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Toward a holistic sustainable and happy neighborhood development assessment tool: A critical review of relevant literature

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ABSTRACT

Holistic ecological indices can integrate the ways in which humans derive happiness (both pleasure and meaning) as either extractive, balanced, or regenerative processes. This critical review paper describes the need for and initial development of a new comprehensive research assessment tool for sustainable and happy neighborhoods: the Sustainable Neighborhoods for Happiness assessment (SNfHa) Tool. The SNfHa builds upon the foundation of the Sustainable Neighborhoods for Happiness Index (Cloutier et al., 2014a) and associated Sustainable Neighborhoods for Happiness Index (Cloutier et al., 2014a) and associated Sustainable Neighborhoods for Happiness Index (Cloutier et al., 2014a). We first provide a critical literature review of the most relevant quantitative and qualitative measures within five domains: happiness, and ecological, economic, social, and cultural sustainability, to inform the development of a comprehensive assessment tool. Next, we provide brief insight on a neighborhoods for Happiness projects. Ultimately, we suggest that sustainable neighborhood development should promote the pursuit of happiness while regenerating local economies and ecosystems, rekindling or enhancing social connections, and revitalizing or maintaining desired cultural traditions. We need holistic indices that can promote the growth toward such a vision.

1. Introduction

Ecological indicators typically include aspects of environmental quality, health or human interaction with nature. We suggest, however, that holistic ecological indices can integrate the ways in which humans derive happiness (both pleasure and meaning) as either extractive or regenerative ecological processes. Further, we propose that a comprehensive ecological index can also include and balance the environmental, social, economic and cultural tradeoffs of the pursuit of happiness.

Happiness has experienced a bloom of new research over the last few decades (O'Brien, 2005; Fordyce, 1986), while the relationship between sustainability and happiness is a growing area of study. The connection between happiness and place has been a particular area of interest for the field of sustainability (and especially in sustainable community development) (Pfeiffer and Cloutier, 2016; Paralkar et al., 2016; Cloutier and Pfeiffer, 2015; Zidansek, 2007; O'Brien, 2008; O'Brien, 2005). The intersection offers unique observation and intervention points. However, because many assessment efforts lack the cultural context of place and cultural perspectives of individuals (Sterling et al., 2017), a comprehensive assessment framework that includes accurate indicators and relevant success criteria to assess the local outcomes of sustainability management actions is needed (Carpenter et al., 2009). The use of a culturally sensitive and comprehensive assessment tool could empower policymakers and planners to make more informed community development decisions, leading to increased happiness and well-being among their constituents, while also enhancing a move toward sustainability. This paper highlights the need for and conceptualizes a new comprehensive tool to assess happiness and sustainable development in neighborhoods: the Sustainable Neighborhoods for Happiness (SNfHa) assessment. The SNfHa (an extension of the Sustainable Neighborhoods for Happiness Index (SNHI)) was developed based on a critical review of the existing literature, and insight from related community projects and current sustainable neighborhood development efforts.

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Review





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1.1. Development of original SNHI

In a review of relevant literature by Cloutier et al. (2013), the authors found strong evidence that happiness and sustainable community development are linked; and though there is a clear relationship, direction and causality are not well understood. The authors suggest that community design can increase individuals' opportunities to pursue happiness, while preserving those of future generations, by integrating human dimensions of sustainability into current planning and development practices. Analyses of two urban sustainability indices in the United States revealed strong correlations between self-reported happiness of residents and several major scoring groups, including: "four out of nine categories that comprise the Green City Index, including energy, waste, buildings, and environmental governance, and five out of fifteen categories that comprise the SustainLane US City Rankings, including metro street and freeway congestion, green (LEED) building, air quality, local food and agriculture and housing affordability." The authors used this data to score cities on their performance in sustainable development, weighted by self-reported happiness ratings from the Gallup Healthways Well-Being Index, and found that cities reporting the highest levels of happiness are those with the most policies supporting and promoting sustainability. The authors, however, emphasize that their results are limited, and do not indicate the causation and directionality of this connection.

Subsequently, Cloutier et al. (2014a) developed the Sustainable Neighborhoods for Happiness Index (SNHI) as a collection of nine subsystems of community development, essential municipal functions that link both happiness and sustainability issues. The SNHI was developed "...to assess and compare how well individual cities, towns, neighborhoods and communities embrace sustainable practices and how these practices translate to opportunities for residents to pursue happiness," (Cloutier et al., 2014a, p. 148). The authors scored 16 US cities (and subsequently 19 additional US coastal cities in Cloutier et al. (2014b)) using the SNHI. SNHI scores help cities to determine how they compare with other cities and to identify areas of improvement to simultaneously increase sustainability and happiness among their residents. The index led to several current and planned Sustainable Neighborhoods for Happiness projects in the United States, Guatemala, Mexico, and Bolivia, as guided by the successively developed Sustainable Neighborhoods for Happiness Framework (SNfH Framework) (Cloutier and Pfeiffer, 2015) and assessment of relationships between neighborhood sustainability and happiness (Pfeiffer and Cloutier, 2016). In short, the projects are meant to be co-creative processes for sustainable neighborhood development that also promote opportunities for happiness (Cloutier and Pfeiffer, 2015).

1.2. Support for new SNfH assessment

Despite efforts to assess neighborhood sustainability and happiness, recent developments have pushed the SNfH projects toward a new objective of promoting equitable access to pathways toward happiness (in search of self-actualization, self-transcendence or meaning) that have net neutral or positive ecological, economic, social and cultural sustainability implications. SNfH interventions often involve tradeoffs among these dimensions (for example, a project that increases economic activity may create waste, so we must simultaneously consider the project's impact on the ecosystem). We suggest that the pursuit of individual and community happiness should not decrease the combined effects of ecological, economic, social and cultural sustainability. Rather, sustainable neighborhood development should promote the pursuit of happiness while regenerating local economies and ecosystems, rekindling or enhancing social connections, and revitalizing or maintaining desired cultural traditions.

Given community development trade-offs may produce negative outcomes in some dimensions while producing positive outcomes in others, a framework is needed that can balance the values of these tradeoffs and approximate whether their potential net impact is positive, negative, or neutral. In this paper, we provide a critical review of existing literature to develop a research framework to assess the tradeoffs of the SNfH projects, capturing quantitative and qualitative aspects of five domains: happiness, ecological, economic, social, and cultural sustainability. Further, we briefly introduce neighborhood development efforts with completed and current projects to highlight the usefulness of such a framework.

2. Materials and methods

This article describes the early development of an assessment tool, which is designed to estimate and measure the net impact of neighborhood level sustainability and happiness projects. To develop this tool, we first conducted a critical search of the literature to identify commonly used measures in five domains: happiness, social, cultural, economic, and ecological sustainability. The search also yielded one comprehensive measure which is included in the results. The goal was to develop a robust pool of potential indicators for the assessment of neighborhood level sustainability and happiness projects. We then combined the most appropriate indicators to form an assessment framework for the SNfH projects. Finally, we briefly provide insights to a neighborhood development project in the Southwestern United States where the assessment framework is described as a potential tool for the future.

3. Results and discussion

The results of the critical literature review assessing the respective domains of the SNfH Assessment Tool are displayed as strongly recommended measures (Table 1) and other recommended measures (Table 2). The measures that we strongly recommend are summarized in Section 3.1 and Table 1 below, while those that we recommend as potential measures for the future are also summarized in Section 3.1, and depicted in Table 2. Ultimately, the indicators selected are meant to inform the outcomes of current and future projects, while being adaptable to future context, needs and visions.

3.1. Literature review and research measures

3.1.1. Happiness measures

Happiness can be challenging to conceptualize, operationalize and measure. O'Brien (2005) notes that part of what makes happiness so difficult to measure is the challenge to define what happiness truly *is*, and that research tends to conceptualize happiness differently from author to author. For the most part, happiness is understood as a subjective state of wellbeing as supported by some objective indicators. Subjective measures of happiness include a personal evaluation of one's own happiness, while objective measures mostly consider measurable outcomes like health statistics, economic conditions, stress indicators, time balance, and proximity to nature.

Subjective wellbeing is widely-cited as the guiding principle of asking subjects to evaluate their own levels of happiness, as individuals are typically the best source for evaluation (Stiglitz, et al., 2009). A number of well-cited, reliable, and valid measures of happiness exist. For instance, early pioneering work by Wessman and Ricks (1966) resulted in the Personal Feeling Scales (PFS). The PFS was an important early step in the development of reliable happiness measures; it was known as the "grand daddy" of subjective happiness scales in its time (Fordyce, 1988). Through subsequent work by Fordyce (who also developed the Psychapp inventory (Fordyce, 1986)), The Happiness Measures survey was born. This method is easily administered as it asks only two questions, but tends to result in significant variation across responses (Fordyce, 1988). Because of its simplicity and response variability, The Happiness Measures survey provides good potential as part of the SNfH Assessment Tool. The Satisfaction With Life Scale Download English Version:

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