
Urban sustainability and gross national happiness: a review of community well-being domains and dimensions

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Abstract: The effort in measuring well-being and happiness by plethora of different indicators and frameworks are stepping up globally, despite critics for not being accepted as the national indicator to promote subjective well-being due to the methodological approach and choices of dimensions employed. This study, reviews current research on community well-being measurement to justify the inclusion of different sustainability metrics to optimize outcomes for national happiness and urban sustainability. Forty-four (44) scientific articles were identified, out of 300 research studies drawn from the electronic data search from the world of science focusing on key dimensions: economic, social, environment, governance, politics, culture, and health. Finding shows that social dimension and objective approach remains the most studied on community well-being with few studies on subjective domain. Finding suggests that a multidisciplinary conceptual framework towards a holistic view is desirable to allow for a more theory-based tool to evaluate multidimensional issues of community well-being at all levels.

Keywords: community assessment; urban dimensions; subjective well-being; sustainable development.

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1 Introduction

The need for indicators to guide sustainable development was emphasised in Rio conference agenda 21. According to the report, indicators of sustainable development need to be developed to provide a strong base for decision making at all levels, and contribute to a self-regulating sustainability of integrated environment and development system (Para. 40.4). Urban development globally, is increasingly becoming a concern among nations towards achieving sustainability. A review of current literature on urban sustainability suggests a plethora of fast-growing research with emphasis on sustainable development. However, very few of this research integrates a holistic system of a framework that identifies and examine the different dimensions of urban sustainability, measure and evaluate them appropriately (Mutisya and Yarime, 2014). With recent advances in research focusing on the understanding and measure of well-being at individual, community, regional and national levels (McCrea et al., 2015), much effort has been devoted to extending the dimensions of measurement and the methodology used in computing performance towards sustainable development (Zaim, 2005). The measurement of well-being is not only limited to economic indicators but also take into consideration social, institutional and ecological dimensions.

Many previous studies did not refer to well-being in terms of dimensions that comprise the notion (McCrea et al., 2015; Kim and Lee, 2014) due to variance in it meaning across culture, group, society and communities (Lee et al., 2015).

These variances called for a common framework of concepts and measure that can assist communities prioritising goals and value towards a holistic view. Recent research concentrate effort on achieving a common framework for obtaining overarching indicators or composite index to measure well-being and social progress (Otoiu et al., 2014). Thus, it is important to include a different sustainability metrics (dimensions) in holistic form to help the understanding of which measure impactful is necessary to optimise community well-being outcomes.

Community well-being is measured as the summation of the individual level of satisfaction with community characteristic (Sirgy et al., 2010). Therefore, defining the level of scale is important when seeking to understand well-being and choosing how to measure. Well-being definition and explanation are typically evaluated along a set of domains and dimensions (McCrea et al., 2015). Domain refers to the highest-level social condition that is measured. In the community well-being context, 'domain' is the generic term denoting an aspect of community well-being in an index. 'Dimension' (or sub-domain) on the other hand measure specific element using a range of indicators items (OECD, JRC and EC, 2008). Dimensions are often considered to represent the domain; however, sometimes used interchangeably in well-being studies. Within each domain or dimension, there are set of indicators against which objective and subjective data may be collected. Thus, the domain encompasses more than one dimension (McCrea et al., 2015) or dimensions underpinned the domains (Land et al., 2011).

In the literature, there is general agreement that subjective well-being is a composite of satisfaction with a number of life domains. However, there is little agreement on which domains constitute the community well-being, and thus should be included in subjective well-being measure (Bernini et al., 2014). There is no one set of domain and dimension that will measure well-being across the spectrum of desired outcomes for all the desired population, nor is there currently a comprehensive well-being measure available for use by local authorities to capture peoples subjective experience of life (Oswald and Wu, 2010) towards sustainability. Many study approach that considers sustainability have included many different specific methods and focused on one or two pillars of the sustainability rather than the holistic term (Davern et al., 2011). For example, the Happy Planet Index (Abdallah et al., 2012), (Gallup-Healthways Wellbeing Index, 2011), Human Development Index, the Economic Intelligence Units Quality of Life, Better Life Index, Community Indicators Victoria, etc. address one particular aspect of sustainability (Wackernagel et al., 2006). Consequently, a different framework of non-identical factors of well-being is used. In this context, if various groups in society have different perceptions of community well-being measurement, then the traditional measurement systems that allow an individual or community to dictate the measurement tool loses validity.

This study, therefore, reviews pertinent literature on community well-being from 2005 to 2015, to explore and evaluate the different dimensions used for assessment community well-being to justify the heuristic inclusion of sustainability dimensions towards a better policy action for gross national happiness and urban sustainable development.

The rest of this paper is organised in the following manner. In Section 1, we discuss the Well-being, happiness and national development. In Section 2, we look at existing measurements of community happiness in terms of domain and dimensions, and also,

a discussion towards sustainable urban community happiness. Section 3 explains the data and methodology for paper source, paper selection and assessment. In Section 4, we discuss the results, and finally, the conclusion with some policy implications.

The findings from this study can significantly contribute to the understanding and development of a more holistic framework to measure well-being towards sustainability (Kim et al., 2014; Moldan et al., 2012; Prilleltensky et al., 2015).

2 Literature review

2.1 Well-being, happiness and national development

An approach to national well-being indicators predates 1972, when Bhutan, the small Asian country stated that gross national happiness (GNH) is a more relevant indicator in measuring the performance of country's well-being than the traditional economic metric (Gross National Product) often used (Ura et al., 2012). The GNH incorporate indicators of environmental well-being domains such as ecological diversity and resilience to calculate national progress. This approach was proposed to the United Nations (UN) resolution, which recommended that member states should embrace happiness and well-being in policies formulation concerning economic and social development (General Assembly of the United Nations, 2011). The 193 UN member states adopted the resolution (Thinley, 2014) and aligned with Millennium Development Goals (MDGs) goal targeted globally. The GNH framework also gives considerable weight to social indicators (health, education, time use, cultural diversity, and community vitality), which intersect with the GNH domain of psychological well-being. Therefore, the aforementioned discussion underscored the need to consider the links between community well-being and sustainable development to provide useful information necessary for policy action to establish enabling conditions for human happiness and well-being (Thinley, 2014).

2.2 Measuring community happiness: domain and dimensions

The community well-being measurement idea reflects a change in approach from the 'top down' imposition of well-being, sustainability, quality of life, etc. to a 'bottom-up' approach that emphasises equity in participation and social empowerment in the development of locally significant understandings of well-being and its measurement (Gahin and Paterson, 2001). 'Urban sustainability' ultimately means improving well-being of the people, and recognises development that is central in satisfying human needs, improvement of long-term well-being by balancing the three dimensions of sustainability, minimising resource consumption and environmental damage, efficient use of resources, ensuring equity and democracy (Huang et al., 2015). Thus, a real sustainable way of life requires holistic integration of social, economic, environmental and governance dimensions (Inter-American, Development and Bank, 2011; World Bank, 2008). On this basis, the community well-being indicators are used extensively by nation, states, regional governments, urban and rural areas, and even neighbourhoods (Ramos and Jones, 2005).

There are many approaches to studying well-being, in which communities can adapt according to needs. In this sense, communities may choose to undertake a quick or in-depth analysis of one or more dimensions; a broader analysis of several dimensions or any other combination reflects that community's values and needs. Therefore, achieving urban sustainability is a significant ethical challenge that required a new set of values-based indicators to measure and motivate the implementation of principles necessary to guide the transition towards sustainability (Dahl, 2012).

2.2.1 Towards sustainable urban community happiness

The modern environmental management literature has stressed the need for community involvement in identifying new measure to monitor progress for sustainable development and environmental management goals (Fraser et al., 2006). Indicators are a powerful tool for making important dimensions of the environment and society visible and enabling management (Dahl, 2012).

Literature has shown evidence of a relationship between sustainable development and happiness. A sustainable lifestyle predicts the condition of satisfaction that leads to psychological well-being (Brown and Kasser, 2005). For instance, Abdallah et al. (2012) in Happy Planet Index (HPI), stated that the HPI is higher in countries that are sustainable in consumption of natural resources. Most countries (European and also Australia) have established subjective well-being of the inhabitants as a national and sustainable policy goal. Developing an integrated measure of progress in line with these goals offer the global community "the opportunity to define what sustainability well-being means, how to measure it and how to achieve it" (Costanza, 2014, p.283–284). Accordingly, reviewing previous studies on community well-being dimensions is essential to assess the extent to which trans-disciplinary effort in research integrate sustainability metrics towards building a global consensus on sustainable development measurement that would improve community happiness and help to build sustainable urban communities.

3 Methods

3.1 Paper selection

A common procedure for understanding the inclusion of sustainability dimensions in community happiness measurement is to review previous research based on peer-reviewed journal papers, as well as books and other relevant documents. The study utilises the electronic data search from the world of science (Wiley online, Springer, Questia, EBSCOhost, SCOPUS, SociIndex, ASSIA (Applied Social Sciences Indexes and Abstracts), EconLit, Google Scholar and Google Search. Research paper titles, abstract, and keywords containing search terms 'community well-being' and 'community happiness', 'community well-being measurement', 'community indicators' and 'well-being and sustainability' from research journals in the last 10 years (2005–2015) focusing explicitly on papers on community well-being or happiness. Various reports on community well-being and happiness were simultaneously identified. For papers to be

considered relevant for this study, it has to provide either an explicit definition or conceptualisation or measure of community well-being and happiness in empirical analysis. Several numbers of records that included those relevant themes were retrieved (Moldan et al., 2012). However, the papers were very few after reviewing due to the exclusion of many studies reported by virtue of abstract form and duplicate publication. We search further to augment with few records on program, government or private reports in the practical field from Google search using the same terms.

According to Trumpp et al. (2015) "Community well-being is a term that varies in meaning by culture, group, society, and communities", and despite the significance of several research streams, a clear and generally accepted definition is still lacking because the concept is still new (Kim and Lee, 2014). Community well-being can be thought of as encompassing "the broad range of social, economic, environmental, cultural and governance, dimensions and priorities identified as important by a particular community, population group or society (Cox et al., 2010, p.72), and also include cultural, and political conditions identified as essential for them to flourish and fulfil their potential (Wiseman and Brasher, 2008). By this assumption and definition, we chose to look at only those measurement systems that intend to provide a holistic view of communities rather than focusing on simple one aspect (e.g., health, income equality, etc.). Based on this, we identified 44 scientific papers, out of a total of 300 research papers drawn from the literature and previous studies focusing on seven key dimensions; economic, social, environmental, governance, health, cultural and Politics used for gauging community well-being explicitly for this review analysis. Similarly, consideration was given to data used in the studies. This includes objective data which is usually obtained from census or secondary sources or subjective data that ask residents' perceptions or feelings. This number of papers generated is remarkable because it shows that the vast majority of studies concerned with CWB fail to specify explicitly the definition of this multi-dimension construct. Furthermore, we included sustainability with CWB approach. Although, sustainability is the long-term approach, however, integrating with CWB approach will assist and serve as a guiding principle for local governments. Also, for "community well-being to be useful practically for local planning, the concept of sustainability, progress, and development are essential" (Kim and Lee, 2014, p.536). Moreover, CWB approach is a response to previous narrow definitions of progress (GDP) which was criticised for not been adequate to portray well-being (Stiglitz et al., 2009)

Therefore, to evaluate the indices and to report the result from the indemnified papers in this study, we developed a standardised data extraction table (Table 1) consist of seven categories based on the fundamental structure reflected within the sustainability and health framework. The items included the indices organised into dimension sectors such as economic, social, and environmental (Lee et al., 2015), including other recent indices such as governance, political and health used in some studies. By our definition, we view the community happiness measurement as systems from a multidimensional perspective that provide a holistic view of communities' happiness regarding sustainable development. From the reviewed papers, we extracted the dimensions each, number of indicators, name and type, type of data – objective or subjective, design participant, sample size, analytical tool, and area coverage.

Table 1 Summary of community well-being indicators by dimensions (continued)

Author	Aim	Indicator Name	Type	No domain	No of indicator	Dimension/indicator categories												Weighting types	Participans in design	No of Sample	Analytical tool used	Αντικείμενο έρευνας	
						Economic	Social	Environmental	Governance	Health	Culture	Political	Obj	Subj	Obj	Subj	Obj						Subj
Conway et al. (2009)	To develop a monitoring system to provide an early warning of changes within the social, economic and environmental well-being of Clark County and its residents	Early Warning Indicator System	Web based indicator survey	5	53	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No	No	USA	
Stubbs (2009)	to understand the contribution of non-economic wellbeing of regional communities and conversely to understand the impact on community wellbeing	Measuring Community Wellbeing report	Survey based indicator	3	28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No	400	Descriptive Statistics	Australia
Mayer and Knox (2009)	to assess the quality of life, as that is inherently place-based	Slow City Well-being Indicator	Survey based indicator		54	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No	77	Index of Well-being (INW) Index of Risk (ISR) & percentage	Italy, Germany & Britain
Sirgy et al. (2010)	to evaluate the QoL with the integration of subjective dimensions in the city of Noombah	Community Well-being Composite Index	Survey based indicator	14		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No	352	Mean, Standard deviation, multiple regression and Factor analysis	Michigan, USA (1978-2001)

Table 1 Summary of community well-being indicators by dimensions (continued)

Author	Aim	Indicator name	Type	No domain	No of indicator	Dimensions/indicator categories												Weighting types	Participants in design	No of Sample	Analytical tool used	Country		
						Economic		Social		Environmental		Governance		Health		Culture							Politics	
						Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj						Obj	Subj
Cook and Lindle (2010)	to identify incidence and prevalence of selected social problems for communities and in particular at risk groups within the community	Indices of Community Well-Being	Survey based indicator	3	18	✓	X	✓	X	✓	X	X	X	X	X	X	X	X	X	GIS, Ranking, Index, volume	Canada			
Masareham et al., (2010)	to develop a conceptual framework for common local sustainability indicators within a regional context, that are supported by a participative approach and allows interaction between local and regional scales.	Common local indicator	Survey base GIS indicators	3	15	✓	X	✓	X	✓	X	X	X	X	X	X	X	X	X	Expert	16 municipalities	No		

Table 1 Summary of community well-being indicators by dimensions (continued)

Author	Aim	Indicator name	Type	No domain	No of indicator	Dimensions/indicator categories												No of Sample	Analytical tool used	Participants in design	Weighting types	Coverage									
						Economic			Social			Environmental			Governance								Health			Culture			Politic		
						Obj	Subj	Subj	Obj	Subj	Subj	Obj	Subj	Subj	Obj	Subj	Subj						Obj	Subj	Subj	Obj	Subj	Subj	Obj	Subj	
Helmsdatter et al. (2011)	to develop a basic model to sustain community projects	--	Survey based indicator	9	30	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	Minnesota USA				
Fopez et al. (2011)	to develop a community wellbeing index (CWI) using the PWI and NWT format to measure residents' evaluation of their community, considering elements from a subjective perspective.	Community Well-Being Index	Survey based indicator	3		✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	Spain	1,106	Rasch analysis, ANOVA and CFA	Citizens	
Viroha et al. (2011)	to develop a happiness index among the poor	Philippine Happiness Index (PHI)	Composite index	18		X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	Philippines		Percentage			

Table 1 Summary of community well-being indicators by dimensions (continued)

Author	Aim	Indicator name	Type	No of domain	No of indicator	Dimensions/indicator categories												Aggregat	Weighting types	Participants in design	No of Sample	Analytical tool used	Area Covered		
						Economic		Social		Environmental		Governance		Health		Culture								Politics	
						Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj							Obj	Subj
Santa Cruz County (2012)	Evaluates quality of life in six subject areas: the economy, education, health, public safety, the social environment, and the natural environment.	Santa Cruz County Community assessment project (CAP)	Survey based indicator	6	6	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	No	.	Citizens and public officers	575 residents	Normalized Pearson product-moment correlation	Santa Cruz County, USA
Quesada et al. (2012)	Assess the relationship between community happiness and socio-economic well-being between well-deprived, well-off and socially-deprived community	Gross National Happiness	Survey based indicator	2	2	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	No	.	Citizens and public officers	575 residents	Normalized Pearson product-moment correlation	London
Uma et al. (2012)	to develop alternative framework of development to measure people's happiness and well-being	Gross National Happiness Index (GNHI)	Survey based indicator	9	33	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Yes	.	Citizens		Percentage (headcount and breadth ratio)	Bhutan
Mohanty and Tanton (2012)	to identify the extent of well-being, vulnerability, resilience and adaptive capacity in the Murray Darling Basin	Well-being framework with adaptive capacity	Survey based indicator	5	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No	.				Australia
Fiksel and Frederickson (2012)	to develop a conceptual framework that could be used as a communication and research planning tool at EPA, Office of Research and Development Sustainable and Healthy Communities Research Program	EPA Sustainable and healthy community framework	Survey based indicator			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No	.			Integrated DHSIR	

Table 1 Summary of community well-being indicators by dimensions (continued)

Author	Aim	Indicator name	Type	No of domain	No of indicator	Dimensions/indicator categories																Weighting types	Participants in design	No of Sample	Analytical tool used	Coverage				
						Economic			Social			Environmental			Governance			Health			Culture						Politic			
						Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj	Obj	Subj							Obj	Subj	
Jurado and Perez-Mayo (2012)	Attempt to calculate a comparative multidimensional index of economic well-being for the Spanish Autonomous Communities.	Multidimensional Well-being Index	Survey indicator based	4	12	✓	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	X	X	X	X	Data Envelopment Analysis (DEA)	Spain (2000-2006)			
Moldan et al. (2012)	To critically review the state of the art in assessing the quality of sustainability indicators and contribute to the development of a suitable methodology for that.		Survey base GIS indicators	9	9	X	X	✓	X	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Average ranking; Least square model	Czech Republic	
Snake (2012)	To measure the well-being of the people of Guelph	Guelph Community wellbeing Survey	Survey indicator based	8	8	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	X	X	X	X	X	X	1401	Canada

Most happiness studies have treated happiness as synonymous with life satisfaction and subjective well-being to emphasise the emotional, personal characteristics of this concept (Veenhoven, 2012). Thus, measurements of happiness are more concerned with subjective evaluations of an individual level, while CWB encompasses both objective and subjective evaluations at the collective level (Lee et al., 2015).

4 Results

4.1 Community well-being dimension categorisation

Of the forty-four papers reviewed, the indices show certain observable trends in the choices of dimensions used by different researchers. The result reveals a partial measure of community well-being from the indices (see Table 2). The social dimension 41 (93.2%), economic dimension 38 (86.3%), and environmental dimension 37 (84.1%) are mostly utilised dimensions. While health dimension with 23 (52.3%), governance dimension with 19 (43.2%), culture dimension with 14 (31.1%), and political dimension with 5 (11.4%) are less used compare to the triple bottom dimensions in the reviewed papers. This result reflects the history of the indicators, since it started with economic indicators and later incorporated as socioeconomic indicators. However, the political dimension is still lacking in comparison to the other dimensions, and often interchangeably used with governance in some of the studies.

Table 2 Dimension categorisation from the sampled papers

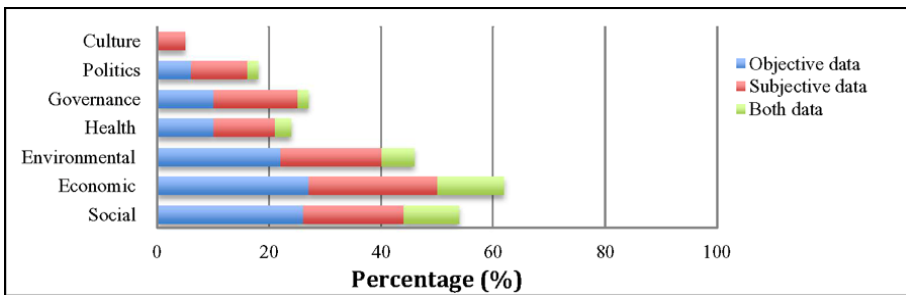
Categorised dimensions	Quantitative data type			No. of papers (n = 44)	
	Objective	Subjective	Both	No.	Percentage (%)
Social	28	18	10	41	93.2
Economic	29	23	12	38	86.3
Environmental	23	18	6	37	84.1
Health	11	11	3	23	52.3
Governance	11	15	2	19	43.2
Politics	6	10	2	14	31.8
Culture	–	5	–	5	11.4

4.2 Data type: subjective and objective

The literature on well-being has typically distinguished between objective and subjective well-being. Both objective and subjective well-being provide key information about the well-being of the people. Of all the 44 papers studied, the objective data are mostly utilised for the dimensions considered, compared to the subjective data which are exceptionally used in the assessment of health, governance, political and cultural dimensions. Only a few studies employed both approaches in a study (Figure 1). The objective approach is most widely studies due to its convenience and accessibility of objective data, whereas few studies employ subjective data due to extreme scepticism surrounding the data. “Subjective indicators are tricky to compare across societies and culture” (Costanza, 2014). However, subjective well-being assessment is essential to an

understanding of individual of their communities and governance (Gourley et al., 2013). Measures of subjective well-being are associated with a broad range of life circumstances (Blanchflower and Oswald, 2011). Therefore, it can be deduced from the review findings that most community well-being measure still focuses mostly on the objective assessment than subjective type. Though the objective data offer the convenience and value of cross-comparison across communities, however, the subjective data play a fundamental role in community well-being measurement. The reason is that the community well-being emphasises the community in its definition and interpretation and hence offer the communities the opportunity of defining the term in a unique and various suitable ways (Murphy, 2010) which are not included in the objective approach. The subjective well-being approach is recommended as the most appropriate measure of societal progress (Costanza, 2014). Therefore, focusing majorly on objective data will not reflect the different value sets of communities subjectively and thus will lead to a partial community well-being measurement.

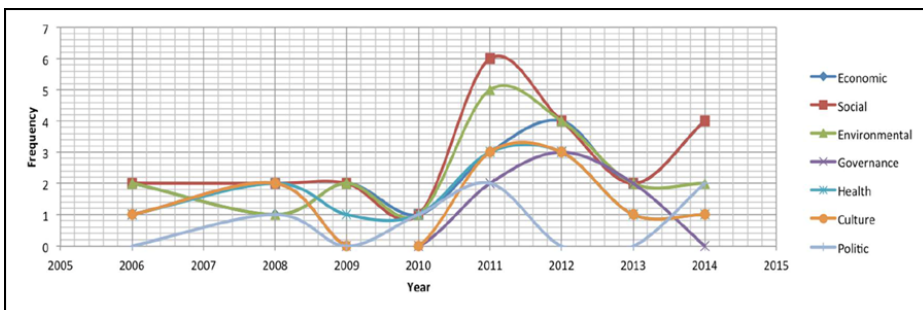
Figure 1 The quantitative data across the community well-being dimensions (see online version for colours)



4.3 Changing pattern of dimensions data

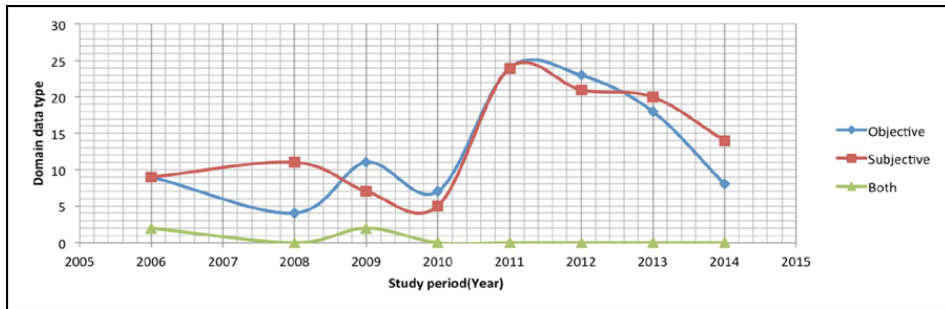
The review findings show the trend of change across the well-being dimension over time. The pattern reveals the frequency of use across all the dimensions of well-being for the temporal period considered, with increasing use of social, economic, environmental, health and cultural dimensions between 2010 and 2012 (Figure 2).

Figure 2 Temporal changes across community well-being dimensions study (see online version for colours)



Additionally, the temporal trend in the contextual use of objective and subjective domain across the dimensions was reviewed. The finding reveals a competing scenario between the used of objective and subjective approach over time, with rising use in 2011, and a decline in the rate of use of objective approach (Figure 3). The decline in objective approach could be attributed to increasing concern to employ subjective well-being measure in current research. This is because the objective approach merely signifies conditions of living and ignored the subjective well-being of life. The subjective approach, on the other hand, is direct measures of people's feeling, cognitive perceptions or satisfaction, thus essential in community well-being measurement (Blanchflower and Oswald, 2011).

Figure 3 Changing trend in domain data used across dimensions (see online version for colours)



4.4 Geographic distribution of studies across countries and regions

Considering the global pattern of community well-being study across countries and regions, the findings reveal that the majority of the studies were carried out in North America, Europe, and the Oceanic, with few studies from Asia, Africa/Middle East and South America (Figure 4). Of all the 44 papers considered, the majority of the studies were specifically developed in USA, Australia, and Canada, followed by London, Korea, Iran, Germany and New Zealand, with few studies from others countries (Figure 5). This implies that though countries may pay attention to community well-being research to achieve a certain level of economic progress. However, despite many studies, emphasis on the holistic development approaches with consideration to subjective well-being among countries follow the previous path of indicator development.

5 Discussions

This study reviewed pertinent literature on community well-being from 2005 to 2015 to explore and evaluate the different dimensions used for assessment of community well-being to justify the heuristic inclusion of sustainability dimensions towards a better policy action for GNH and urban sustainable development. The findings from the study reveal that different conceptual frameworks studied by researchers have employed various dimensions to assess community well-being. The study show that, social, economic and environmental dimensions are more widely studied (Lee et al., 2015; Cloutier et al., 2014; Forjaz et al., 2011; Ura et al., 2012; Mohanty and Tanton, 2012; Fiksel and Frederickson, 2012), than the health, governance, cultural and the political dimension of

community well-being (Virola et al., 2011). This difference in dimensions hitherto makes it impossible to formulate one identical conceptual framework due to the different methodological approach adapted, as well as the multidimensional nature of the subject (Lee et al., 2015). Also, the broad range of disciplines among the researchers has made the approach and the term mostly used for community well-being very difficult and with huge differences. This variation in the perceptions among different groups in society having different community well-being measurement has made the traditional measurement systems of an individual or community measurement criteria loses validity (Christakopoulou et al., 2001). However, sustainability indicators' with the corresponding dimensions and subjective well-being approach is indispensable for the development of integrated systems of CWB to address sustainability (Wu, 2014; Huang et al., 2015). Developing such a holistic framework requires eliciting an opinion from multidisciplinary experts to contribute to such multidimensional discourse. This approach would not only serve, as a source of mutual inspiration among the professional but would improve the validity of the framework with significant output for governance and policymakers (Kamp et al., 2003).

Figure 4 The distribution of community well-being study across regional continents (see online version for colours)

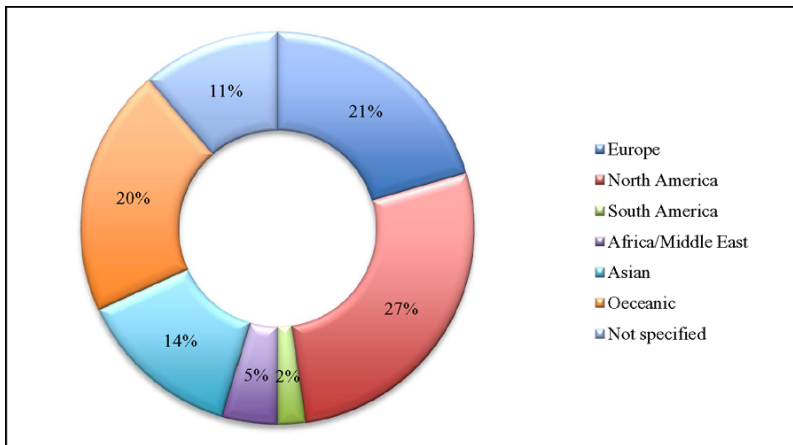
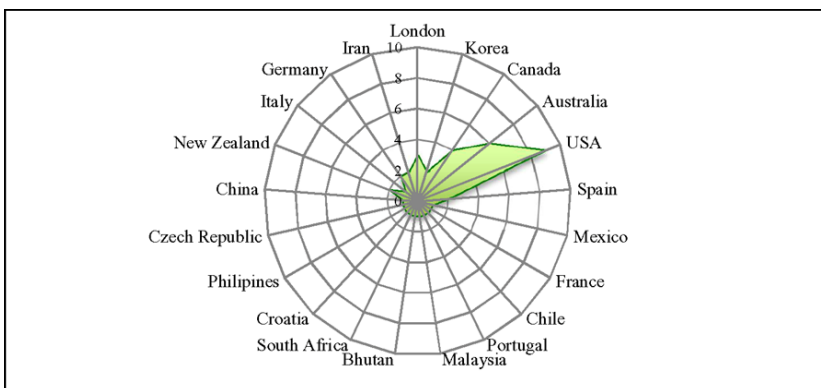


Figure 5 The distribution of community well-being study across countries (see online version for colours)



In addition, as a focus of sustainable development, urban sustainability has become increasingly prominent on political agendas and scientific studies. Thus the efforts within the last decades have increased across the world (Shen et al., 2011; Wu, 2014). However, how urban sustainability is defined certainly affects how its indicators are derived. Urban sustainability has been defined in various ways, with different criteria and emphases. Most of the definitions are derivations from those of sustainability, focusing on the improvement of long-term human well-being by balancing the holistic sustainability dimensions, minimising resource consumption and environmental damage, maximising resource use efficiency, and ensuring equity and democracy. Sustainability research has increasingly become highly quantitative and includes more sustainability dimensions simultaneously to allow for more targeted policies implementation and monitoring (Mayer, 2008). Thus, holistic sustainability framework can be integrated with community well-being approach for both short and long-term planning.

6 Conclusions

Government at all level have gained interest and involved in active enhancement of people's well-being (Cobb and Rixford, 2005). However, past social indicators and community indicators are rather more descriptive than diagnostic (Kim and Lee, 2014). Community well-being measure at the appropriate level is a useful guiding principle for local governments. The previous concept such as sustainability or happiness is limited. Sustainability tends to focus on natural environment or resources, while happiness tends to emphasise only those factors that incite a specific type of emotion in an individual. However, with the current issues of global warming and environment have shown that local planning must consider factors that do not have immediate connections to individuals' emotions. Community well-being is more comprehensive and can, therefore, assist local governments in balancing and directing several policies.

Urban sustainability studies seem to focus increasingly on the relationship between ecosystem services and human well-being (Nassauer and Raskin, 2014; Wu, 2014). Wu (2014) defined urban sustainability as "an adaptive process of facilitating and maintaining a virtual cycle between ecosystem services and human well-being through concerted ecological, economic, and social actions in response to changes within and beyond the urban landscape". Thus, to achieve sustainability, social and environmental issues must be addressed. Maintaining a healthy environment and making the transition to environmental sustainability requires human societies that function well (Rogers et al., 2012). The Human-environmental system is multi-dimensional, influenced by many different economic, social, and environmental characteristics (Mayer and Knox, 2009). A high level of well-being is a result of the interplay of these holistic sustainability factors that collectively make individual satisfied with their life.

Consequently, cities and urban areas require a holistic framework for development to captures all of the environmental, economic, social, and governance dimensions to fulfil the multifaceted functions for a range of action strategies for long-term sustainability and well-being of the community (Community Development Society, 2014). Such a framework will address the challenges of sustainability through the development and application of appropriate measurements and indicators. In other words, the practice of sustainable development can serve a vital role in actualising community well-being and happiness as defined and reported by those who live it (the residents of villages, towns,

and cities). This study, therefore, provide useful information to guide the local government in service delivery and direct policies for effective community development and sustainability.

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