Understanding the Pursuit of Happiness in Ten Major Cities

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Kevin M. Leyden[1], Abraham Goldberg[3], and Philip Michelbach[2]

Abstract

The pursuit of happiness has a long history as a primary political end in Western political thought. Along with traditional economic indicators, policy makers are increasingly concerned with the subjective well-being of a society as a measure for its success. It is important to understand the nature of happiness and ask what can be done to improve it. This article builds upon existing literature that consistently identifies health, wealth, and social connectedness as key predictors of happiness. We find that the design and conditions of cities are associated with the happiness of residents in 10 urban areas. Cities that provide easy access to convenient public transportation and to cultural and leisure amenities promote happiness. Cities that are affordable and serve as good places to raise children also have happier residents. We suggest that such places foster the types of social connections that can improve happiness and ultimately enhance the attractiveness of living in the city.

Keywords

happiness, urban design, built environment, public sphere, social connections

[1]West Virginia University, Morgantown and National University of Ireland, Galway
[2]West Virginia University, Morgantown
[3]University of South Carolina Upstate, Spartanburg

Corresponding Author:
Abraham Goldberg, Department of History, Political Science, Philosophy and American Studies, University of South Carolina Upstate, 800 University Way, Spartanburg, SC 29303
Email: agoldberg@uscupstate.edu

Increasingly, scholars from a multitude of disciplines are examining the causes and consequences of subjective well-being, or happiness. Although with no shortage of controversy (Duncan 2008), the findings associated with this research have been used to formulate "happiness policies" aimed at increasing the aggregate level of happiness among people of a given nation (Frey 2008). Some have argued that the modern welfare state is best judged by its ability to make people happy (Pacek and Radcliff 2008, pp. 267-68) and that great societies should be judged by the happiness of its people (Layard 2005). And there is emerging evidence that people who are happier are healthier (Davidson, Mostofsky, and Whang 2010). Indeed, the importance of happiness and well-being recently prompted French President Nicholas Sarkozy to lead a reexamination of the way nations measure success by commissioning a panel of top economists, including Nobel laureates Joseph Stiglitz and Amartya Sen. That report urges that countries consider a broad range of measures of social well-being that go far beyond traditional economic measures such as the Gross Domestic Product (Stiglitz, Sen, and Fitoussi 2009).

But what does the study of happiness have to do with urban affairs, cities, or urban planning? In this exploratory study, we find key attributes and functions of the city are associated with individual levels of happiness among city residents around the world. In addition to the usual correlates, such as income and health, city residents appear to be happier when they feel connected to the people and to the places of their cities. Furthermore, happiness is linked to whether people feel their cities successfully provide amenities that improve their quality of life. Happiness and its pursuit, therefore, is a subject that should be of concern to scholars of urban places and urban policy.

Following a first section addressing the philosophical underpinnings of happiness and the importance of place, this article will present major findings of the "happiness literature" and create a baseline model in a second section. This will allow readers to frame the association between happiness and urban places into a larger context when those issues are addressed in a third section. A final section will provide concluding remarks.

The Concept of Happiness and the Importance of Place

Happiness is tricky to study; it is often described as an "elusive concept" (Frey and Stutzer 2002, p. 4) or something not worthy of serious empirical examination. This conceptual confusion is strange, however, given the long history of happiness as a *primary political end* in Western political thought.

Indeed, the idea of enabling the "pursuit of happiness" is intertwined with the foundation of the American republic (Maier 1997). The idea that politics should somehow enable "the good life" or "living well" has perhaps its most famous foundation in Aristotle, where politics should aim at producing *eudaimonia* or happiness. The "best form of government," Aristotle famously argued, "is that under which the body politic is happiest" (Aristotle 1996, pp. 177-78).

In modern political thought, the idea of happiness has continued to play a central role especially under the auspices of utilitarianism, which argues in its crudest form that politics should aim at a social surplus of pleasure over pain. But reliance on the idea of happiness is particularly important in the nuanced utilitarian thought of John Stuart Mill, where it reigns as the premier social value. For him "not *every* composite of pleasures which outweigh pains constitutes happiness" (Berger 1986, p. 37). Mill argued that political activity is "necessary for the development of distinctly human powers" (Salkever 1977, p. 402) which pay off in individual and social flourishing or happiness. Debates over the concept of welfare (whether by economists or philosophers) have tended to take one form or another of utilitarianism—usually a more simplistic conception than Mill's—as their basis or foil (Hamlin 2007). This has translated into the methods by which happiness is studied. For example, Frey and Stutzer (2002) maintain that for social scientists in the study of happiness, "a useful way out" is to "ask the individuals how happy they feel themselves to be" and assume "that they are the best judges of when they are happy and unhappy" (p. 4). Bruni and Porta (2007) conclude that happiness "is not generally *defined*, but empirically *measured*, on the basis of the answers to questionnaires" (p. xvii). Layard (2005) describes happiness as "feeling good—enjoying life and wanting the feeling to be maintained" (p. 12).

Happiness is very much at issue in contemporary discussions of civic culture, where Putnam found that "happiness is best predicted by the breadth and depth of one's social connections" (Putnam 2000, p. 332). Beyond this, and perhaps harkening back to Aristotle (for whom politics had a particular architectural setting), some theorists link a vibrant civil society to the built environment, urban places, and more specifically to neighborhoods. For instance, Cahoone (2002) argues,

> The neighborhood is thus the landscape of persons with whom one habitually deals, or with whom one may well have to deal. These are the people to whom one *must*, with rare exceptions, be civil. Failure to do so will not only be seen as a moral failing by others, but will threaten to make one's life unhappy. (p. 246)

As suggested above, this research seeks to contribute to recent work by economists, psychologists, public health researchers, sociologists, and political scientists who believe that articulating the best—or even most suitable—definition of happiness should not exclusively remain the domain of philosophers, but the subject for researchers and practitioners interested in the how and why of happiness.

If the object of the limitations associated with the happiness research renaissance has been its struggles in definition and meaning, its strengths have rested in its ability to model the concept. Survey research techniques have afforded social scientists the ability to statistically model happiness. Scholars have been able to identify independent variables that reliably and consistently affect happiness (e.g., Frey and Stutzer 2002; Huppert, Baylis, and Keverne 2005; Layard 2005; Bruni and Porta 2007; Zidansek 2007; Holder and Coleman 2007; Winkelmann 2008; Frey 2008; Chaplin 2008; Koopmans et al. 2008; Holder, Coleman, and Wallace 2008; Martikainen 2008). In this article, we build upon this literature using survey data from a study of quality of life in 10 cities. Our purpose is to begin to understand how individual happiness is associated with aspects of urban places. Our findings suggest that social connections within the city, aspects of city planning, and the maintenance of the public sphere are associated with individual happiness around the world. Accounting for the traditional predictors of happiness drawn from the research of others, we find that there are aspects of the city that people do care about such as access to the arts and entertainment, and surprisingly, a good public transportation system. The aesthetics of their city and issues related to the rearing of children are also important for happiness, universally.

Major Findings of Happiness Research

Personal income and wealth has been the single most studied factor predicting individual happiness. The relationship between income and happiness is a positive one but it is also not straightforward. Within countries, there is a positive relationship between income and happiness; however, when aggregate incomes within the society rise over time, happiness remains constant (Frank 2005; Layard 2005; Bruni and Porta 2007). A common conclusion drawn is that happiness is dependent not necessarily upon objective income but rather how much income an individual has compared to others (Frey and Stutzer 2002; Bruni and Porta 2007). Cross-national studies of happiness and studies of happiness over time within countries, therefore, typically do not inquire about objective income but rather ask survey respondents to describe their subjective level of income relative to others.

Income, of course, is not the only factor that has been shown to predict happiness. Perhaps the most thorough social science investigation of happiness is the work of Richard Layard (2005). Using the United States General Social Survey, Layard (2005) described the "Big Seven" factors that affect happiness among adult populations. In addition to financial situation, variables include family relationships, work, community and friends, health, personal freedom, and personal values. His work, described below, has been increasingly supported by the findings of others.

After income, Layard's second factor (of the Big Seven)—family relationships—are commonly found to be important for predicting individual-level happiness. Layard (2005) found that married people, all things being equal, are happier than those who are divorced, separated, widowed, or never having been married (Layard 2005). Martikainen (2008) also found that marital status and satisfaction with marriage significantly affect general life satisfaction among young adults in Finland and Koopmans et al. (2008), in a study of older adults, found that a higher percentage of people who are married and living with their spouse are happier than those who are not. Using the German Socio-Economic Panel, Frey (2008) demonstrated that people are at their happiest in the years that immediately follow a marriage. After this peak, happiness begins to return to a baseline level or set-point (Huppert, Baylis, and Keverne 2005). The key mechanism for this return is based upon adaptation (Huppert 2005; Bruni and Porta 2007). During a life-changing event, there is a bump (or dip depending upon the type of event) in happiness, but people adapt to their new situations (Huppert, Baylis, & Keverne 2005; Frank 2005). As people adapt, their levels of happiness return to levels they experienced before the event (Huppert 2005; Frank 2005; Bruni and Porta 2007).

Layard's (2005) third factor affecting individual happiness focuses upon work. People who are employed with a secure job are happier than those who are unemployed or employed with an insecure job. Once again, this finding is largely supported within the empirical happiness literature. Winkelman (2008) found that losing a job has a negative effect on subjective well-being. This finding is not consistent among all segments of the population. Women and people more than 45 years old are not as negatively affected by employment loss as others (Winkelman 2008). Along with marriage, Martikainen (2008) found a statistically significant relationship between work status and happiness. Among young Finnish adults, "occupational status" and "satisfaction with working conditions" affect general life satisfaction.

The fourth of the Big Seven factors generally focuses upon relationships or connectivity with community and friends (Layard 2005). People are happier if they feel that people in their community can be trusted. This public, or social, trust is a key indicator of social capital (Putnam 2000), generally

defined as the degree to which people feel connected to others in their community and actively participate in formal or informal community activities. Using the DDB Needham Life Style survey, Putnam (2000) demonstrated there is a significant relationship between social capital and happiness. Putnam (2000) concluded that "regular club attendance, volunteering, entertaining, or church attendance is the happiness equivalent of getting a college degree or more than doubling your income. Civic connections rival marriage and affluence as predictors of life happiness" (p. 333). In a more recent study, other indicators of social capital were found to be associated with happiness. Throughout the world, Helliwell and Putnam (2005) showed that that happiness is significantly related to spending time with friends and neighbors, civic participation, and trust in neighborhoods and the local police.

The importance of good social relationships for happiness has been emphasized by others as well. Holder and Coleman (2007) demonstrated that among children between the ages of 9 and 12, happiness is affected by having many friends. Furthermore, parents report that children are happier when they frequently visit their friends outside of the school environment.

Layard's (2005) fifth factor is good health. Self-assessed health is significantly associated with self-assessed happiness. Koopmans et al. (2008) found that among seniors, happiness is negatively associated with chronic disorders and other illnesses. To some degree, however, the association between health and happiness is dependent upon whether health is measured objectively or subjectively. According to Frey and Stutzer (2002), measuring health subjectively (i.e., self-assessment) has a stronger effect on happiness than objective health (i.e., determined by a doctor). Personality of the survey respondents is taken out of the equation when health is measured objectively and could explain this difference (Frey and Stutzer 2002). Nonetheless, a link between health and happiness is consistently demonstrated in the literature (Marks and Shah 2005), whether measured subjectively or objectively.

Personal freedom is Layard's (2005) sixth factor; it is primarily measured by the extent to which people feel that their governments are effective and provide them with a stable context of rights and the rule of law. Layard includes measures of "rule of law; stability and lack of violence; voice and accountability; the effectiveness of government services; the absence of corruption; and the efficiency of the system of regulation" (p. 70), all of which are thought to affect personal freedoms. Aggregate levels of happiness among nations systemically vary by the quality of their government and the rights and stability it affords (Layard 2005). This difference is found when comparing all nations of the world and, therefore, all existing forms of government (Frey and Stutzer 2002; Layard 2005; Frey 2008).

Layard's (2005) final major factor associated with happiness is described as personal values. The belief in a higher power is associated with happiness. Also, people who care for others and the world around them are happier (Layard 2005). In a broader treatment of religion's effect on happiness, Frey and Stutzer (2002) supported Layard's (2005) finding and maintained that people with religious values may be better able to cope with life's difficulties. Using survey data from Mexico, Garcia et al. (2007) calculate a religious index composed of "the importance given to God and to religion, frequency of prayer and of attendance at religious services, and satisfaction with one's religion" (p. 421). The religious index has a positive, statistically significant relationship with happiness. There is also a social benefit to attending religious services (Putnam 2000; Helliwell and Putnam 2005) that can lead to a happier life. Furthermore, behaviors among the religious may promote a healthier lifestyle thus indirectly promoting happiness via health (Frey and Stutzer 2002).

Taken together, these Big Seven factors offer a summary of the current state of the happiness literature. It is, of course, not entirely clear whether the directional arrows point from the Big Seven to happiness or the reverse. This is problematic with any social science research that relies on cross-sectional survey data. Given that the results reported below are drawn from survey data, we are not immune to such concerns about endogeneity. We agree with scholars who have similarly faced this issue that "ultimately, longitudinal data and quasi-experimental methods will be necessary to resolve those uncertainties" (Helliwell and Putnam 2005, p. 440). Like others, "we present not confirmed causal claims, but a kind of tour d'horizon to highlight promising domains of future work" (Helliwell and Putnam 2005, p. 440).[1] Our findings are, therefore, to be considered exploratory, leaving room for future research to better understand the dynamics of the linkages we show to be quite important. This said, we suggest that there is more to happiness than the variables identified to date, and some of this has to do with the way we organize and maintain the places we live.[2]

The Data and the Baseline Model of Happiness

In the analyses below, we use the 2008 Quality of Life survey that sampled residents living in 10 major international metropolitan cities. The surveys were carried out by Gallup Organization. The participating cities were New York, London, Paris, Stockholm, Toronto, Milan, Berlin, Seoul, Beijing, and Tokyo. The survey was administered for the National Academy of Sciences of the Republic of Korea under the auspices of the Seoul Metropolitan Government and the Seoul Welfare Foundation. Random samples of 1,000 people in each city

were included.[3] The data were collected in late 2007 and made available in 2008. The purpose of the survey was multifaceted but primarily concerned with the quality of life in the 10 participating cities.

Happiness was measured by asking respondents the following question: "How happy are you now?" Respondents were given five choices to respond to this question. The responses were coded in the following manner: 1 = *not happy at all*; 2 = *not very happy*; 3 = *neither happy nor unhappy*; 4 = *somewhat happy*; 5 = *very happy*. The Quality of Life survey also contains items that measure key aspects of most of the Big Seven factors associated with happiness.[4] Table 1 presents each factor next to its measurement(s).

In Table 2, we examine the impact of these established variables on happiness. Since happiness is scored as an ordinal variable, ordered logit regression is utilized (Long and Freese 2006). A *z*-statistic is used to determine the statistical significance of each coefficient. Table 2 presents a happiness model using items representing the Big Seven factors addressed above. Differences that may exist among the cities that participated in the Quality of Life survey are accounted for, with each city scored one and Seoul scored as zero as a baseline.

Table 2 demonstrates that all of the items available in the Quality of Life survey that represent the Big Seven factors have a statistically significant relationship with happiness.[5] This is true even as the independent effect of each city is held constant. Respondents with higher incomes, who reported being healthier, and who felt "connected to the people who live in" their neighborhoods, all were more likely to report being happier. Similarly, those who were more likely to feel they could volunteer, that there were plenty of job opportunities, and that there was good quality health care and were married were more likely to report higher levels of happiness. And measures as to whether the respondent perceives the city government does a good job addressing citizen concerns and requests, and is trusted are, likewise, statistically significant with individual levels of happiness.

The model presented in Table 2 suggests two things: first that our data and our analysis supports existing theory, and second that there is a considerable amount of variance left to be explained. Layard (2005) notes that save income and health, all of the factors currently identified in the literature deal with the quality of relationships or connections. Whether these connections are with a spouse, friends or community, local government, or religious in nature, there appears to be an element that permeates the traditional factors associated with happiness that indicates that relationships are important.

If the quality of one's connections is central to individual happiness, other measures or variables currently not the focus of the happiness research might

Table 1. Measuring the Big Seven Factors Using the 2008 Quality of Life Survey

Big Seven Factors	Survey Item
Income	What is the level of your household income?
Marital status	Are you currently married, separated, divorced, widowed, or have you never married?
Employment	There are plenty of job opportunities in my city.
Social capital 1	I feel connected to the people who live in my neighborhood.
Social capital 2	There are many opportunities for volunteer activities in my city.
Health 1	How is your health in general?
Health 2	It is easy to get good quality healthcare in my city.
Personal freedom 1	The city government does a good job addressing citizen concerns and requests.
Personal freedom 2	I can trust what my city government does
Personal values	No item available in the survey

be worth examining. Below, we explore such additional measures emphasizing the quality of the city's built environment, or its neighborhoods, which have linkages to the planning, the design, and the maintenance of urban places. Do connections with place affect happiness? Does the design of the city and its neighborhoods and the way those places are maintained have an effect on happiness?

Happiness, Social Connections, and Connections to Place: The Role of Urban Planning and Policy

Below we hypothesize that the way cities and city neighborhoods are designed and maintained can have a significant impact on the happiness of city residents. The key reasons, we suggest, are that places can facilitate human social connections and relationships and because people are often connected to quality places that are cultural and distinctive. City neighborhoods are an important environment that can facilitate social connections and connection with place itself (Jacobs 1961; Oldenburg 1999; Beatley and Manning 1996; Putnam 2000; Duany, Plater-Zyberk, and Speck 2000; Leyden 2003; Ezell 2004; Frumkin, Frank, and Jackson 2004; Leyden, Goldberg, and Duval 2008; Leyden, Goldberg, and Duval 2011). These connections,

Table 2. Ordered Logit Model Predicting Happiness with the Big Seven Factors

	Coefficient	*z*
Big Seven Factors		
Income (1= *very low income*, 5 = *very high income*)	0.242*	8.70
Health (1 = *very bad health*, 5 = *very good health*)	0.634*	23.94
I feel connected to the people who live in my neighborhood.	0.206*	9.10
There are many volunteer opportunities in my city.	0.175*	6.61
There are plenty of job opportunities in my city.	0.099*	4.71
It is easy to get good quality healthcare in my city.	0.090*	4.11
Marital status (1 = *married*, 0 = *not married*)	0.288*	6.38
The city government does a good job addressing citizen concerns and requests.	0.140*	5.51
I can trust what my city government does.	0.070*	2.90
City Controls		
New York	0.914*	8.74
Toronto	0.980*	9.41
London	0.507*	4.71
Paris	0.134	1.26
Berlin	0.378*	3.46
Milan	–0.229*	–2.17
Tokyo	0.592*	6.26
Beijing	–0.026	–0.27
Stockholm	0.581*	5.12

Note: LR χ^2 = 1862.78; n = 7,946; pseudo R^2 = 0.095; log likelihood = –8889.415 Dependent Variable: (1 = *not happy at all*, 5 = *very happy*).
*$p < .05$.

in turn, are important for happiness and one's quality of life (Putnam 2000; Helliwell and Putnam 2005; Layard 2005).

But not all neighborhoods are the same. Some are designed and built to foster or enable connections. Other are built to discourage them (e.g., a gated model) or devolve to become places that are antisocial because of crime or other negative behaviors. Increasingly, researchers and practitioners have become aware that some neighborhood designs appear better suited for social connectedness than others (Freeman 2001; Leyden 2003; Frumkin, Frank, & Jackson 2004; Wood et al. 2008; Richard et al. 2009). Urban philosopher Jane Jacobs (1961) planted the seeds of this line of research by arguing that the design of cities can play a profound role in the desirability of city living. Jacobs (1961) associates the physical design of a city as important for

determining whether the city is safe, vibrant, interesting, and social. Her seminal work *Death and Life of Great American Cities* (1961) maintains that city neighborhoods designed with mixed uses (i.e., a combination of residential and work places along with shops, pubs, parks, and civic buildings) and a vibrant, active sidewalk life, can influence the desirability of city living and have a positive effect on the personal well-being of residents. A consistently active sidewalk life–or pedestrian orientation—and the interactions that occur in local neighborhood shops, for example, make "others" less anonymous, leading people to take more responsibility over the well-being of "others" and the city itself. These design principles are likely to spawn places that are livable, unique, interesting, and safe (Jacobs 1961). The consistent face-to-face contacts (whether between the familiar or the unfamiliar) that occur in mixed-use, pedestrian-oriented city neighborhoods encourage a sense of public trust and social connectedness among city inhabitants (Jacobs 1961).

Similarly, Ray Oldenburg (1989) maintains that "third places," in concert with mixed-use principles, also provide places for people to congregate and interact socially. These "third places" represent a "great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realm of home and work" (p. 16). Such places are prerequisites for cities and city neighborhoods because they promote social connections and personal well-being (Oldenburg 1989, also see Taylor, Kuo, and Sullivan 1998; Leyden 2003; Burns 2005; Rogers et al. 2010).

Places that encourage a vibrant public life can vary. Public parks or public squares are possibilities. In some cities, public parks "are among a community's most highly valued assets, not simply for their greenery, but also for the opportunity they afford for organized or spontaneous contact with other community members" (Beatley and Manning 1996, p. 178). Oldenburg (1999) emphasizes the importance of cafes and pubs, and community centers. Local restaurants or corner grocery shops—or even barbershops or hair salons—may also be important (Jacobs 1961). Communities built to encourage multiple modes of transportation (e.g., walking, biking, and public transportation) may also bring people together in shared public places while they commute, recreate, or run errands (Beatley and Manning 1996; Cervero 1998).

Theoretically, if some urban designs encourage social interaction and connections with place, what sorts of places discourage these attributes and possibly their impact on happiness? Duany, Plater-Zyberk, and Speck (2000) suggest that car-dependent places and those that emphasize the private rather than the public are intrinsically bad for social connectivity and connections with place. This is especially likely to happen in places that emphasize single-use zoning, or the segregation of houses from places of work, shopping, and recreation. "In the absence of walkable public places—streets, squares, and

parks, the public realm—people of diverse ages, races, and beliefs are unlikely to meet and talk" (p. 60). Referring to the car dependency and long commutes (to work, to recreate, and to shop) largely associated with modern suburbs, Putnam (2000) suggests that "more time spent alone in the car means less time for friends and neighbors" (p. 214). Most importantly, Putnam demonstrates that "the car and the commute . . . are demonstrably bad for community life. In round numbers, the evidence suggests that *each additional ten minutes in daily commuting time cuts involvement in community affairs by 10 percent*—fewer public meetings attended, fewer committees chaired, fewer petitions signed, fewer church services attended, less volunteering, and so on" (Putnam 2000, p. 213). This relationship has been largely replicated using alternative data sets (Freeman 2001; Besser, Marcus, and Frumkin 2008). Long commutes by car also negatively affect informal social interaction and even depress the civic involvement of noncommuters who live in areas where commuting levels are high (Putnam 2000). Strikingly, Putnam concludes that other than education levels, commuting time is "more important than almost any other demographic factor" for explaining levels of social capital (Putnam 2000, p. 213).

Although there is some empirical evidence that long commutes by car are associated with reduced social and community interaction and involvement, the direct linkage between the built environment and these connections to others and to place are limited. Differentiating between residents of Galway, Ireland, who live in walkable, mixed-use neighborhoods from residents who live in car-dependent neighborhoods, Leyden (2003) found significant differences in regards to social connectivity. Using a "walkability index," Leyden found that people living in walkable, mixed-use neighborhoods were more likely to know their neighbors, and be more trusting, social, and active politically than those residing in car-dependent, residential subdivisions, all things being equal.

The limited empirical literature on the relationship between urban form and social capital is mixed but generally supportive of the notion that urban design matters. That said, it also cries out for further, systematic empirical investigation. Frumkin, Frank, and Jackson (2004) reviewed nine empirical analyses investigating the relationship between the built environment and social capital or sense of community and concluded:

> Despite some inconsistencies, this body of literature suggests that the way a neighbourhood is built can have a major impact on the social capital of the people who live there. In particular, walkability, public places, and mixed use are associated with improvements in social capital. (Frumkin, Frank, and Jackson 2004, p. 180)

Since 2004, there have been several additional published articles examining the relationship between urban form and social capital. Du Toit and colleagues examined the relationship in Adelaide, Australia. Using a sample of 2,194 respondents living in a mix of neighborhood types and several measures of neighborhood social interaction, sense of community, and social cohesion, du Toit et al. (2007) found only limited support for the notion that neighborhood walkability leads to increased levels of social capital. Interestingly, a second Australian study—this time from Perth—also published in 2008, found a fairly complex relationship between the built environment, social capital, and perceived safety, suggesting that the *quality of the built environment* is very important (Wood et al. 2008). For example, the authors conclude that it is not the number of destinations per se that is important for higher levels of social capital but the "perceived adequacy of facilities and proximity to a shop." And most recently, Rogers et al. (2010) found evidence—in New Hampshire—that more walkable neighborhoods show higher levels of social capital than less walkable neighborhoods.

Finally, additional recent studies focused on the relationship between the built environment and social support and/or social activities for elderly citizens (Richard et al. 2009; Brown et al. 2008). Examining social participation among seniors in Montreal, Canada, Richard et al. (2009) found clear evidence that active travel (namely walking almost everyday, and perceived accessibility to destinations in the neighborhood such as shops, restaurants, places or worship, and cultural centers, among others) increased the likelihood that elderly citizens would volunteer, visit others, and remain generally active outside the home. Similar to Leyden's study of Irish neighborhoods, Richard et al. (2009) concluded that the number and quality of accessible destinations is important for social capital. According to these authors,

> Urban and community planners should aim at designing neighbourhoods offering supportive environments for social interaction and participation. In this respect, the provision of opportunity structures such as parks, local shops, and user-friendly buildings and streets where people can "achieve easy contact" . . . should encourage older adults to go out, interact, and socially participate (Richard et al. 2009).

Complementing this is an exhaustive, impressive study of seniors living in low-socioeconomic-status, Hispanic neighborhoods in Miami, Florida, that further clarifies the relevance of urban design and architectural features for seniors. Examining the architectural features of 3,857 lots in 403 blocks, Brown and his associates found that elders who resided on neighborhood

blocks that promoted visual—eyes on the street–type perspectives—and social contacts (e.g., front porches and stoops built above grade) were more likely to have better physical functioning such as gait speed and grip strength. The relationship between the built environment in this case was both directly related to physical functioning and indirectly related via social support. According to Brown et al. (2008), the nature of the built environment enabled elderly residents to remain physically and socially active, thereby improving their physical functioning (and to some degree their mental health) and better enabling them to age in place.

A New Model of Happiness: Examining the Importance of Place and the Maintenance of the Public Sphere

In Table 2, we demonstrated the relevance of the major factors (or the Big Seven) typically used to predict happiness using data from the Quality of Life Survey; happiness was found to be significantly related to measures of income, marital status, employment, good social relations, good health, and confidence in government. Fortunately, the Quality of Life survey also provides a number of items that asked respondents to assess the quality and/or type of built environment they live in as well as questions about the conditions of, or maintenance of, their city's public realm. As discussed above, the existing literature generally suggests that there is a relationship between aspects of the built environment and social connections, which is also known to be important for happiness. Here we use our data to test whether there is a link between additional aspects of place (and the way it is maintained) and happiness, controlling for the Big Seven factors, including measures of social connectivity. Focusing on aspects of place—or the built environment—first, respondents were asked to what degree they agreed or disagreed with the following statements:

- It is convenient to use public transportation (e.g., subways, trains, or buses) in my city.
- I have easy access in my city to plenty of shops, supermarkets, and department stores.
- There are many parks and sports facilities in my city.
- My city allows easy access to culture and leisure facilities such as movie theaters, museums, and concert halls.
- There are a sufficient number of libraries in my city.

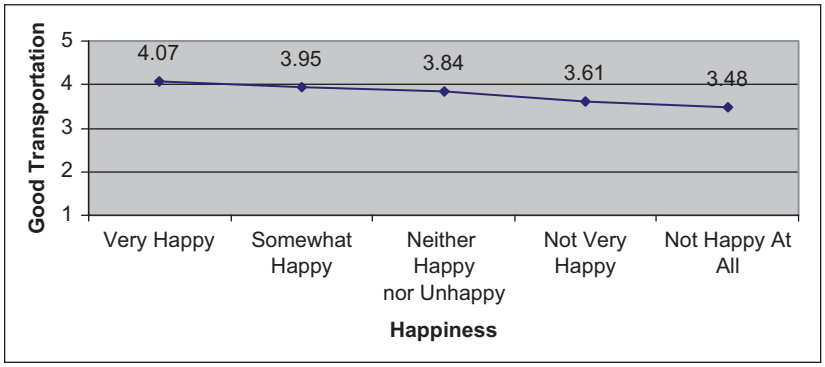

Figure 1. Mean score of "It is convenient to use public transportation (e.g., subways, trains, or buses) in my city" and Happiness

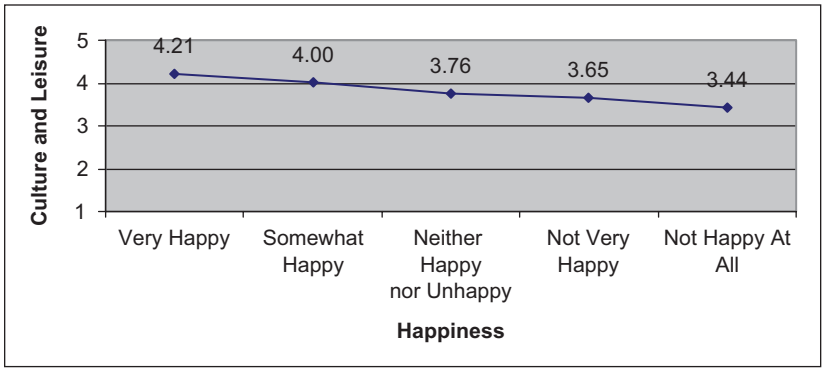

Figure 2. Mean score of "My city allows easy access to culture and leisure facilities, such as theaters, museums, and concert halls" and Happiness

For each statement, respondents were asked to indicate whether they strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree. Figures 1 to 5 show the mean score for each of these built environment items for each level of happiness. In order to display readable figures, the built environment or place variables were coded so that 5 = *strongly agree* and 1 = *strongly disagree*. Therefore, in Figures 1 to 5, *higher scores on each of these items indicate that respondents reported having greater access to a variety of amenities and "third places," and a variety of transportation options to access these amenities*.

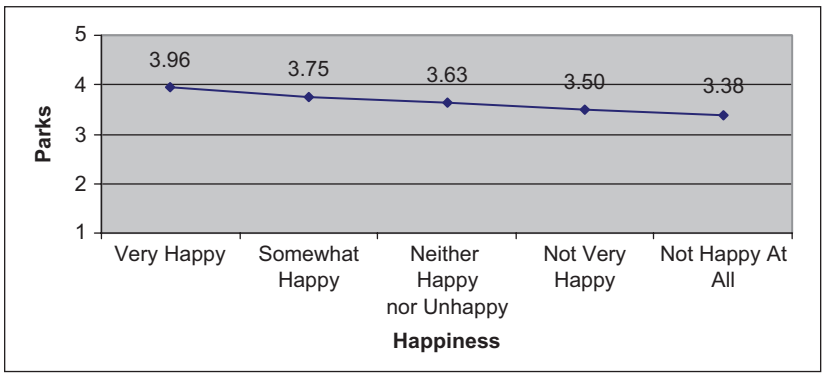

Figure 3. Mean score of "There are many parks and sports facilities in my city" and Happiness

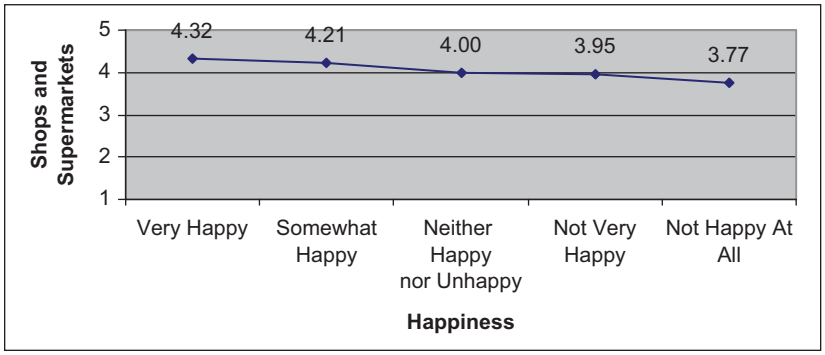

Figure 4. Mean score of "I have easy access in my city to plenty of shops, supermarkets, and department stores" and Happiness

A consistent theme that runs through each of these figures is that happier people are also more likely to agree that the built environment of their cities and city neighborhoods provide convenient or easy access to cultural and mixed-use amenities including "third places" and to public transportation. Figures 1 to 5 suggest clear bivariate relationships between reported happiness and the accessibility to a variety of cultural, leisure, and experiential amenities and happiness. Figure 1 suggests that access to convenient public transportation is related to happiness. Figures 2 to 5 suggest the importance of

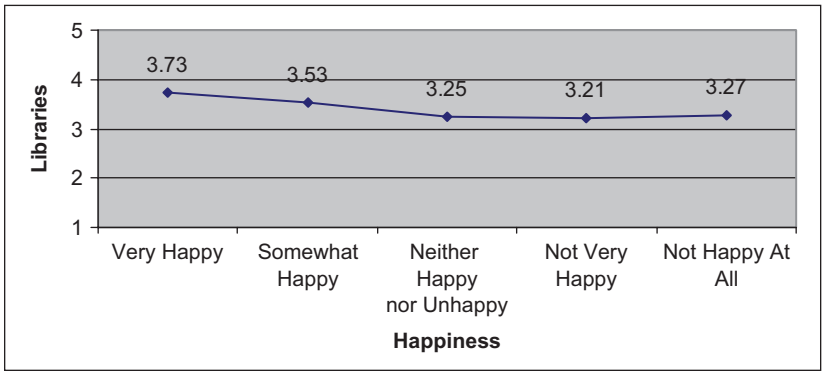

Figure 5. Mean score of "There are a sufficient number of libraries in my city" and Happiness

access to theaters, museums, concert halls, parks, sports facilities, shops, stores, and libraries.

In addition to variables related to the character, design, or accessibility of place or the built environment, the Quality of Life survey also provides variables that measure *the condition* of public places or the public realm. Respondents were asked the degree to which they agree or disagree with each of the following statements, all of which reflect the importance of aesthetics, maintenance, safety, or other public policies people regard as relevant for the quality of their lives:

- (City name) is a beautiful city.
- Streets, sidewalks, and other public places are clean in my city.
- I feel safe walking around at night.
- Air pollution is a serious problem in my city.
- I feel safe from the danger of various accidents such as car accidents, fires, and building collapses.
- The price of living in my city is high.
- I feel safe when I drink publicly provided tap water.
- My city is a good place to rear and care for children.
- It is easy for children in my city to go to a good school.

Again, the variables associated with Figures 6 though 10 were coded with 5 = *strongly agree*; 4 = *agree*; 3 = *neither agree nor disagree*; 2 = *disagree*; 1= *strongly disagree*. Higher scores indicate that respondents were more

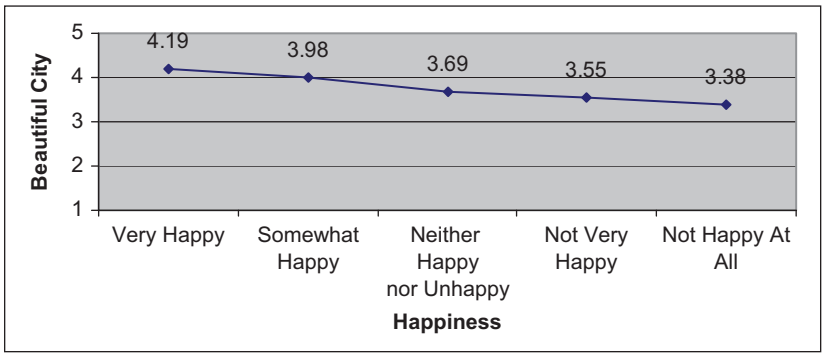

Figure 6. Mean score of "(City name) is a beautiful city" and Happiness

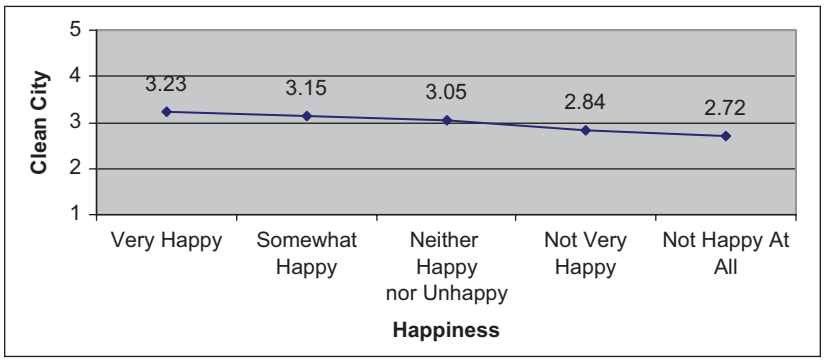

Figure 7. Mean score of "Streets, sidewalks, and other places are clean in my city" and Happiness

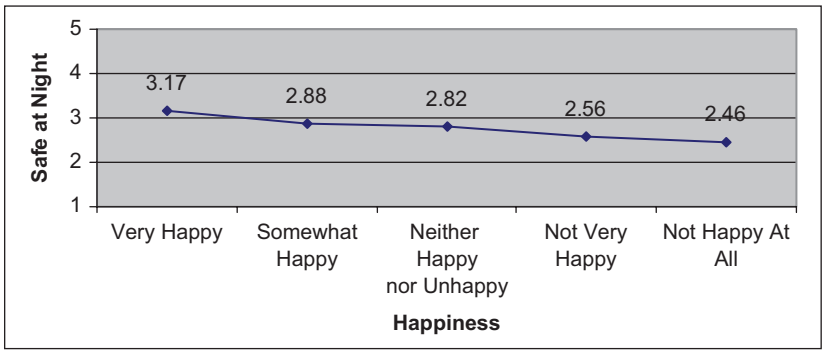

Figure 8. Mean score of "I feel safe walking around at night" and Happiness

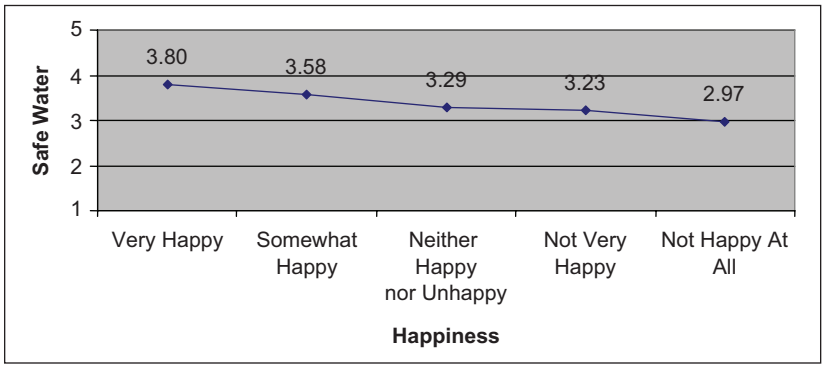

Figure 9. Mean score of "I feel safe when I drink publicly provided tap water" and Happiness

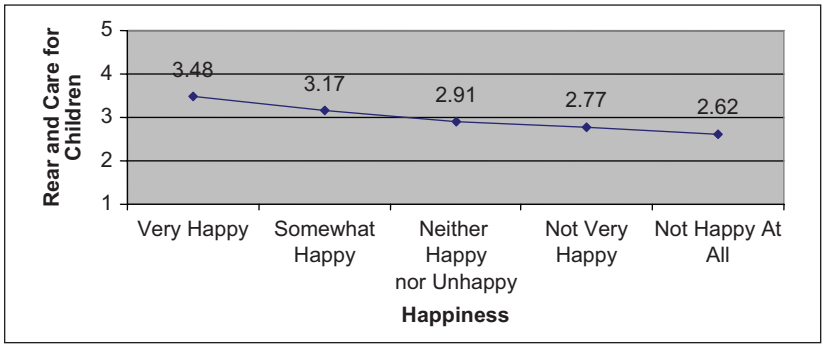

Figure 10. Mean score of "My city is a good place to rear and care for children" and Happiness

satisfied with the aesthetics, safety, public services, economic conditions, and their cities' ability to accommodate children and families. Figures 6 to10 provide several examples of how these factors are associated with mean levels of happiness across all 10 cities.[6]

Collectively, the relationships presented in Figures 6 through10 suggest that at the mean level, the more respondents felt their city was beautiful (aesthetics), felt it was clean (aesthetics and safety), and felt safe walking at night (safety), the more likely they were to report being happy. Similarly, the more they felt that publicly provided water was safe, and their city was a good place to rear and care for children, the more likely they were to be happy.

Going beyond these summary statistics, Table 3 presents a more comprehensive, multivariate, model of happiness. The model examines the independent effects of the Big Seven factors (as presented in Table 2), the Quality of Life Survey's place or built environment variables, and the maintenance of the public sphere (or conditions of the city) variables on the individual-level happiness of residents in 10 international cities. The differences among the 10 cities are accounted for with control variables. Again, we use an ordered-logit model to account for the categorical nature of the dependent variable: happiness.

Table 3 demonstrates that the traditional Big Seven predictors, *as well as* measures related to the nature of place and the maintenance of the public sphere, have a statistically significant relationship with individual happiness. Overall, available measures of the Big Seven factors remain significant as originally demonstrated above in Table 2. Also, the city dummy variables appear to have *decreased* significance in Table 3. This probably suggests that the added variables associated with aspects of urban areas absorbed some of the explanatory power of the city differences.[7] In addition, place or the built environment variables, such as the convenience of public transportation and access to culture and leisure activities such as movie theaters, museums, and concert halls and, independently, libraries all exhibit a statistically significant association with happiness. Moreover, the maintenance of the public sphere also matters. Respondents who felt their city was "beautiful" or felt that their city was a good place to rear and care for children were more likely to report higher levels of happiness, all other things being equal. Likewise, those *who disagreed* that the "price of living in their city was high" were more likely to report feeling happier (note the reversed coding on this particular variable).

One of the tested variables, however, indicates that the relationship between maintenance of the public sphere and happiness is not totally intuitive or straightforward. The negative relationship between clean streets, sidewalks, and public places and happiness is intriguing. In interpreting this variable, it is important to again note that respondents who felt their cities were "beautiful" also were happier. Aesthetics clearly do matter. Perhaps there is an understanding here, among urbanites, that cleanliness in the city is not something they can always control, or that it is allowable as long as the city is beautiful and safe in general (enough to rear and care for children, for example). Urbanites may be more willing to put up with some untidiness in the streets given that all of the other important benefits of good urban living are in place. Some litter and graffiti in urban places is, perhaps, more commonly tolerated in the city as opposed to a suburb environment.[8]

Table 3. Ordered Logit Model Predicting Happiness

	Coefficient	*z*
Big Seven Factors		
Income (1 = *very low income*, 5 = *very high income*)	0.244*	8.16
Health (1 = *very bad health*, 5 = *very good health*)	0.616*	21.50
I feel connected to the people who live in my neighborhood.	0.193*	7.89
There are many volunteer opportunities in my city.	0.124*	4.28
There are plenty of job opportunities in my city	0.080*	3.51
It is easy to get good quality healthcare in my city.	0.029	1.18
Marital status	0.278*	–5.82
The city government does a good job addressing citizen concerns and requests	0.100*	3.62
I can trust what my city government does	0.053*	2.02
Place or the Built Environment		
It is convenient to use public transportation (e.g., subways, trains, or buses) in my city.	0.074*	2.88
I have easy access in my city to plenty of shops, supermarkets, and department stores.	0.034	1.16
There are many parks and sports facilities in my city.	0.001	0.04
My city allows easy access to culture and leisure facilities such as movie theaters, museums, and concert halls.	0.108*	3.87
There are a sufficient number of libraries in my city.	0.055*	2.22
Maintenance of the Public Sphere/Conditions of the City		
(City name) is a beautiful city.	0.150*	5.15
Streets, sidewalks, and other public places are clean in my city.	–0.052*	2.24
I feel safe walking around at night.	–0.010	–0.45
Air pollution is a problem in my city.	0.037	1.61
I feel safe from the danger of various accidents such as car accidents, fires, and build collapses	0.018	0.78
The price of living in my city is high. (1 = *strongly agree*, 5 = *strongly disagree*)	0.094*	3.46
I feel safe when I drink publicly provided tap water.	0.020	0.92
My city is a good place to rear and care for children.	0.087*	3.59
It is easy for children in my city to go to a good school.	0.009	0.37
City Controls		
New York	0.630*	–5.31
Toronto	0.715*	–6.01
London	0.296*	2.37

(continued)

Table 3. (continued)

	Coefficient	z
City Controls (continued)		
Paris	0.093	–0.76
Berlin	0.008	–0.06
Milan	0.329*	–2.76
Tokyo	0.394*	3.68
Beijing	0.226	–1.93
Stockholm	0.110	0.81

Note: LR χ^2 = 1,827.25; n = 7,175; pseudo R^2 = 0.103; log likelihood = –7923.594 Dependent Variable: (1 = *not happy at all*, 5 = *very happy*).
*$p < .05$.

Conclusion

This research suggests that self-reported happiness of city residents is associated with important aspects of their built environments and the way these places are maintained. There is more to individual happiness than income, health, social relationships, and government effectiveness. *People also care about the places in which they live and how those places are maintained.* This is demonstrated by the significant relationship between happiness and access to cultural amenities, such as movie theaters, museums, and concert halls, along with libraries. Having access to convenient public transportation options also appear to be important. We suggest that these aspects of the built environment affect social connections and arguably connections to place that are important for happiness (Jacobs 1961; Oldenburg 1989; Beatley and Manning 1996; Putnam 2000; Helliwell and Putnam 2005; Layard 2005; Holder and Coleman 2008). *Apparently, feeling connected to the people and the places of the city are important for the happiness of urban residents.* Here we provide empirical support from ten international cities for these relationships.

The conditions of cities or the maintenance of the public sphere also appears to be important. Happiness is significantly associated with agreeing that an individual's city is a good place to rear and care for children. Furthermore, local economic conditions, as measured by the cost of living, and the perceived beauty of the city are associated with the happiness.

Of course, the research presented here is exploratory. There are several avenues of future research that would allow us to better understand the relationship

between the urban form and happiness. We suggest four paths that serve that end. First, future research should seek to better understand how spatial differences *within* urban areas affect happiness. Do more traditional mixed-use, pedestrian-oriented urban designs[9] spawn happiness better than car-dependent single-use areas? The literature would suggest that such a relationship exists because of the importance of social connections that appear to be found in more walkable, mixed-use places. Second, future research should seek to untangle the dynamics between aspects of urban places, social and community connectedness, individual characteristics, and happiness. This can be done by exploring these relationships with more sophisticated structural equations or path-models. Third, work should be done to determine why levels of happiness are significantly different across cities. Even after accounting for differences in urban form and personal characteristics, people is some cities seem to be happier than others. More variance needs to be explained. Finally, efforts should be made to determine causation. If indeed it can be found that happiness is directly influenced by characteristics of a city's built environment and the conditions of its public sphere, then more specific policy prescriptions can follow.

This said, we suggest that planners, urban designers, transportation engineers, public health officials, and policy makers focus more on cities (and towns) and how their decisions might affect the well-being of residents. Frug (1996) maintains that the "urban landscape is not simply the result of individual choices about where to live or to create a business. It is the product of a multitude of governmental policies" (p. 1038).

The viability of the city and the happiness of its residents will depend mostly on whether policy makers learn to think of the city more holistically and being about people and their lives. Public health policy, or transport, or housing, or crime policy, for example, should not be implemented each in its own single-policy vacuum. The way policies reinforce or enable each other and affect the lives and well-being of city residents must be brought into greater focus (Sallis, Bauman, & Pratt, 1998). As we noted, the primacy accorded happiness in normative political theory extends from ancient Greek thought through the American Founders (Lane 2000). The present research provides an empirical warrant to revisit the conceptual importance of this topic in public policy making both on grounds of well-being and as an important investment in democracy.

Our research argues that the happiness of city residents requires far more than simply focusing on the economic conditions of a city. Ensuring that people can lead healthy lives with quality social connections is within the purview of policy makers. The way that cities are built and maintained could be an important means to improving our quality of life.

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Notes

1. Lyubomirsky, King, and Diener (2005) offer an extensive discussion of causality in the happiness literature. Their work suggests that researchers should report findings with care as it is likely that happiness is both affected by "a variety of resources, desirable characteristics, and favorable life circumstances" and a cause of such outcomes (p. 803).
2. Readers will find that some variables used to measure aspects of urban areas are more affected by endogeneity than others. We thank our anonymous reviewers for reminding us of the importance of this issue.
3. The Gallup Organization conducted a random sample in each city. However, efforts were not made to account for space within each city. This could be problematic when trying to understand differences across the participating cities and differences within each city; however, we feel that controlling for the independent differences among the cities allows us to isolate self-perceived characteristics of urban areas.
4. The Quality of Life survey does not provide a measure for "personal values."
5. A variance inflation factor (VIF) was calculated to determine the existence and severity of multicollinearity in the models presented in this article. Both models were converted to ordinary least squares (OLS) and it was found that no VIF was greater than 3.0, indicating acceptable levels by most standards. Converting logistic regression analysis to OLS has been justified as a legitimate practice since the concern is associated with the relationship between independent variables (Menard 2002).
6. Because of issues of space, we did not include figures illustrating summary statistics for all of the independent variables that account for conditions of the public sphere.
7. We thank an anonymous reviewer for pointing this out.
8. An alternative explanation for this unexpected finding is that clean public places are more associated with modern suburban development than urban living. Suburban development has been linked in past research to having a negative effect on social connections that appear to be important to individual happiness. An anonymous reviewer is to be thanked for proposing this alternative.
9. Traditional mixed-use, pedestrian-oriented neighborhoods are commonly referred to as "smart growth."

References

Aristotle. 1996. *The politics and the constitution of Athens*,edited by S. Everson. Cambridge: Cambridge University Press.

Beatley, T., and K. Manning. 1996. *The ecology of place: Planning for environment, economy, and community.* Washington, DC: Island Press.

Berger, F. R. 1986. *Happiness, justice and freedom: The moral and political philosophy of John Stuart Mill*. Berkeley: Univ. of California Press.

Besser, L., M. Marcus, and H. Frumkin. 2008. Commute time and social capital in the U.S. *American Journal of Preventive Medicine* 34 (3): 207-11.

Brown, S. C., C. A. Mason, T. Perrino, J. L. Lombard, F. Martinez, E. Plater-Zyberk, A. R. Spokane, and J. Szapocznik. 2008. Built environment and physical functioning in Hispanic elders: The role of "eyes on the street." *Environmental Health Perspectives*116 (10): 1300-1307.

Bruni, L., and P. L. Porta. 2007. *Handbook on the economics of happiness*. Cheltenham: Edward Elgar.

Burns, G. W. (2005). Naturally happy, naturally healthy: The role of natural environment in well-being. In *The science of well-being*, edited by F. A. Huppert, N. Baylis, and B. Keverne, 404-31. New York: Oxford Univ. Press.

Cahoone, L. E. 2002. *Civil society: The conservative meaning of liberal politics*. Oxford: Blackwell.

Cervero, R. 1998. *A transit metropolis: A global inquiry.* Washington, DC: Island Press.

Chaplin, L. N. 2008. Please may I have a bike? Better yet, may I have a hug? An examination of children's and adolescents' happiness. *Journal of Happiness Studies*, DOI 10.1007/s10902-008-9108-3.

Davidson, K. W., E. Mostofsky, and W. Whang. 2010. Don't worry, be happy: Positive affect and reduced 10-year incident coronary heart disease: The Canadian Nova Scotia health survey. *European Heart Journal*, Feb. 17 [Epub ahead of print] PMID: 20164244.

Duany, A., E. Plater-Zyberk, and J. Speck. 2000. *Suburban nation*. New York: North Point Press.

Duncan, G. 2008. Should happiness-maximization be the goal of government? *Journal of Happiness Studies*, DOI 10.1007/s10902-008-9129-y.

du Toit, L., C. Ester, L. Evie, and O. Neville. 2007. Does walking in the neighbourhood enhance local sociability? *Urban Studies* 44 (9): 1677-95.

Ezell, K. 2004. *Get urban*. Herndon, VA: Capital Books.

Frank, R. H. (2005). Does money buy happiness? In *The science of well-being*, edited by F. A. Huppert, N. Baylis, and B. Keverne, 460-73. New York: Oxford Univ. Press.

Freeman, L. 2001. The effects of sprawl on neighborhood social ties: An explanatory analysis. *Journal of the American Planning Association* 67: 69-77.

Frey, B. S. 2008. *Happiness: A revolution in economics*. Cambridge: MIT Press.

Frey, B. S., and A. Stutzer. 2002. *Happiness and economics: How the economy and institutions affect well-being*. Princeton: Princeton Univ. Press.

Frug, J. 1996. The geography of community. *Stanford Law Review* 48 (5): 1047-1108.

Frumkin, H., L. Frank, and R. Jackson. 2004. *Urban sprawl and public health: Designing, planning, and building for healthy communities.* Washington, DC: Island Press.

Garcia, J., N. Fuentes, S. Borrego, M. Gutierrez, and A. Tapia. 2007. Values and happiness in Mexico: The case of the metropolitan city of Monterrey. In *Handbook on the economics of happiness*, edited by L. Bruni and P. L. Porta, 407-21. Cheltenham: Edward Elgar.

Hamlin, A. 2007. Welfare. In *A companion to contemporary political philosophy*, edited by R. E. Goodin, P. Petit, and T. Pogge, 852-64. Oxford: Blackwell.

Helliwell, J. F., and R. D. Putnam. 2005. The social context of well-being. In *The science of well-being*, edited by F. A. Huppert, N. Baylis, and B. Keverne, 434-59. New York: Oxford Univ. Press.

Holder, M. D., and B. Coleman. 2007. The contributions of social relationships to children's happiness. *Journal of Happiness Studies* 9 (2): 279-302.

Holder, M. D., B. Coleman, and J. M. Wallace. 2008. Spirituality, religiousness, and happiness in children aged 8-12 years. *Journal of Happiness Studies*, DOI 10.1007/s10902-008-9126-1.

Huppert, F. A., N. Baylis, and B. Keverne. 2005. *The science of well-being*. New York: Oxford Univ. Press.

Jacobs, J. 1961. *The death and life of great American cities*. New York: Random House.

Koopmans, T. A., J. M. Geleijnse, F. G. Zitman, and E. J. Giltay. 2008. Effects of happiness on all-cause mortality during 15 years of follow-up: The Arnhem elderly study. *Journal of Happiness Studies*, DOI 10.1007/s10902-008-9127-0.

Lane, R. E. 2000. *The loss of happiness in market economies*. New Haven: Yale Univ. Press.

Layard, R. 2005. *Happiness: Lessons from a new science*. New York: Penguin Books.

Leyden, K. M. 2003. Social capital and the built environment: The importance of walkable neighborhoods. *American Journal of Public Health* 93 (9): 1546- 51.

Leyden, K. M., A. Goldberg, and R. Duval. 2008. *Quality of life, happiness and the importance of social and community connections*. Paper presented at the Global Metropolitan Forum of Seoul, South Korea.

Leyden, K. M., A. Goldberg, and R. Duval. 2011. The Built Environment, Maintenance of the Public Sphere and Connections to Others and to Place: An Examination of Ten International Cities. *Journal of Urbanism*, 4 (1): 25-38.

Long, J. S., and J. Freese. 2006. *Regression models for categorical dependent variusing Stata*. 2nd ed. College Station, TX: Stata Corp.

Lyubomirsky, S., L. King, and E. Diener. 2005. The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin* 131 (6): 803-55.

Marks, N., and H. Shah. 2005. A well-being manifesto for a flourishing society. In *The science of well-being*, edited by F. A. Huppert, N. Baylis, and B. Keverne. Oxford: Oxford Univ. Press.

Maier, P.1997. *American scripture: Making the Declaration of Independence*. New York: Vintage.

Martikainen, L. 2008. The many faces of life satisfaction among Finnish young adults. *Journal of Happiness Studies*, DOI 10.1007/s10902-008-9117-2.

Menard, S. W. 2002. *Applied logistic regression analysis*. 2nd ed. Thousand Oaks, CA: SAGE.

Oldenburg, R. 1999. *The great good place: Cafes, coffee shops, community centers, beauty parlors, general stores, bars, hangouts, and how they get you through the day*. New York: Marlowe.

Pacek, A., and B. Radcliff.2008. Assessing the welfare state: The politics of happiness. *Perspectives on Politics* 6(2): 267-77.

Putnam, R. 2000. *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.

Richard, L., L. Gauvin, C. Gosselin, and S. Laforest. 2009. Staying connected: Neighbourhood correlates of social participation among older adults living in an urban environment in Montréal, Quebec. *Health Promotion International* 24 (1): 46-57. Epub 2008 Dec 20.

Rogers, S. H., J. M. Halstead, K. H. Gardner, and C. H. Carlson. 2010. Examining walkability and social capital as indicators of quality of life at the municipal and neighborhood scales. *Applied Research in Quality of Life*, DOI 10.1007/s11482-010-9132-4.

Salkever, S. G. 1977.Freedom, participation, and happiness. *Political Theory* 5(3): 391-413.

Sallis, J.F., A. Bauman, M. Pratt. 1998. Environmental and Policy Interventions to Promote Physical Activity. *American Journal of Preventive Medicine* 15 (4): 379-397.

Stiglitz, J. E., A. Sen, and J. Fitoussi. 2009. Report by the Commission on the Measurement of Economic Performance and Social Progress. www.stiglitz-sen-fitoussi.fr

Taylor, A. F., F. E. Kuo, and W. C. Sullivan. 1998. Growing up in the inner city: Green spaces as places to grow. *Environmental Behavior* 30 (1): 3-27.

Winkelmann, R. 2008. Unemployment, social capital, and subjective well-being. *Journal of Happiness Studies* DOI 10.1007/s10902-008-9097-2.

Wood, L., T. Shannon, M. Bulsara, T. Pikora, G. McCormack, and B. Giles-Corti. 2008. The anatomy of the safe and social suburb: An exploratory study of the built environment, social capital and residents' perceptions of safety.*Health & Place* 14 (1): 15-31.

Zidansek, A. 2007. Sustainable development and happiness in nations. *Energy*, 32: 891-7.

Bios

Kevin M. Leyden (PhD, Iowa University, 1992) is a Professor of Political Science at West Virginia University and currently an invited Honorary Research Professor of Social Science and Public Policy at the Centre for Innovation and Structural Change (CISC) at the National University of Ireland, Galway. Professor Leyden's teaching and research interests include social capital, public opinion, elections, interest groups, health policy, energy policy, land-use and transportation planning and issues of sustainable development. His research has been published in the *American Journal of Public Health*, *Environmental Health Perspectives*, *Environment International*, *The British Journal of Political Science*, *Political Research Quarterly*, *Legislative Studies Quarterly*, *American Politics Quarterly*, *American Journal of Health Promotion*, *American Journal of Preventive Medicine*, *Presidential Studies Quarterly*, and *Policy Studies Journal* among others. His current research focuses primarily on the relationship between urban design, social capital, health, and climate change.

Philip A. Michelbach's (PhD, University of California, San Diego, 2006) research interests are in the area of political theory and include German political thought, democratic theory, and distributive justice. He has taught introductory courses in political theory as well as more specialized classes in ancient, modern, and American political thought.

Abraham Goldberg, (PhD, West Virginia University, 2009), is an Assistant Professor of Political Science at the University of South Carolina Upstate. His research and teaching interests lie broadly in American politics and public policy with an emphasis on urban design, planning, sustainability, social capital, and political behavior.