The Ecological Sensibility of New Yorkers: A Survey Conducted July–August 2010 in New York’s Central Park

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Abstract

New Yorkers are estimated to have some of the smallest ecological footprints in America, as the urban landscape of Manhattan has proven to be one of the best energy-saving devices for its overcrowded population. However, the ecological footprint index does not gather information about individuals’ ecological sensibility, which many eco-critics have argued has an important influence on an individual’s environmental impact. This study set out to investigate the ecological sensibility of Manhattan’s urban dwellers with a survey that questions participants’ consumption behavior, understanding of waste and resource sites, perceptions of environmental impact, and understanding of the word “sustainability.” Results suggest the prevalence of some environmentally responsible behaviors versus others, ignorance as to the locations of waste and resource sites, and more individual concern than guilt about the current state of the environment. Finally, study results suggest that there is no generally understood definition of sustainability among New Yorkers.

Introduction

Cities are generally considered the best energy-saving device of the modern world. Urban dwellers living in close proximity are less likely to use cars, own energy-intensive homes, or use unsustainable amounts of water for yard irrigation. As 1.5 million people sharing 23 square miles of space (2010 U.S. Census Bureau), New York’s Manhattanites are estimated to have half the ecological footprint of the average American (Duany, 2010). However, as we can see in the more intensified examples of Rio de Janeiro’s favelas or Mumbai’s slums, while they may be resource efficient, densely
populated communities do not necessarily provide a better quality of life for their residents. The reasons for questioning how to measure sustainable development are constantly increasing.

The Brundtland definition of sustainable development—“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”—expresses an ideal development goal. It is holistic and flexible, yet it is imprecise. As argued in the 2006 Report of the International Union for Conservation of Nature Renowned Thinkers Meeting, the current idea of sustainable development may bring people together, but it does not necessarily help them to agree on goals. In implying everything, sustainable development arguably ends up meaning nothing (Adams, 2006). Perhaps Pyne’s understanding of the concept rings closest to truth: “Sustainability is not an ecological condition so much as it is an interplay between a continuously evolving state of nature and a continuously changing state of mind” (quoted in Allen, Tainter, and Hoekstra 2003, p. 23). This understanding of sustainability recognizes that the changing mindsets of individuals influence global environmental impact.

Wilhelm Schmid’s concept of ökologische Lebenskunst, which can be translated as the ecological art of living, rather than preaching the necessity for individuals to join a collective eco-movement, advocates enlightened self-interest. That is, ökologische Lebenskunst assumes that it is in every individual’s self-interest to live in a natural world because this provides an individual with better quality air, better food quality—overall a better quality of life. Schmid proposes that the way to mitigate global environmental crises is to bring about individual behavior change with ecological sensibility and awareness-inspired self-discipline (Schmid, 2008).

Similarly emphasizing the role of self-led behavior, in his paper titled “A detailed look at the three disciplines, environmental ethics, law and education to determine which plays the most critical role in environmental enhancement and protection,” Soloman makes the argument that environmental ethics is the force that propels environmental enhancement and protection (Soloman, 2010). Both of these theories stress the importance of an individual’s ecological sensibility to drive sustainable behavior.

A National Geographic–led Greendex: Consumer Choice and the Environment worldwide tracking survey has investigated consumer progress towards environmentally sustainable consumption three times between 2008 and 2010. As in 2008, the top-scoring consumers of 2010 (meaning the consumers with the lowest environmental impact) were in the developing economies of India, Brazil, China, in descending order. However, the six lowest scores (meaning the highest environmental
impacts) were awarded to consumers in industrialized countries—with the U.S. coming in at #1 with the world’s most non-environmentally friendly consumers (Greendex, 2010).

Juxtaposing the work of Schmidt and Soloman—whose theories suggest that the social change needed to mitigate global environmental concerns will only develop as individuals voluntarily commit themselves to ecologically minded efforts—with Greendex data suggesting that consumers in developed countries (who have made the larger historical contribution to detrimental environmental effects) hold the lowest levels of concern and guilt about environmental problems presents a largely ironic and disturbing situation. While at international climate conferences, politicians from Western countries may quickly be passed the blame for today’s environmental catastrophe, it seems the consumers in these nations are largely lacking the ecological sensibility to comprehend their lifestyle’s effects on the rest of the planet.

In recent years, action at governmental and administrative levels in the U.S. to encourage “green” and “sustainable” initiatives has increased. Analysts believe that the widespread willingness to adopt the idea of sustainable development stems from the fact that its definition still remains so loose—it can be used to support very divergent ideas (Adams, 2001). Greater action at the local and individual levels is needed in order to bring the concept of sustainable development to life. A better understanding of how and why individuals commit themselves to ecologically minded efforts may bring with it a better understanding of the types of social and physical environments that support these choices.

Focusing on the densely populated island with America’s most attractive urban eco-footprint, this study set out to investigate New York City residents’ ecological sensibility at the individual and local levels. In studying this, I hoped to develop a better understanding of whether ecological sensibility and which individual-led sustainability-minded actions are prevalent in New York City. The central questions of this study are:

- What are the ecologically considerate actions that individuals are taking/not taking within the local context of New York City?
- How concerned and how guilty do individuals in New York City feel about the current state of the global environment?

It is important to note is that the Greendex survey not only ranked data about average consumer actions and behaviors, but also collected data about attitudes and beliefs. Asked how much they agreed that “I am very concerned about environmental problems,” Indians, Chinese, Brazilians, and South Koreans ranked as the most concerned, while Americans, British, Germans, and Swedes ranked as the least concerned. Similarly, when asked to rank their agreement with “I feel guilty about the impact I have on the environment,” Indians, Chinese, Brazilians, and Mexicans (countries with economies in transition) ranked their guilt level the highest, while French, British, Germans, and Japanese ranked theirs the lowest.
How knowledgeable are New York City residents about where they draw their resources from, and where their waste settles?

How do individuals in New York City define sustainability?

My hypothesis predicted that the urban environment of New York City would serve to inhibit ecological sensibility, and that self-led, ecologically considerate actions would be more popular if able to be easily integrated into the urban lifestyle. I predicted that the most popular behavior among integrated New York City residents would be the consumption of “green” or “eco” products. I also predicted that the more time people spent in the city, the less ecologically responsible their answers would be.

A qualitative study, conducted during the months of July and August 2010, collected 220 surveys from New York City residents. Because the survey size of 220 is relatively small, I did not have sufficient data to test my prediction that the more time people spent in the city, the less ecologically responsible their answers would be. However, the survey results do suggest that, among the New Yorkers surveyed:

- Some ecologically considerate target behaviors (using public transportation, recycling) are more prevalent than others.
- New Yorkers are largely unaware of where their food, water, and electricity come from and where their waste goes.
- Most New Yorkers feel only moderately or not at all responsible for the state of the environment.
- But most New Yorkers are very or moderately concerned about the state of the environment.
- There is no general understanding of a definition for sustainability that New Yorkers share.

Methodology: Location and Data Tools

For this qualitative study, a diverse and willing study group was targeted to take the questionnaire surveys. The survey site location was Central Park, New York, during the months of July and August 2010. Central Park stretches from 59th Street, Manhattan’s Midtown, to 110th Street, Manhattan’s Harlem. The overall profile of people who use the park is diverse. Those who chose to participate in the study first confirmed that they were both over the age of 18 and residents of New York.

Individuals were approached only if found relaxing (sitting, lying down, reading, eating, or playing a sport) in Central Park’s green spaces. Everyone encountered in the survey zone, an area of the park that rotated each day of study, was asked to participate. Individuals in transit were not asked to
participate, in order to ensure that participants were not rushed while answering the lengthy survey. Survey periods lasted between three and five hours, and were stopped once 22 surveys had been collected. Many of the “relaxers” approached in the park were tourists or summer visitors, which meant that survey sessions usually took several hours, despite the initially perceived large number of “relaxers.” Ten survey sessions took place inside of each of the five survey zones twice (once on a weekday and once on a weekend), with 22 surveys collected each time. Most people who were eligible to take the survey agreed to do so. Individuals who declined most often explained they did not feel comfortable enough with English. All participants were informed that the survey was voluntary, and for student research purposes only.

At left is a diagram of the five divided areas of Central Park referred to in this study. Areas 1 and 2 begin at 59th Street, and areas 4 and 5 end at 110th Street.

The questionnaire asked the following questions, in three categories:

**Participant History**

This section intended to collect information about the backgrounds of the study participants. With a larger group, this data might be used to develop conclusions about how New York City residents’ backgrounds affect their ecologically considerate behaviors and perceptions of environmental sustainability.

**Age, sex, years spent in this city, U.S. citizen?**

**How often did you spend time in outdoor green space as a child?**

0 hours per week, 1-4 hours per week, 5-9 hours per week, 9 or more hours per week

**How often do you spend time in outdoor green space now?**

0 hours per week, 1-4 hours per week, 5-9 hours per week, 9 or more hours per week

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2 Twenty-two surveys were collected in a “test” session of 4 hours at the beginning of July. This number was used as a standard survey-collection goal for the following 10 sessions to ensure a diverse sample.
Participant Sustainable Development Behaviors

This section was included to collect data to better understand which ecologically considerate actions New York City residents engage in. From the data collected we can begin to make conclusions about which individual behaviors are more or less common in New York City’s population. I also collected data about New York City residents’ concern and guilt about the state of the natural environment; creating a data group to compare to Greendex findings, which suggest that developed nations’ consumers rate these levels comparatively moderately.

**How often do you recycle (rather than trash) your waste?**
**How often do you make an effort to unplug vampire appliances (phone and computer chargers) when they are not in use?**
**How often do you make an effort to buy local and organic foods?**
**How often do you make an effort to support companies who sell eco-friendly/green products?**
**How often do you make an effort to use reusable cups or water bottles instead of disposable containers and bottled water?**
**How often do you make an effort to walk, carpool, or take public transport instead of driving?**

The answer choices for these questions were never, rarely, sometimes, and always.

**How concerned are you about the state of the natural environment?**
**How guilty do you personally feel about the state of the environment?**

The answer choices for these questions were not at all, very little, moderately, and very.

Participant Knowledge of Sustainable Development

This section studies the extent to which New York City residents are informed about the impact of their consumption habits. It also collected data about public understanding of the word “sustainability.”

**What is the source of your tap water?**
I don’t know; I know, it is: ________________________________

**How far does your food travel to get to you?**
I don’t know; I know, it travels from: ________________________________

**What is the energy source that drives your electricity?**
I don’t know; I know, it is: ________________________________

**Where is your waste’s final destination?**
I don’t know; I know, it ends up ________________________________

**What is sustainability?**
I don’t know; I know, it is: ________________________________
Advantages and Limitations of the Study

Individualized Answers

While some of the questions offered multiple-choice answers, much data of interest is found in the individualized answers of participants. The range of answers for the participant knowledge section could not have been foreseen, and if the survey had used simple multiple-choice methodology for the entire study, less dynamic data results, particularly for the “what is sustainability?” question, would likely have been recorded. A limitation of the data is that, although it is interesting that so many different answers for sustainability were produced, there was no system in place to help organize results. The prevalent use of buzzwords such as “green” and “eco” also limits options for organizing knowledge groups to reflect individual understanding of sustainability. This question’s data would have benefited from the prohibition of using these buzzwords.

Guessing

It is possible that a significant amount of guessing produced the incorrect answers for the knowledge section (regarding questions such as “what is the source of your tap water?”). However, providing multiple-choice answers might have only increased the amount of guessing, skewing data results further.

Ranking Scale

The ranking methodology for the behaviors section (“not at all” to “very” and “never” to “always”) may have made data results appear more moderately set than reality. Although this system was meant to limit the number of moderate answers by forcing participants to choose between “sometimes” and “always,” the survey might have benefited from the inclusion of an “often” option. Furthermore, ranking how likely a participant is to perform an action like unplugging appliances or buying local foods might not have been the best way to record popular behaviors. A better option might have been to ask participants to rank their top three behaviors in the order in which they most often perform them.

Survey Size

Perhaps because the survey took place during late summer, or because half of the survey days were scheduled during the week, more often than not the “relaxers” approached in Central Park were tourists, not residents. This unforeseen variable cut the expected survey size considerably. Perhaps
scheduling survey days exclusively on weekends might have yielded more results. There is, however, a perk to having a relatively medium-sized survey, as many of the questions demanded individualized write-ins. This smaller size made the interpretation of answers more manageable.

Results

Behaviors:

Part 1. Ecologically Considerate Action

How often do you make an effort to recycle (rather than trash) your waste?

- 54% (118 people) answered always
- 8% (17 people) answered rarely
- 4% (8 people) answered never
- 34% (75 people) answered sometimes

How often do you make an effort to unplug vampire appliances (phone and computer chargers) when they are not in use?

- 15% (33 people) answered always
- 23% (50 people) answered rarely
- 16% (34 people) answered never
- 46% (98 people) answered sometimes
How often do you make an effort to buy local and organic foods?

- 21% (46 people) answered always
- 20% (44 people) answered rarely
- 9% (20 people) answered never
- 50% (109 people) answered sometimes

How often do you make an effort to support companies who sell eco-friendly/green products?

- 16% (35 people) answered always
- 6% (13 people) answered never
- 21% (45 people) answered rarely
- 57% (124 people) answered sometimes
How often do you make an effort to use reusable cups or water bottles instead of disposable containers and bottled water?

37% (82 people) answered **always**
3% (6 people) answered **never**
12% (26 people) answered **rarely**
48% (105 people) answered **sometimes**

How often do you make an effort to walk, carpool, or take public transport instead of driving?

74% (160 people) answered **always**
1% (3 people) answered **never**
5% (10 people) answered **rarely**
20% (44 people) answered **sometimes**
Analysis

*Transportation* and *Recycling* categories had the highest “always” responses. These behaviors may have been more popular because they are city-supported behaviors. Public transport in New York, while not very efficient compared to other cities, is the fastest and cheapest way to get around the city. Rarely do New Yorkers own their own cars, as parking is scarce and traffic can be brutal. *Recycling* was the other most popular individual behavior. This was more surprising, as New York City does not provide many public street-side recycling bins. People may have answered this question in reference to their home-based recycling behavior, which city policy supports with recyclables collection every week. *Reusing* cups or water bottles instead of disposable containers and bottled water also had a high “always” response in comparison to the other behaviors in question. This is an interesting result, and may suggest that New Yorkers are largely satisfied with their city’s tap water, a behavior that may have been influenced by New York City’s recent campaign, *NYC tap*.

The least popular activities were *Unplugging* and buying *Local and Organic Foods*. Unplugging appliances when they’re not in use is one of the behaviors that is not particularly encouraged by media or policy—this may account for its being the least popular activity. Buying local and organic food was also not as popular as other behaviors. Cost could be the deciding factor here. Organic food can be considerably more expensive in New York City. It’s possible that many people did not make buying organic and local food a priority in the midst of current high unemployment rates and recession pressures. Another reason for the low popularity of this behavior could be the prevalence of food vendors and restaurants in New York City—it’s possible that participants recorded it less frequently because they do not consistently buy fresh produce and instead eat out.

The behavior that falls somewhere in the middle of popular and unpopular was “How often do you make an effort to support companies who sell eco-friendly/green products?” with 57% of participants choosing “sometimes.” That most companies are greenwashing their products in some manner, either with sustainability claims or by tacking on the word (or color) “green,” makes it almost impossible for anyone to choose “never” for this question. It is nevertheless interesting that this question has the largest “sometimes” response. This is the behavior question originally hypothesized to generate the most popular response. Study results determine that it is in third place, after the more popular *Recycling* and *Public Transportation*. 
Behaviors:
Part 2. Perceptions of the state of the natural environment

Questions:
How concerned are you about the state of the natural environment?
How guilty do you personally feel about the state of the environment?

58% (127 people) answered very
37% (80 people) answered moderately
5% (11 people) answered very little
0% (1 person) answered not at all

16% (35 people) answered very
51% (110 people) answered moderately
24% (51 people) answered very little
10% (21 people) answered not at all
Analysis

The majority of participants, 58%, were “very” concerned about the state of the environment, yet only 16% felt “very” guilty about their own impact. Instead, the majority (51%) of participants felt only “moderately” guilty.

What these numbers tell us is that most New Yorkers don’t feel significantly responsible for the detrimental global environmental impacts of human consumption. One possible reason for the high “very” response to concern and the low “very” response to guilt could be that some participants did not believe that climate change is anthropogenically caused. Or perhaps, after supporting environmental policy or being able to check off a few “always” answers for the ecologically conscious behaviors section, some participants felt they were doing enough as individuals to counter their own negative impacts. Either way, these numbers show that, although the majority of participants are significantly concerned about the state of the environment, the blame for environmental damage is being sent elsewhere—it’s not staying with the individual.

More people answered “very little” (38%) than answered “very” (16%) in response to the question “How guilty do you personally feel about the state of the environment?” However, more people answered “very” (58%) than “very little” (5%) when asked how concerned they were; in fact, only one person answered that he was “not at all” concerned about the state of the environment.

This data can be compared to Greendex findings, which rate U.S. citizens as the fourth least concerned about the environment and sixty least guilty feeling among the 18 countries studied.

Knowledge: Consumption sources and sinks

I also questioned New York City resident knowledge of the resources that they depend on for urban living (water sources, food sources, energy sources, waste sites). Note that most participants could not answer (or incorrectly answered) these questions.

- What is the source of your tap water?
- How far must food travel to get to your plate?
- What is the energy source that drives your electricity?
- Where is the final destination of your waste?

Water

The source of New York City tap water is a network of large upstate reservoirs: the New Croton Reservoir, the Catskill aqueduct, and the Delaware and Hudson Rivers (the Delaware system).
About one quarter (26%) of participants correctly identified “upstate reservoirs” or named one of the reservoirs specifically as the answer to “What is the source of your tap water?” Twenty percent of participants incorrectly identified the source of their tap water. Common answers were “New York City,” “NYC tap,” or “City Water.” Many people also said “Oceans” or “Central Park reservoir.” The majority of participants (53%) checked the “I don’t know” box.

The incorrect answers for “What is the source of your tap water?” suggest that many people do not think about the “source” as being a natural ecosystem collection site. It’s possible that they are more likely to think of their water “source” as their local water provider. The fact that a majority of participants could not identify the source of their tap water and checked the “I don’t know” box suggests that New York City urban dwellers are largely lacking the ecological sensibility to connect their dependence on city water to an outside source.

Food

In the United States, food travels 1,500 miles, on average, from farm to consumer (Pirog 2001). However, for this question, I considered participants’ answers correct if they acknowledged that food ingredients travel very long distances to New York from all over the world, or named the specific distances traveled by locally grown food they buy.

About a quarter (27%) of participants gave a correct answer to the question “How far does your food travel to get to you?” Because it would be nearly impossible to accurately calculate this, I considered as correct answers like “I try to buy as much as I can from the tri-state area at NYC farmers markets,” or “only meats from New York State, produce and other things I buy from the supermarket and come from all over the world.”

About another quarter (23%) of participants answered incorrectly, identifying certain states or low mile amounts as the answer to “How far does your food travel to get to you?” Some common answers included “500 miles” and “upstate.”

The majority of participants (63%) could not answer the question, and instead checked the “I don’t know” box. Those participants, plus the 23% who answered incorrectly, suggests that New York City urban dwellers are largely lacking the ecological sensibility to connect their food dependence to faraway outside communities and ecosystems.
Electricity

While it proved impossible to find the original sources for electricity that powers New York City, I was able to find information about the electricity sources for New York State. New York relies heavily on nuclear power from the state’s four nuclear plants and on hydro-electric power for electricity generation. Other sources—wood and waste, fuel ethanol, coal, and petroleum—also account for a substantial share of the power generated in the state. Comparatively, a very small amount of geothermal, solar, and wind energy is harvested (U.S. Energy Information Administration State Energy Data: Consumption, 2008).

New York also imports electricity from neighboring states and Canada. Therefore, this question was very difficult for participants to correctly answer, as no one energy source powers New York City; it’s more of a cocktail of sources. However, New York’s leading power source is definitely nuclear electric power, providing an annual 451.7 trillion BTUs of power. Hydro-electric takes second place, with nearly half the amount, 263.3 BTUs (U.S. Energy Information Administration State Energy Data: Consumption, 2008).

Only 4% of participants answered this question correctly, with answers acknowledging the different sources that New York uses to power electricity. I also considered “mostly nuclear” correct, as it is the leading source.

One third (33%) incorrectly identified the energy source as only (in order of most answered) “coal,” “Con Edison,” “gas,” “fuel,” or “oil” and “water/hydro.” There was also a scattering of other incorrect answers and combinations of two non-leading sources.

The majority of participants (63%) checked the “I don’t know” box, affirming that New York City urban dwellers are largely unaware of their electricity dependence on outside sources.

The fact that it proved impossible to track the exact source of electrical power in New York City was an interesting finding in itself. But also interesting is that so many survey participants considered the “source” of their electricity to be the company that sends the electricity bill—Con Edison. This suggests that New Yorkers are lacking the ecological sensibility to question where the source of the energy for their electricity is located, or for that matter what the source of their electricity is.

Waste

New York’s waste is exported by rail and barge to a network of landfill sites in surrounding states—Ohio, Pennsylvania, South Carolina, and Virginia. The borough of Queens sends its trash to New Jersey, and from there it goes on to “more distant landfills” (“NYC's Garbage Crisis,” 2006).
Only 2% of participants answered this question correctly.

More than a third (35%) of participants answered this question incorrectly. The most common answers were “Fresh Kills,” “Staten Island,” “recycling,” and an unidentified “landfill.”

The majority of participants (63%) could not answer this question and instead checked the “I don’t know” box.

The 35% of participants who answered incorrectly and the 63% who could not answer the question “Where is the final destination of your waste?” suggests that New York City urban dwellers are largely lacking ecological sensibility to connect the effects of their waste to outside environments. The popularity of the answers “New Jersey” and “Fresh Kills,” which would have been correct ten years ago, suggests that there is a public misunderstanding about the recent major transition in trash exportation policy. This transition could be important for citizens to know about, as it represents New York City’s growing problem of waste management.

**Knowledge: What is sustainability?**

The 122 participants (56%) who answered this question provided 122 different definitions (see Appendix). The remaining 98 participants (44%) checked “I don’t know”

**Analysis**

While the internationally recognized definition for sustainability considers three components—economy, environment, and equity—many of the definitions provided in this study ignore one, two, or all of these components. For example, some people referred to production cycles or to the environment in terms of resources to be produced, consumed, or managed and didn’t mention environmental well-being or social equity. For example:

- M-20: “Being able to produce and reuse without wasting”
- M-23: “Being able to produce a product that is able to support itself”
- F-20: “The ability to maintain stability and preserve a constant state of a system or material”
- F-23: “Using our resources to their fullest extent and in a cycle”
- F-25: “The ability to exist on natural resources”
- F-51: “Not using up resources”
In contrast, these answers seem to consider sustainability, fundamentally, as a nature preservation and conservation concept. If equity and economics are implied in these definitions, they are mentioned as a means to support the goal of a healthy, natural environment. For example:

- F-20: “Protecting and conserving the environment and our natural resources”
- F-23: “Preserving and protecting the environment through efficient means of productivity. (limit usage of electricity, reusing materials, etc).”
- M-23: “Acting in a way that can help preserve the environment”
- M-35: “To sustain the trees and parks”
- F-27: “Keeping the environment healthy”

These answers could be grouped as interpreting sustainability as a social-equity concept, highlighting an equitable society as the central goal of sustainability. For example:

- M-27: “The ability to sustain a lifestyle that uses less and conserves more to make ones life and others longer and better”
- F–23 “To be sustainable is to cause little impact on your environment, be it socially or physically. Sustainable consumption should avoid destruction of natural habitats, exhaustion of resources or contamination of any sort”
- M-61: “To realize simpleness in one’s life. To carry ourselves to a new dimension—to be non-destructive”
- F-31: “The ability to maintain a certain level of environmental balance within society”

Some responses did consider more than one of the three components (economy, environment, and equity), and a few responses, rather than identify any of the components, simply stated opinions about the word “sustainability.” For example:

- M-22: “Can’t explain in one line”
- M-31: “We’re all through”
- F-30: “This word is overused and becoming trendy—buzz word”

The range of answers for this question suggests that “sustainability” is indeed becoming a buzzword, without a widely understood meaning among New Yorkers.
Conclusions

The results of this study call attention to a dangerous situation in the urban environment of New York City. In one of the world’s largest developed urban areas, individuals draw from natural resource pools beyond their view and have shown to be largely unknowledgeable about the details of their dependence on these sources and the impact of their consumption on communities and ecosystems beyond their view. Most of the individuals surveyed also appear uncommitted to pursuing self-led, ecologically considerate behaviors, with the percent of “always” answers from participants rarely exceeding 50%. New Yorkers also, while generally concerned about the state of the environment, do not feel personally guilty about the current state of the environment.

The data collected suggest the need for more research that seeks to understand why, at the individual and local level, more ecologically considerate initiatives aren’t being undertaken, why understanding of sustainability is so varied, and what the influences of living in New York City, where resources are shipped in from outside local view, might have to do with these behaviors and perceptions. These are important questions to ask because, while New Yorkers may have relatively small eco-footprints compared to the rest of Americans, the lack of ecological sensibility among individuals makes New Yorkers far less likely to be motivated than is needed to pursue globally focused eco-justice and combat climate change effects.

The urban lifestyle conveniently allows residents to use and misuse valuable resources like water, food, and electricity without considering their impact on a larger, common natural resource pool. That this challenges global limits of growth has been acknowledged in the political realm since 1972, when the Club of Rome made the dramatic statement that “if the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years” (Meadows, 1972). Yet, almost 40 years later, sustainability policy is still not meeting these challenges. The fact that, at the local and individual level, people are still clueless as to where their water, food, and electricity come from, as well as to where the end location of their waste’s journey is, may be the reason for the low levels of concern and the low motivation levels to participate in individually led, ecologically sensible behaviors to lessen society’s impact on the environment.

Perhaps the most important findings of this study, the most underrepresented data in the larger research community, were the varied understandings of sustainability. The fact that nearly half of participants checked the “I don’t know” box also highlights the problem that “sustainability” is still an unclear concept, even in the developed city of New York. Mainstream greenwashing, or the
uncalculated overuse of the word “sustainability” by companies, institutions, and individuals hoping to brand themselves as responsible, has likely led to this general confusion. That nearly 50% of the participants could not answer the question “What is sustainability?” represents a large problem in political communication and, a more general, lack of societal engagement.

This survey has uncovered, fundamentally, how difficult it is to accurately record and represent individual “behaviors” and “attitudes” towards sustainability. The use of buzzwords to explain the word “sustainability” brought to light the complexity of deciphering what the public really thinks about sustainable development—and suggests the threat that “sustainability” may be developing into yet another empty political/marketing term. The use of empty words like “green” and “eco” to define “sustainability” raise the question of whether the mainstream media’s overuse of these words, or the lack of politically led ecologically focused education outreach, has made it possible for individuals to feel they need not think about their own role in the concept of sustainable development at all.

Sources


Appendix: Answers to the question “What is sustainability?”

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>19</td>
<td>Being able to last a long time</td>
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<tr>
<td>F</td>
<td>25</td>
<td>the ability to exist on natural resources</td>
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<td>F</td>
<td>29</td>
<td>having processes that keep renewable resources from depleting</td>
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<tr>
<td>M</td>
<td>20</td>
<td>being able to produce and reuse without wasting</td>
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<tr>
<td>M</td>
<td>39</td>
<td>use of recycled and environmentally friendly products</td>
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<tr>
<td>M</td>
<td>29</td>
<td>a way of life to spend our resources wisely</td>
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<tr>
<td>F</td>
<td>25</td>
<td>the ability to sustain/thrive in a renewable manner without harming others/things</td>
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<tr>
<td>F</td>
<td>20</td>
<td>The ability to maintain stability and preserve a constant state of a system or material</td>
</tr>
<tr>
<td>M</td>
<td>40</td>
<td>developing habits and ways of living that can balance with human growth</td>
</tr>
<tr>
<td>M</td>
<td>22</td>
<td>being able to sustain oneself and/or a society on reusable resources</td>
</tr>
<tr>
<td>M</td>
<td>23</td>
<td>Being able to produce a product that is able to support itself</td>
</tr>
<tr>
<td>F</td>
<td>31</td>
<td>using what the earth provides to eat and make shelter</td>
</tr>
<tr>
<td>F</td>
<td>50</td>
<td>having clean air and water for future generations</td>
</tr>
<tr>
<td>F</td>
<td>60</td>
<td>being able to support the population w. natural resources that doesn’t use them up in doing so.</td>
</tr>
<tr>
<td>F</td>
<td>52</td>
<td>Living off of what you grow, etc.</td>
</tr>
<tr>
<td>M</td>
<td>45</td>
<td>living in a way to efficiently use natural resources. Giving back more than you take</td>
</tr>
<tr>
<td>M</td>
<td>35</td>
<td>Long term development and equity</td>
</tr>
<tr>
<td>M</td>
<td>32</td>
<td>Living under current condition</td>
</tr>
<tr>
<td>F</td>
<td>31</td>
<td>a community in which input resources and output of waste can be managed, contained, continued w/o sustaining major problems for the community.</td>
</tr>
<tr>
<td>F</td>
<td>28</td>
<td>using local and renewable resources</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>not wasting energy</td>
</tr>
<tr>
<td>F</td>
<td>38</td>
<td>the ability to maintain at least the status quo in natural materials</td>
</tr>
<tr>
<td>M</td>
<td>25</td>
<td>a way of living which, if everyone complied, can be practiced for a significant time.</td>
</tr>
<tr>
<td>M</td>
<td>24</td>
<td>a frame of thinking and planning—an adapted use of resources matching with our necessities and natural resources available</td>
</tr>
<tr>
<td>M</td>
<td>40</td>
<td>being able to use products that can be reused, recycled to help reduce using raw materials</td>
</tr>
<tr>
<td>M</td>
<td>36</td>
<td>self sufficiency for all stakeholders with least impact on environment</td>
</tr>
<tr>
<td>M</td>
<td>23</td>
<td>Long-term existence of natural resources.</td>
</tr>
<tr>
<td>F</td>
<td>41</td>
<td>to keep something going</td>
</tr>
<tr>
<td>M</td>
<td>22</td>
<td>to have da power to constantly maintain</td>
</tr>
<tr>
<td>F</td>
<td>26</td>
<td>keeping the use of natural resources at a minimum while focusing more on use of renewable resources</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>The ability to adjust our production and consumption so that energy and food sources are no longer being depleted, but rather have the chance to regenerate and to sustain long term use</td>
</tr>
<tr>
<td>F</td>
<td>49</td>
<td>to be able to take care of yourself</td>
</tr>
<tr>
<td>F</td>
<td>25</td>
<td>ability to continually use something</td>
</tr>
<tr>
<td>M</td>
<td>36</td>
<td>Living in a manner in which resources can be naturally replenished.</td>
</tr>
<tr>
<td>M</td>
<td>44</td>
<td>what is used by me is immediately replaced (it is sustained)</td>
</tr>
<tr>
<td>F</td>
<td>51</td>
<td>Not using up resources</td>
</tr>
<tr>
<td>F</td>
<td>27</td>
<td>ability to make natural resources last</td>
</tr>
<tr>
<td>F</td>
<td>23</td>
<td>using our resources to their fullest extent and in a cycle</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>looking out for future generations</td>
</tr>
<tr>
<td>F</td>
<td>24</td>
<td>keeping something consistent</td>
</tr>
<tr>
<td>M</td>
<td>28</td>
<td>to renovate all things possible</td>
</tr>
<tr>
<td>F</td>
<td>22</td>
<td>Using/creating/utilizing services or items that can be reused/ not as easily gone to waste.</td>
</tr>
<tr>
<td>F</td>
<td>19</td>
<td>using less?</td>
</tr>
<tr>
<td>M</td>
<td>26</td>
<td>to replace more than you use</td>
</tr>
<tr>
<td>M</td>
<td>21</td>
<td>living in a way that the earth is able to replenish the resources you consume</td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td>keeping the environment as is?</td>
</tr>
</tbody>
</table>
sustaining a level of healthy environment

a way of using our natural resources which will not permanently use them up

the process by which the environment is taken care of

Sustainability is our ability to preserve our natural environment, to protect its vital resources which we use (eco-friendly use) for our present and future generations

Having growth without destroying/depleting natural environment and resources.

practice of doing least amount of harm to environment

searching for reusable, natural, eco-friendly solutions and resources

renewable use of resources, taking care of the environment

using products that do not cause a burden on the environment to renew

preserving and protecting the environment through efficient means of productivity. (limit usage of electricity, reusing materials, etc).

an approach to farming, energy, businesses, that does not lead to depletion/exhaustion of the supporting environments.

creating and using products that don’t destroy the environment.

Living in a way that does not damage the environment – low impact

being responsible for your own carbon footprint, don’t take more than you leave.

acting in a way that can help preserve the environment.

to sustain the trees and parks

To be sustainable is to cause little impact on your environment, be it socially or physically. Sustainable consumption should avoid destruction of natural habits, exhaustion of resources or contamination of any sort

ecological balance that prevents the depletion of natural resources

protecting and conserving the environment and our natural resources

being able to maintain the current state of resources, not taking more than you put back into the earth, not causing damage along the way, being responsible about every step of the process of taking, producing, or using anything on earth so that you leave little or no footprint

the ability to sustain a lifestyle that uses less and conserves more to make ones life and others longer and better

to try to keep the environment intact in a certain way as it relates to the topic.

supporting the protection of Natural resources and the environment

keeping the environment healthy

to realize simpleness in one’s life. To carry ourselves to a new dimension to be non-destructive

living in an attempt to limit our footprint

when a person replaces what they consume and does not waste

maintaining our existence and our environment’s existence for the present and future

living within your natural means and carbon footprint

how we can sustain (support) the environment

Not using up resources

preserving the environment by recycling, saving electricity, using eco-friendly products, etc

living in a way that doesn’t deplete natural resources to extinction

Our attempt to ensure that our ecological footprint is not too high for the earth to handle

to live without using more than you need

The ability to maintain a certain level of environmental balance within society

acting to preserve the balance

living a lifestyle that does not deplete the earth’s resources

use of the planet with responsibility

doing what we can to make our natural resources remain natural

The ability to produce something with as little waste and as much recyclability as possible. I.e. local farming, organically grown products etc.

what keeps everything going alive

renewable, renews itself

sustaining the resources we have, now by local, green, organic, recycling, reusing

Sustainable = renewable

Long Lasting

renewable as quickly as its used?

the effort to keep it natural—how to sustain (continued)
reusing, recycling, reducing impact on environment
environmental issues/ causes/ effects
reusing/ recycling
reducing negative impact on the environment
e.g. a farm that can sustain itself on its own
The environment’s resources
keeping the environment green and eco-centric
The availability to reuse, recycle and birth to rebuild in a few words.
to preserve, etc.
to preserve
to preserve
Sustaining an environment
endurance, maintenance, strength
capable to sustain
Hard to sum up, but a self-fueling, healthy cycle
taking care of or preserving
being able to maintain… I don’t know
Reuse of Products and biodegradability
Something that is re-usable and has the capability of funding itself
Good Question
This word is overused and becoming trendy – buzz word
using local/natural resources/foods to reduce pollution, etc.
something that doesn’t get depleted
something that maintains itself
Can’t explain in one line
We’re all through