Life satisfaction of urban residents: Do health perception, wealth, safety, community pride and, and cultural tourism matter?

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LIFE SATISFACTION OF URBAN RESIDENTS: DO HEALTH PERCEPTION, WEALTH, SAFETY, COMMUNITY PRIDE, AND CULTURAL TOURISM MATTER?

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ABSTRACT
The purpose of this study was to investigate the relationship between urban residents’ life satisfaction and five life domains – health perception, wealth, safety, community pride, and cultural tourism. A convenience sample of 364 urban residents was used. Discriminant function analysis was employed to discriminate between high and low life satisfaction groups based on five life domains. The results showed that life satisfaction was significantly related to the five life domains. It was also found that health perception was the strongest discriminator, followed by wealth and community pride.

Key Words: life satisfaction, cultural tourism, quality of life

INTRODUCTION
Diener (1984) defined life satisfaction as the cognitive evaluation of one’s life. Life satisfaction can be considered a central component of human welfare. Extensive research has been conducted in psychology and the social sciences to understand the factors that influence objective and subjective well-being. Several metrics measure how well citizens of various countries live. For example, The United States ranked 13 in the 2005 Economist Intelligence Unit’s quality-of-life index (n.d.), and 23 in the Satisfaction with Life Index (White, 2006). It appears that Americans are generally happy and content with life.

It is important to understand what makes people happy and what affects life satisfaction. The common terminology used to measure how well people live are life satisfaction and quality of life. Examples of validated measures, taking into account environmental and individual factors, are the Quality of Life Index (Ferrans & Powers, 1984) and Satisfaction With Life Scale (Diener, Emmons, Larsen & Griffin, 1985). The subjective and objective variables identified with life satisfaction include employment status, health status, humor, income, job, leisure satisfaction leisure participation, leisure repertoire planning, marital status, satisfaction, personal safety, place in community, social activity, spirituality, and standard of living (Diener & Suh, 2000; Ragheb & Griffith, 1982; Riddick, 1985; Riddick & Daniel, 1984; Riddick & Stewart, 1994; Russell, 1987; Sneegas, 1986).

LITERATURE REVIEW
Health Perception
The relationship between life satisfaction and various aspects of perceived health has been investigated. For example, Ferrell, Dow, Leigh, Ly, and Gulasekaram (1995) developed a quality of life model that included physical, psychological, social and spiritual well being. Lyon (1990) purported that health is a subjective phenomenon manifested as the experience of wellness or illness based on individuals’ evaluations of how they are feeling and doing. There is a positive relationship between subjective health and life satisfaction (Arrindell, Heesink, & Feij,1999; Fishbein & Klein, 1980; Kaplan & Fischer, 1992; Willits & Crider, 1988).
Wealth

The relationship between wealth and life satisfaction is varied and there are dissenting findings. Furnham and Argyle (1998) reported that research showed increase in wealth is related to positive outcomes in life. Similar positive relationships between economic factors and life satisfaction were found in numerous studies (Biswas-Diener & Diener, 2001; Diener, 2000; Diener & Biswas-Diener, 2002; Marks & Fleming, 1999). However, Dawson and Bamossy (1991) found that materialism is negatively correlated with the life satisfaction for Americans. Other studies that suggested a negative relationship between income and life satisfaction include Carver and Baird (1998), Fournier and Richins (1991), and Mick (1996). Thirdly, some research reported the impact of income on life satisfaction is minimal or economic factors generate resources to create a satisfying life (Roszkowski, & Grable, 2007; Schwartz, 2004). Easterlin (2001), for example, argued that the correlation between income and happiness is about .20 on average, which indicates that income accounts for only 4% of the variability in individuals’ happiness. Taken together, previous studies suggest that the relationship between wealth and life satisfaction is largely negative, but that it is also important to consider economic factors as one of the facets in Maslow’s (1954) hierarchy of needs. Therefore an individuals’ position with respect to wealth and life satisfaction may be relative and subject to the levels of needs that have been met.

Safety and Community Pride

Safety concerns impact life satisfaction (Amerigo & Aragones, 1990; Cummins, McCabe, Romeo, & Gullone, 1994). For example, Schkade and Kahneman (1998) found that university students considered personal safety as one of the most important aspects to their life satisfaction. Safety issues affect the perceived condition of communities in which people live and result in the level of their community satisfaction (Austin, Furr, & Spine, 2002). Amerigo and Aragones (1997) presented a conceptual framework of residential satisfaction and postulated that a positive evaluation of neighborhood conditions leads to satisfaction with neighborhood, which then leads to life satisfaction in general. Concerns about other community conditions and services are also associated with life satisfaction. Cummins (1996a) recognized “place in community” as a quality of life domain, which refers to community integration, community involvement, self-esteem, empowerment, etc. Cummins (1996b) reviewed 32 studies and concluded that life satisfaction could be measured by multiple domains and that the inclusion of community, safety, and health domains was appropriate.

Cultural Tourism

According to the Travel Industry Association (2003), cultural tourists formed 81% of U.S. adults who travelled in 2003 and they were more affluent and wanted life enriching experiences through travel. Cultural tourism has a growing impact on the socio-economic environment and several researchers (Bechleitner & Zins, 1999; Besculides, Lee, & McCormick, 2002; Cave, Ryan, & Panakera; 2007; Murphy & Boyle, 2006) have studied issues related to the impact of cultural tourism on local communities and cultural tourism planning. Besculides, Lee, and McCormick (2002) found that residents identified cultural tourism benefits as gaining pride in their communities, developing a stronger sense of ethnic identity, and etc. Murphy and Boyle (2006) examined the development of cultural tourism in Glasgow, Scotland and concluded that local contextual characteristics should be the focus, in order to raise city pride and profile and to attract more investment and tourists. A few studies have reported the influence of cultural tourism on life satisfaction (Wang, Fu, Cecil, & Avgoustis, 2006; 2008). Cecil, Fu, Wang, and Avgoustis (2008) discussed the cultural tourism development in Indianapolis in recent years and how it positively affected residents’ life satisfaction.

In addition to understanding the relationship between life satisfaction and specific life domains, a theoretical perspective may clarify the dynamics of life satisfaction. Bottom-up spillover theory may help explain the relationship between life satisfaction and several life domains because the relationships can be a type of bottom-up spillover effect. Many studies have employed this theoretical approach to understand quality of life (Cramer, Torgersen, & Krøkingen, 2004; Evans & Huxley, 2002; Heady, Veenhoven, & Wearing, 1991; Sirgy, Rahtz, Cicic, & Underwood, 2000). There may also be a hierarchical relationship as people experience satisfaction in individual life domains to achieve global life satisfaction. Maslow’s (1954) hierarchical needs model suggests that people first fulfill the lowest level of needs before moving to fulfill the higher level of needs. Such theoretical perspectives may guide us to develop a better understanding about how each of the life domains interacts with overall life satisfaction.

Taken together, each life domain (i.e., health perception, wealth, cultural tourism, safety, and community pride) are regarded as important aspects to understanding life satisfaction. These domains may overlap with the
hierarchical nature of Maslow’s needs model, with cultural tourism being a higher level need because it involves individuals’ search for the growth and understanding. Based on the literature and the premise of the hierarchical needs model, it is expected that (1) the five life domains are positively related to life satisfaction and (2) if the higher need is related to life satisfaction, other lower level needs also relate to life satisfaction. Further understanding of how these topics affect life satisfaction will enlighten tourism professionals attempting to use cultural tourism as a promotion modality. In addition, while the importance of cultural tourism has been investigated (Reisinger, 1994), there has been limited research on the relationship between cultural tourism and life satisfaction. Few studies have examined the relationships among these variables, and no empirical studies have looked at their application to a tourism environment. Thus, this study examined the relationships among these variables using residents in a Midwestern city. Specifically, the purpose of this study was to examine if perceived health, wealth, safety, community pride, and cultural tourism discriminate between high and low life satisfaction groups.

**METHODOLOGY**

Subjects in a Midwestern city were asked to complete a pen and paper survey in October 2008, via convenience sampling methodology. A questionnaire was developed to examine the relationship between life satisfaction and five life domains: health perception, wealth, safety, community pride, and cultural tourism. By using convenience sampling, surveys were administered in downtown in a Midwestern city. This city has a population about 1 million, and a number of theaters, private art galleries, bars, museums, and independently owned restaurants offer cultural tourism opportunities to the urban residents. Of the 395 collected, 364 complete questionnaires were used in data analysis.

**Dependent variable.** The SWLS scale (Diener, 1984) was used to measure life satisfaction. The scale has been used extensively and is applicable to adult age groups (Hamarat, Thompson, Zabrucky, Steele, Matheny, & Aysan, 2001). Internal consistency of SWLS was .80 (Reistetter, Spencer, Trujillo, Abreu, 2005). An example of the five-item SWLS is “In most ways my life is close to my ideal.” The SWLS is rated on 7-point Likert scale and higher scores indicate greater life satisfaction. The overall mean SWLS score was 4.82 (SD =1.39); respondents generally agreed that they were satisfied with their lives. Cronbach’s alpha was .907. Two a priori groups were created based on the life satisfaction scores: high life satisfaction and low life satisfaction.

**Independent variables.** The health perception variable was measured on an ordinal scale that assessed satisfaction with current state of health. A 7-point Likert scale was used. Wealth was identified by the item relating to annual household income, which ranged from zero to $150,000 and above. The cultural tourism items were adapted from Wang et al.’s (2008) quality of life and cultural tourism study. Six of the original 21 items that assessed events, festivals, and life enrichment were included. The items were rated on 5-point Likert scale, and included statements such as “I enjoy the cultural attractions the city offers,” and “I enjoy the city wide events and festivals.” Cronbach’s alpha for the above six cultural tourism items was .911. The fourth independent variable used was safety and six items were adapted from the study by Wang et al (2008). Questions such as “How safe do you feel in your home during daytime?” and “How safe do you feel in your neighborhood after dark?” were reviewed for face validity. The items were based on a 5-point Likert scale ranging from very unsafe to very safe. Cronbach’s alpha for the safety items was .870. Based on the review of quality of life literature (Cecil, Fu, Wang, & Avgoustis, 2008; Wang, Fu, Cecil, & Avgoustis, 2006), a list of 11 items was constructed to measure the last variable, community pride, based on the city’s living condition, infrastructure, and services. A 5-point Likert scale was used and Cronbach’s alpha for the community pride items was .841.

**Data Analysis.** Zero-order correlation coefficients were computed. Discriminant function analysis was used to identify the domains that distinguished between respondents who had high and low life satisfaction scores.

**RESULTS**

The study, n=364, comprised of 51% males and 49% females. Of the respondents, 33% were 18-30, 27% were 31-43, and 29% were 44-56 years old. The sample comprised of 76% Caucasian, 11% African American, 3% Asian, 1% Hispanic, and etc. With regard to marital status, 53% were married, 12% were divorced and 31% were never married. With regards to income, 15% had $30,000 or less, and 30% had $90,000 and above (See Table 1). Pearson correlations coefficients indicated that there significant relationships among the domains existed (see Table 2). Life satisfaction was positively related to all five domains. Participants who scored high on life satisfaction were generally satisfied with the city’s health, wealth, safety, community pride, and cultural tourism.
satisfaction tended to report higher awareness of cultural tourism, community pride, safety, health perception, and wealth.

Table 1. 
Demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-30</td>
<td>121</td>
<td>33.2</td>
</tr>
<tr>
<td>31-43</td>
<td>99</td>
<td>27.2</td>
</tr>
<tr>
<td>44-56</td>
<td>105</td>
<td>28.8</td>
</tr>
<tr>
<td>&gt;57</td>
<td>36</td>
<td>9.8</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>186</td>
<td>51.1</td>
</tr>
<tr>
<td>Female</td>
<td>177</td>
<td>48.6</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>276</td>
<td>75.8</td>
</tr>
<tr>
<td>African American</td>
<td>41</td>
<td>11.3</td>
</tr>
<tr>
<td>Asian</td>
<td>9</td>
<td>2.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5</td>
<td>1.4</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>192</td>
<td>52.7</td>
</tr>
<tr>
<td>Never Married</td>
<td>112</td>
<td>30.8</td>
</tr>
<tr>
<td>Divorced</td>
<td>45</td>
<td>12.4</td>
</tr>
<tr>
<td>Household Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30,000</td>
<td>55</td>
<td>15.1</td>
</tr>
<tr>
<td>30,001-60,000</td>
<td>99</td>
<td>27.2</td>
</tr>
<tr>
<td>60,001-90,000</td>
<td>83</td>
<td>22.8</td>
</tr>
<tr>
<td>90,001-120,000</td>
<td>60</td>
<td>16.5</td>
</tr>
<tr>
<td>&gt;120,000</td>
<td>49</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Table 2. 
Zero-order Correlation Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cultural tourism</td>
<td>3.66</td>
<td>.81</td>
<td>1.00</td>
<td>.43**</td>
<td>.28**</td>
<td>.16*</td>
<td>.15*</td>
<td>.11*</td>
</tr>
<tr>
<td>2. Community pride</td>
<td>3.20</td>
<td>.61</td>
<td>1.00</td>
<td>.38**</td>
<td>.16**</td>
<td>.20**</td>
<td>.22**</td>
<td></td>
</tr>
<tr>
<td>3. Safety</td>
<td>4.10</td>
<td>.73</td>
<td>1.00</td>
<td>.18**</td>
<td>.22**</td>
<td>.17**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Health perception</td>
<td>4.99</td>
<td>1.57</td>
<td>1.00</td>
<td>.12*</td>
<td>.56**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Income¹</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Life satisfaction</td>
<td>4.83</td>
<td>1.39</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ¹: Income was measured in ordinal scale. Mean and SD are not available. * p< .05; ** p<.01

Discriminant function analysis was used to determine the ability to predict the group differences of life satisfaction using the 5 domains (see Table 3). The analysis generated a significant function (Wilks’$ \Lambda = .754, X^2 (5, N=320) = 88.44, p<.001$). The canonical correlation ($r = .49$) indicated that approximately 24.6% of the variance in
the discriminant function was explained by the groups. Thus, health perception, wealth, cultural tourism, safety, and community pride items accounted for about 24.6% of the variability in life satisfaction.

Table 3.
**Discriminate Function Analysis of Life Satisfaction**

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>Canonical Correlation</th>
<th>Wilks’ $\Lambda$</th>
<th>$X^2$</th>
<th>df</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.326</td>
<td>100.0</td>
<td>0.496</td>
<td>0.754</td>
<td>84.44</td>
<td>5</td>
<td>&gt;.001</td>
</tr>
</tbody>
</table>

Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardized Function Coefficients</th>
<th>Structure Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Health perception</td>
<td>0.861</td>
<td>0.882</td>
</tr>
<tr>
<td>2. Income</td>
<td>0.367</td>
<td>0.407</td>
</tr>
<tr>
<td>3. Community pride</td>
<td>0.257</td>
<td>0.392</td>
</tr>
<tr>
<td>4. Safety</td>
<td>-0.072</td>
<td>0.222</td>
</tr>
<tr>
<td>5. Cultural tourism</td>
<td>0.025</td>
<td>0.264</td>
</tr>
</tbody>
</table>

Group Centroid = Low Life Satisfaction, -0.599; High Life Satisfaction, 0.541

Discriminant function analysis was used to identify which domains best distinguished between the two groups, while classification analysis was used to examine the adequacy of the discriminant function. Table 4 indicates that 72% were correctly classified for overall sample. Given that random assignment in this two group situation would result in approximately 50% correct classification, the discriminant function offers improvement. Further examination of the classification results indicates that the discriminant function is more accurate in classifying those who have high life satisfaction (79.6% correctly classified) as opposed to those who have low life satisfaction (63.6% correctly classified).

Table 4.
**Classification Results for Life Satisfaction**

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>Number of Respondents</th>
<th>Predicted Group (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Life Satisfaction</td>
<td>151</td>
<td>Low Life Satisfaction: 96 (63.6%)</td>
</tr>
<tr>
<td>High Life Satisfaction</td>
<td>167</td>
<td>Low Life Satisfaction: 34 (20.4%)</td>
</tr>
</tbody>
</table>

Percentage of groups correctly classified = 72.0%

**DISCUSSION**

Study findings demonstrated that five life domains - health perception, wealth, safety, community pride, and cultural tourism – were positively related to life satisfaction. The study also lends empirical support to previous research that investigated the relationships among those life domains and life satisfaction (Furnham & Argyle, 1998; Lohr et al., 1988; Schkade & Kahneaman, 1998). As anticipated, association of life satisfaction and health perception was relatively high. This finding is consistent with other studies that also observed positive correlations between health perception and life satisfaction (Arrindell et. al., 1999; Rapkin & Fischer, 1992). With regard to the relationship between wealth and life satisfaction, the results from this study does not support the old adage “money will not make you happy.” As previously mentioned, views on the roles of economic factors have been rather controversial among researchers. The result of this study confirms the positive influence of wealth on life satisfaction (Diener, 2000; Marks & Fleming, 1999). The finding contradicts results of numerous studies that suggested wealth is negatively correlated with life satisfaction (Carver & Baird, 1998; Dawson & Bamossey, 1991; Fournier & Richins, 1991; Mick, 1996). Additionally, Veehoven (1991) suggested that correlation between wealth and life satisfaction was higher in poorer countries than in rich countries. It should be noted that the respondents in the present study had unique demographics (i.e., median age < 44, married = 52.7%, and median annual household income > $60,000) and that may offer some level of explanation for dissenting findings. The median annual
household income in the sampling frame is $49,888 (Ecanned, 2007) and when compared to the median income of the sampled respondents ($60,000 and greater), an obvious income discrepancy exists; the sample in this study is relatively affluent. Hence it is postulated that the respondents may be at certain stages in their life where accumulation of wealth is of more importance. Further investigating into possible situational factors is recommended.

The finding of a positive relationship between cultural tourism and life satisfaction could be a significant contribution in that few studied have quantitatively measured the relationship between those two variables. This is a further refinement of the findings by Wang et al. (2008). They had identified life enrichment as a cultural tourism factor and concluded that perceptions of cultural tourism positively impacted quality of life. Life enrichment is a benefit derived from cultural tourism. Further investigation of the relationship between cultural tourism and other constructs of quality of life (e.g., mental health, happiness, optimism, and positive affect) is needed.

Discriminant function analysis revealed 72% accuracy in the prediction of either low or high life satisfaction group membership. The discriminant function analysis identified health perception, wealth, and community pride as relatively more important discriminating variables than safety and cultural tourism for life satisfaction. Both domains can be argued to be similar to the more basic needs (i.e., needs to be met prior to satisfy higher order needs) in Maslow’s (1954) hierarchy of needs. Physiological and safety needs were lower level needs that had to be met prior to satisfying higher order needs such as belonging, self-esteem, and self-actualization. Cultural tourism in the form of life enrichment, and community involvement in the form of belonging could be considered higher level of needs. In contrast, health perception, wealth and safety can be viewed as lower level needs.

City planners may gain knowledge about whether the community is striving to fulfill lower or higher level needs by investigating their levels of life satisfaction. This may help identify city services that need to be addressed or improved. When the majority of a community falls in a high life satisfaction group, services that address higher level needs could be strengthened. For example the quality of museums may be enhanced so as to offer more life enriching opportunities, or cultural features may be emphasized to further improve community pride. When the majority of a community falls in a low life satisfaction group, services that address lower level needs, such as police patrol and presence, may be expanded to improve life satisfaction. The next phase of research is to examine the causal relationship between life satisfaction and the domains.

REFERENCES


Dawson, S., & Bamossy, G. (1991). If we are what we have: What are we when we don't have? *Journal of Social Behavior and Personality, 6*, 363-384.


