistics Newsletter*, 58, 3-7.
- Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In R. David & M. Reder (Eds), *Nations and households in economic growth: Essays in honor of Moses Abramovitz*. New York: Academic Press.
- Easterlin, R. A. (2005). Building a better theory of well-being. In L. Bruni & P. L. Porta (Eds), *Economics and happiness: Framing the analysis*. Oxford: Oxford University Press.
- Farrell, C., McAvoy, H., Wilde, J., & Combat Poverty Agency. (2008). *Tackling health inequalities: An all-Ireland approach to social determinants*. Dublin: Institute of Public Health & Combat Poverty Agency.
- Feeg, R. (1988). Forum of the future of pediatric nursing: Looking toward the 21st century. *Pediatric Nursing*, 14, 393-396
- Flanagan, O. (2007). *The really hard problem: Meaning in a material world*. Massachusetts: The MIT Press.
- Goldberg, A. Leyden, Kevin M., and T.J. Scotto. (2012). Untangling What Makes Cities Livable: Happiness in Five Cities. *Proceedings of the Institute of Civil Engineers: Urban Design and Planning*. Vol. 165. (September): 127-136

- Helliwell, J. F., Layard, R. & Sachs, J. (2013). *World Happiness Report 2013*. New York: UN Sustainable Development Solutions Network.
- Hogan, M.J. & Broome, B. (2012). Well-Being in Ireland: Overcoming Barriers to Well-Being in Ireland, Collective Intelligence Conference Report, NUI, Galway.
- Hogan, M.J. & Broome, B. (2013). Wellbeing in Ireland – Designing Measures and Implementing Policies, Collective Intelligence Conference Report, NUI, Galway.
- Hogan, M.J., Harney, O. & Broome, B. (2014). Integrating Argument Mapping with Systems Thinking Tools – Advancing Applied Systems Science. In, *Knowledge Cartography: Software Tools and Mapping Techniques*. (Eds.) Okada, A., Buckingham Shum, S. and Sherborne, T. Springer: Advanced Information and Knowledge Processing Series. (In Press)
- Kahneman, D. (1999). Objective happiness. In D. Kahneman, E. Diener & N. Schwartz (Eds), *Well-being: The foundations of hedonic psychology*. New York: Russell Sage Foundation.
- Keever, D. B. (1989, April). *Cultural complexities in the participative design of a computer-based organization information system*. Paper presented at the International Conference on Support, Society and Culture: Mutual Uses of Cybernetics and Science, Amsterdam, The Netherlands.
- Kemeny, J. (1980). Saving American democracy: The lesson of Three Mile Island. *Technology Review*, 83(7), 64-75.
- Kroll, C. (2011). *Measuring progress and well-being: Achievements and challenges of a New global movement*. Berlin: Friedrich Ebert Foundation.
- Layard, R. (2005). *Happiness: Lessons from a new science*. London: Penguin.
- Layte, R., Nolan, A., & Nolan, B. (2007). Health and Health Care. In T. Fahey, H. Russell & C. T. Whelan (Eds), *Best of times: The social impact of the Celtic tiger*. Dublin: Institute of Public Administration.
- Leyden, Kevin M., Goldberg A. and Michelbach, P. (2011). Understanding the Pursuit of Happiness in Ten Major Cities. *Urban Affairs Review*. Vol. 47, (November): 861-888.
- Leyden, Kevin M. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *American Journal of Public Health*. Volume 93: 1546-1551.
- Maani, K., & Cavana, R. Y. (2000). *Systems thinking and modelling: Understanding change and complexity*. Auckland: Prentice Hall.
- Matheson, J. (2011). *Measuring national wellbeing: Measuring what matters*. London: Office of National Statistics. Retrieved October, 2, 2012.

- Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychology Review*, 63, 81-97. doi: 10.1037/h0043158
- Morgan, K., McGee, H., Watson, D., Perry, I., Barry, M., Shelley, E., Harrington, J., Molcho, M., Layte, R., Tully, N., Van Lente, E., Ward, M., Lutomski, J., Conroy, R., & Brugha, R. (2008). *SLÁN 2007: Survey of lifestyle, attitudes & nutrition in Ireland. Main report*. Dublin: Department of Health and Children.
- NESC. (2009). *Well-being matters: A social report for Ireland* [NESC Report No. 119]. Dublin: NESC.
- New Economics Foundation. (2009a). *National accounts of well-being*. Retrieved from www.nationalaccountsofwellbeing.org [12 June 2009].
- New Economics Foundation. (2009b). *The 'un'happy planet index 2.0: Why good lives don't have to cost the earth*. London: New Economics Foundation.
- NUI Galway. (2012) *Overcoming barriers to well-being in Ireland: Workshop Report*. Retrieved from www.nuigalway.ie/psy/documents/overcoming_barriers_report_thursday31st_may.docx [12 April 2013]
- Reis, H. & Gable, S. (2003). Toward a positive psychology of relationships. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived*. Washington, D.C.: American Psychological Association. doi:10.1037/10594-006
- Rittel, H., & Webber, M. (1974). Dilemmas in a general theory of planning. *DMG-DRS Journal*, 8, 31-39. Doi: 10.1007/BF01405730
- Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.
- Simon, H. A. (1960). *The new science of management decisions*. New York: Harper & Row.
- Stahl G, Koschmann T, & Suthers D. (2006). Computer-supported collaborative learning: An historical perspective. In R.K. Sawyer (Ed.) *Cambridge handbook of the learning sciences*, (pp 409–426). Cambridge, UK: Cambridge University Press.
- Stiglitz, J. (2009). Speech at launch of the Report of the Commission on the Measurement of Economic Performance and Social Progress. Retrieved from www.stiglitz-sen-fitoussi.fr/en [1 October 2009].
- Stiglitz, J. E., Sen, A., & Fitoussi, J. P. (2010). *Report by the commission on the measurement of economic performance and social progress*. Paris: Commission on the Measurement of Economic Performance and Social Progress. Retrieved from www.stiglitz-sen-fitoussi.fr/en/index.htm [10 April 2013].
- Wallace, J., & Schmucker, K. (2012). *Shifting the dial: From wellbeing measures to policy practice*. Dunfermline: Carnegie UK Trust.
- Warfield, J. (2006). *An introduction to systems science*. Singapore: World Scientific.

- Warfield, J. (1994). *A science of generic design: Managing complexity through systems design* (2nd ed.). Salinas, CA: Intersystems.
- Wells, G., & Arauz, R. M. (2006). Dialogue in the classroom. *The journal of the learning sciences*, 15(3), 379-428.
- Wilkinson, R., & Pickett, K. (2009). *The spirit level: Why more equal societies almost always do better*. London: Allen Lane.
- World Health Organisation. (2004). *Global strategy on diet, physical activity and health*. Retrieved from www.who.int/dietphysical/strategy/eb11344/strategyenglish_web.pdf [10 April 2013].

Table 1. Top Ranked Strategic Objectives across Ten Wellbeing domains

A. Education
▪ To facilitate personal development and the development of critical life skills in Irish youth
▪ To educate people about the dimensions of wellbeing
B. Business and Employment
▪ To provide employees in Ireland with rewarding and fulfilling employment opportunities and conditions
▪ To develop ethical frameworks in business to promote wellbeing
C. Community
▪ To ensure that all citizens have the freedom and agency to bring about positive change in their communities
▪ To promote the stimulation of peoples' intrinsic values (i.e. autonomy, competence, relatedness)
D. Health
▪ To make healthy choice the easy choice
▪ To promote access to healthcare for all citizens in Ireland
E. Democracy
▪ To educate people about the need for and importance of democracy
▪ To ensure the voice of vulnerable groups is heard
F. Environment
▪ To recognise and respect the multi-dimensional aspects of the environment and how vital they are
▪ To create beautiful and enjoyable environments for people to live, work and spend time in
G. Sustainability
▪ To ensure future planning and development is sustainable
▪ To enhance appreciation of Ireland's uniqueness in terms of its rich linguistic, artistic and cultural heritage
H. Governance
▪ To ensure that research is promptly fed back at a government level so that policy change can occur
▪ To promote leadership and governance with an emphasis on community participation
I. Lifestyle
▪ To enhance quality of life-work balance
▪ To improve childcare and maternity/paternity leave to enhance early family experience
J. Equality
▪ To ensure policy goals toward equal opportunities acknowledge unequal starting points
▪ To reduce socio-economic inequalities

Table 2. Highly ranked strategic goals across five category themes as identified by older adults, working age groups, and teenage groups.

Theme One: Governance and Infrastructure	
Older Adult	
	<ul style="list-style-type: none"> ▪ To ensure that the government sticks to the policies they set out ▪ To reduce levels of crime in the country
Working Age	
	<ul style="list-style-type: none"> ▪ To enhance our health services to ensure a higher standard of care for patients ▪ To ensure that all citizens have access to suitable transport to enable access to local amenities and thereby reduce social isolation
Teenage	
	<ul style="list-style-type: none"> ▪ To put in place an external independent monitoring body of the Government to ensure accountability ▪ To ensure that healthcare is free for everyone
Theme Two: Social Factors	
Older Adult	
	<ul style="list-style-type: none"> ▪ To promote independence in elderly people ▪ To employ more Irish graduates in Ireland
Working Age	
	<ul style="list-style-type: none"> ▪ To ensure that services for older adults allow them to maintain their independence ▪ To ensure employers improve the availability of childcare services for their employees who have children under school age
Teenage	
	<ul style="list-style-type: none"> ▪ To ensure that unemployed people participate in community schemes thereby helping them to feel needed and help them to develop new skills ▪ To set-up more shelters and services for homeless people
Theme Three: Education and Culture	
Older Adult	
	<ul style="list-style-type: none"> ▪ To promote Ireland as a place of well-educated and skilled young people ▪ To denormalise alcohol misuse in Ireland
Working Age	
	<ul style="list-style-type: none"> ▪ To promote the resources in our local areas more at both a local and national level ▪ To ensure parents take more responsibility for alcohol use by their children
Teenage	
	<ul style="list-style-type: none"> ▪ To ensure that there is a greater focus in schools on teaching life-relevant skills and not just focused on exams ▪ To ensure that there is a designated adult within a school whom students are encouraged to talk to
Theme Four: Personal Factors	
Older Adult	
	<ul style="list-style-type: none"> ▪ To educate everyone about the importance of getting children involved in

enjoyable physical activities at an early age
<ul style="list-style-type: none"> ▪ To educate parents on the importance of spending quality time with their children
Working Age
<ul style="list-style-type: none"> ▪ To encourage acceptance of others ▪ To promote the concept of wellbeing and how to achieve it
Teenage
<ul style="list-style-type: none"> ▪ To reduce the stigma attached to socioeconomic background ▪ To encourage people to be nicer to each other
Theme Five: Community
Older Adult
<ul style="list-style-type: none"> ▪ To create more outlets that retired people can get involved in in their local area ▪ To promote better community cohesion and involvement in all areas
Working Age
<ul style="list-style-type: none"> ▪ To encourage marginalised groups to get involved in politics and political decisions that affect them ▪ To empower people to make changes in their own community
Teenage
<ul style="list-style-type: none"> ▪ To encourage more people to get involved in community-level sporting organisations so that they feel more involved in their community and are healthier ▪ To establish a project whereby young people visit the elderly in order to combat loneliness of the elderly and facilitate knowledge transfer to the young

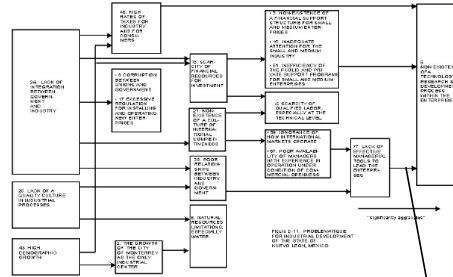


(1) Generate and Clarify Ideas (system elements)

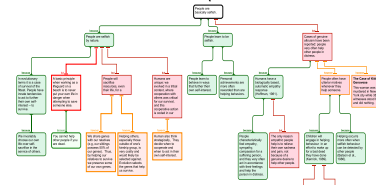
Statement	Category	Number of votes	Sum of ranks
2. Lack of clear incentives to		4	16
23. Clashing personalities and		4	10
12. Challenge of identifying i		3	8
4. Lack of identity for the new		3	9
17. Uncertainty regarding new		2	7
25. Lack of reward systems to		2	6
9. Difficulty in defining cust		2	7
24. Unrecognized value of soci		2	6
5. Specialization (mitigates ag		2	6
7. Lack of clear language that		2	6
13. Overdependence on "bureau		2	7
22. Some individuals want to w		2	7
3. Lack of motivation or intere		2	7
13. Lack of opportunity for fo		1	3
26. Turf issues: individuals w		1	4
32. Someone needs to commit si		1	4
20. Divergence in methods, pro		1	4
28. Not really an existing, re		1	4
32. Institute based on what we		1	4
14. Lack of information/cerai		1	2
10. Lack of translation of res		1	2

(2) Vote, rank order, and select elements for structuring

(3) Structure Elements



(4) Evaluate graphical representation of group logic (element relations)



(5) Evaluate the reasoning supporting each relation in the system of logic

Figure 1. Steps in the IM process

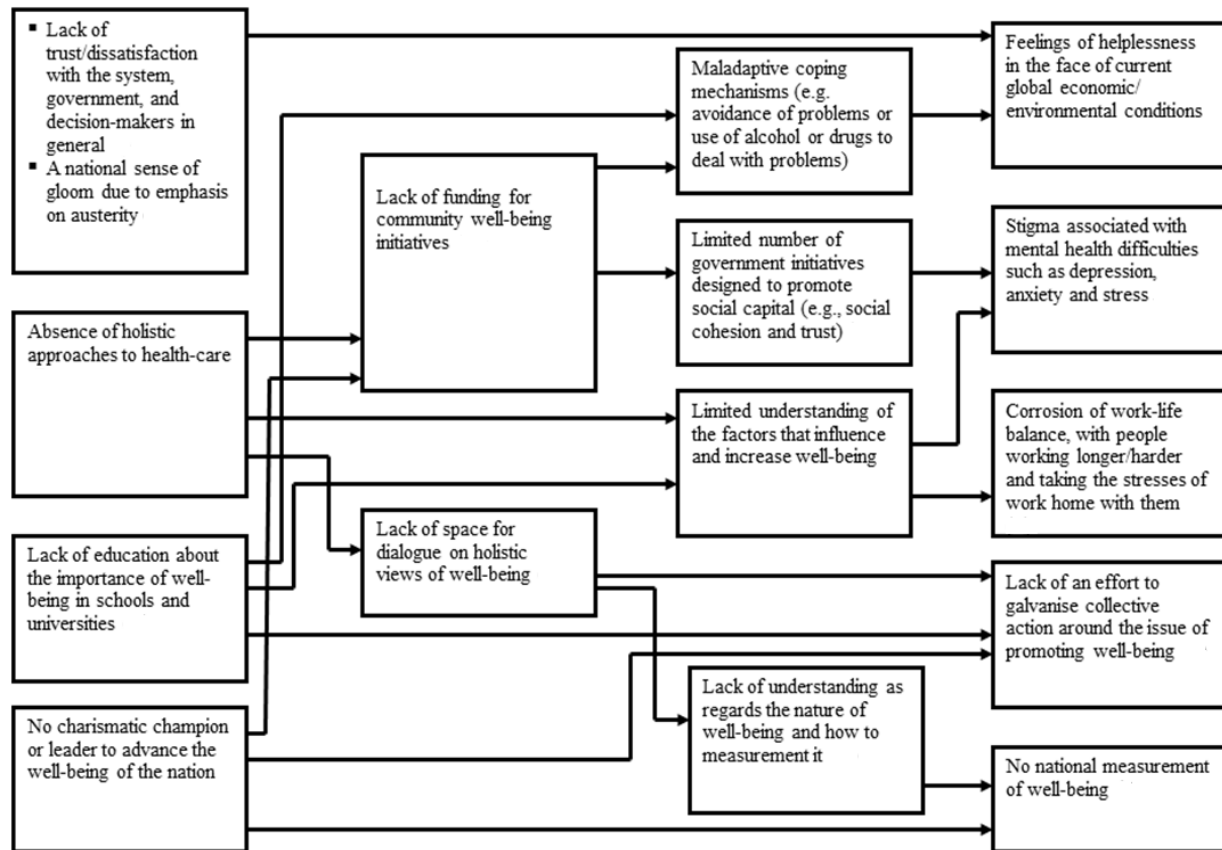


Figure 2. Influence Structure of Barriers to Wellbeing in Ireland.

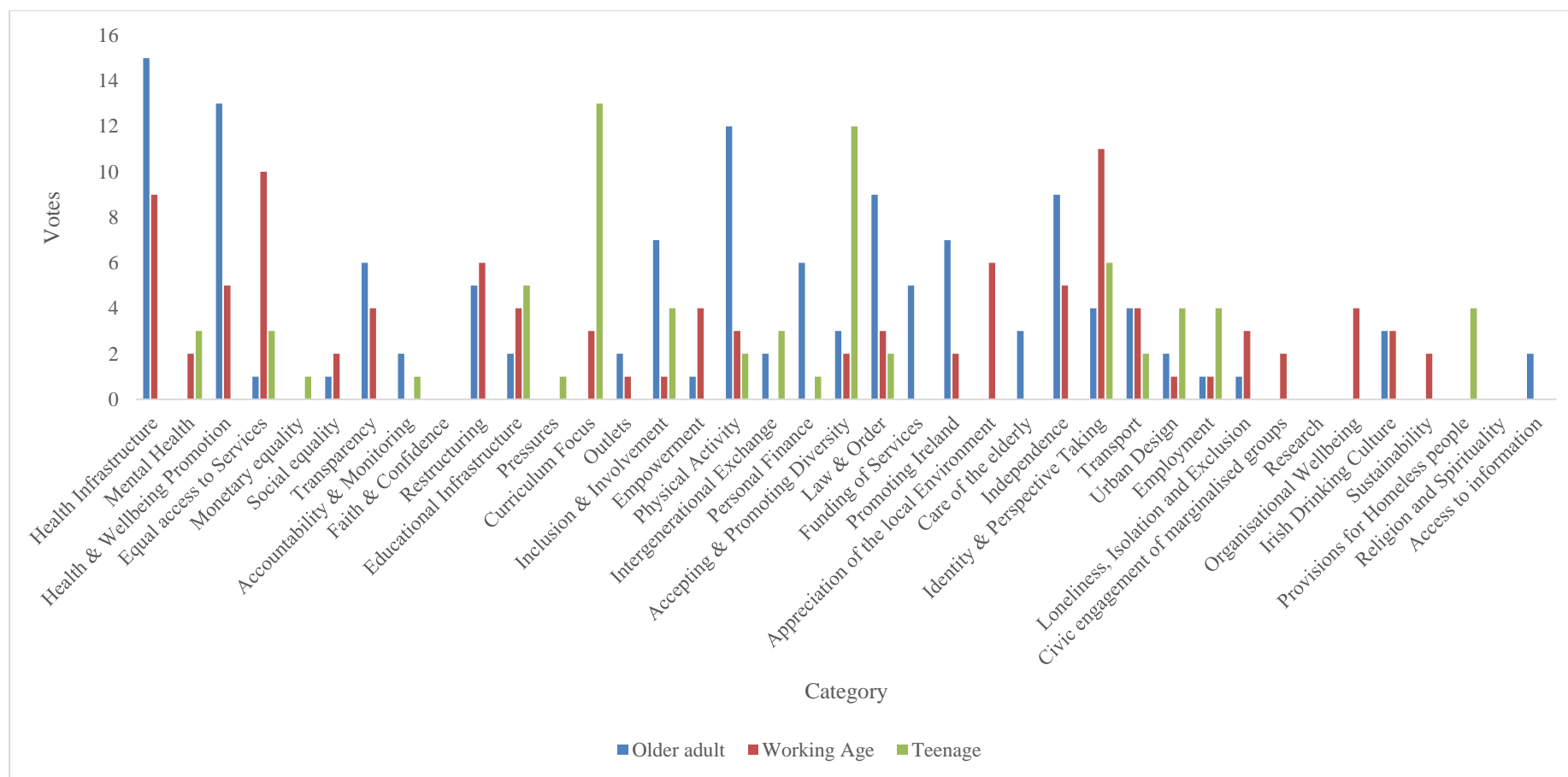


Figure 3. Aggregate votes across 39 categories of strategic objectives, for older adults, working age groups, and teenage groups, respectively.

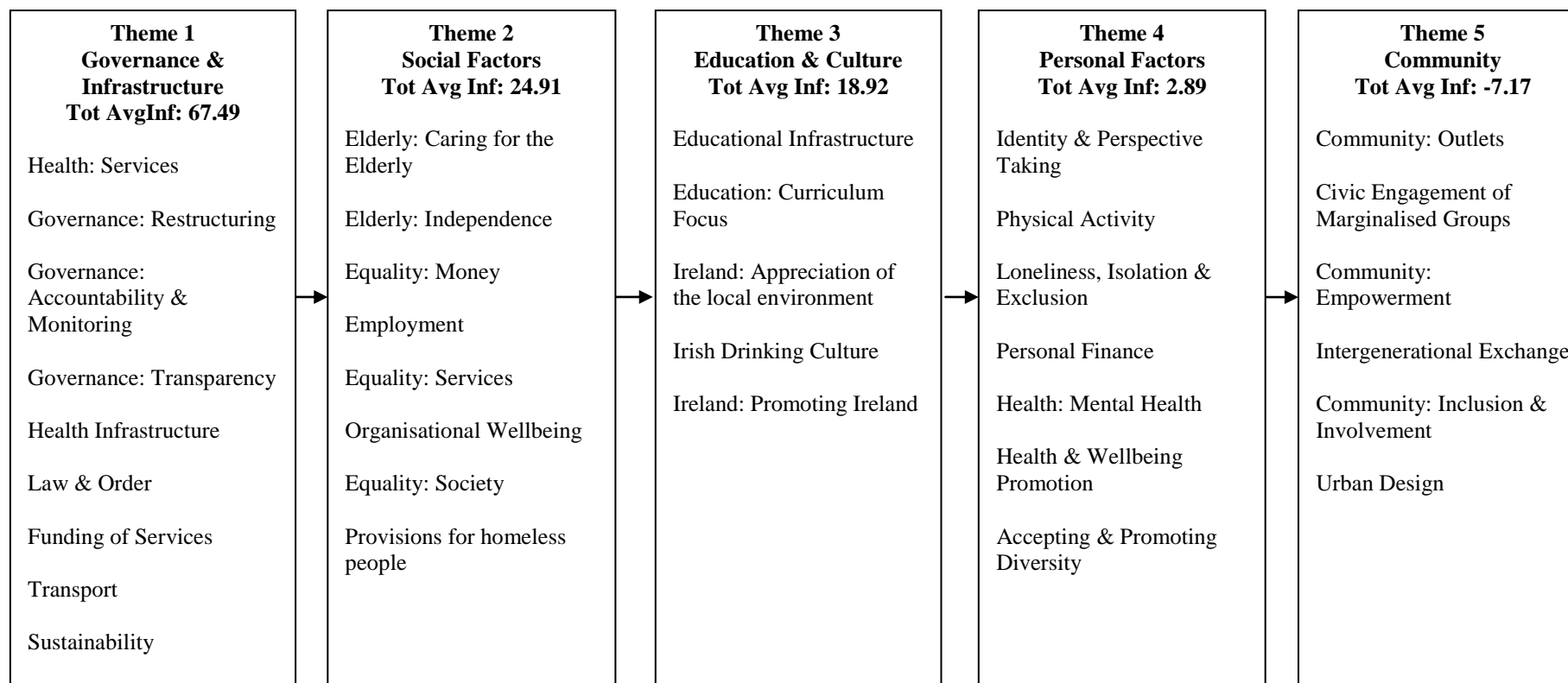


Figure 4. Whole group influence model of high-level category themes

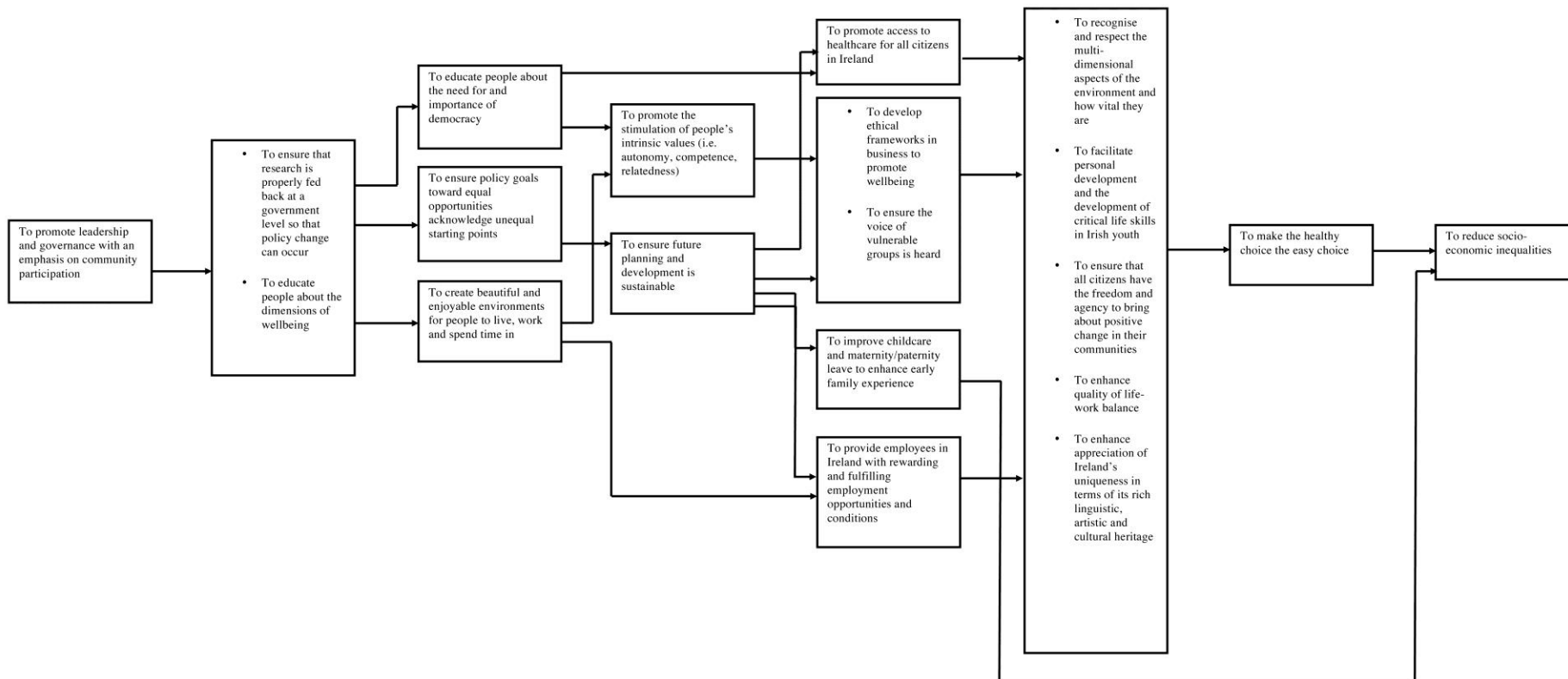


Figure 5. Well-Being in Ireland Conference Strategic Objectives Structure

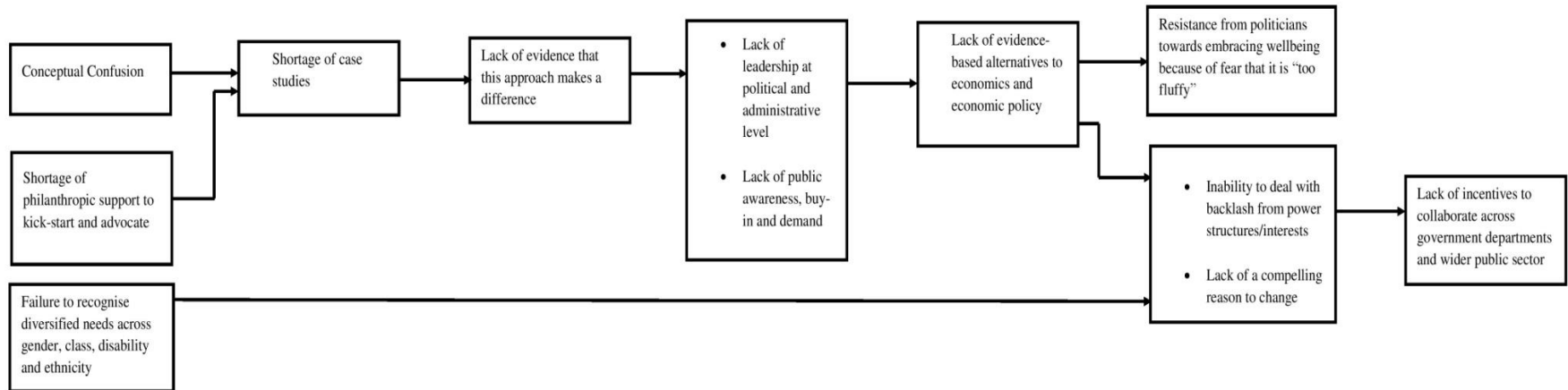


Figure 6: Problematique of barriers to implementing national and international wellbeing policies