Factors Shaping Urban Planning for Sustainability in Amsterdam and Singapore

Daniel Leong | dj2128@columbia.edu | Urban Studies Program | Columbia College | April 2012 | Thesis Advisor: Prof. Susan Gladstone

Introduction
The fight for a sustainable world will be decided by what happens in cities. Urban planning can shape how cities are built and used, thereby shaping their impacts on the environment. Need to understand how urban planning for sustainability is shaped, so that it can be consciously shaped to facilitate the development of more sustainable cities.

1. Respondents’ conceptualizations of urban sustainability were correlated with the following factors:
   1. Respondents’ education levels & Public Service Motivation (PSM) levels
   2. The rates at which respondents discussed urban sustainability with other stakeholders
   3. The degree to which respondents’ agencies were familial and bureaucratic

2. The rates at which respondents engaged in various interactions with other stakeholders were also correlated with respondents’ PSM levels and the organizational characteristics of their agencies

3. The degree to which respondents’ agencies were familial and bureaucratic

Finding 1: Respondents’ conceptualizations of urban sustainability were correlated with the following factors:
   1. Respondents’ education levels & Public Service Motivation (PSM) levels
   2. The rates at which respondents discussed urban sustainability with other stakeholders
   3. The degree to which respondents’ agencies were familial and bureaucratic

Finding 2: The rates at which respondents engaged in various interactions with other stakeholders were also correlated with respondents’ PSM levels and the organizational characteristics of their agencies

Finding 3: The rates at which respondents engaged in various interactions with other stakeholders were also correlated with respondents’ PSM levels and the organizational characteristics of their agencies

Conclusion
A Model of Factors Shaping Urban Planning for Sustainability in Amsterdam and Singapore

Support for Urban Sustainability Policies
Education Level
PSM
Conceptualizations of Urban Sustainability
Organizational Factors
Individual-Level Factors
Interactional Factors

Methodology
Online Survey

Planning Systems
Amsterdam
National
Spatial Planning Act 2008
Municipal
Development Plan
National

Singapore
National
Planning Act 1998
Provincial
Concept Plan
Municipal
Master Plan
Development Plan

Qualitative Interviews & Questionnaires

Finding 2:
The rates at which respondents engaged in various interactions with other stakeholders were also correlated with respondents’ PSM levels and the organizational characteristics of their agencies

Key to Color-Coding

Survey

Organizational Factors
Urban Planning for Sustainability
Individual-Level Factors
Interactional Factors
How the City is Built & Used
Urban Sustainability

Results – Bivariate

Factors Shaping Urban Planning for Sustainability in Amsterdam and Singapore

Key to Color-Coding

Color

Pearson’s Correlation Coefficient Polarity

P-value

No correlation
≤ 0.05
≤ 0.01
> 0.1
≤ 0.05
≤ 0.01
> 0.1
≤ 0.05
≤ 0.01
> 0.1

Individual-Level Factors

Organizational Factors

Finding 1: Respondents’ conceptualizations of urban sustainability were correlated with the following factors:
   1. Respondents’ education levels & Public Service Motivation (PSM) levels
   2. The rates at which respondents discussed urban sustainability with other stakeholders
   3. The degree to which respondents’ agencies were familial and bureaucratic

Finding 2: The rates at which respondents engaged in various interactions with other stakeholders were also correlated with respondents’ PSM levels and the organizational characteristics of their agencies

Finding 3: The rates at which respondents engaged in various interactions with other stakeholders were also correlated with respondents’ PSM levels and the organizational characteristics of their agencies