Students' environmental responsibility and their willingness to pay for green buildings

Sharmin Attaran
Department of Marketing, Bryant University, Smithfield, Rhode Island, USA, and
Bilge Gokhan Celik
Construction Management Program, Roger Williams University, Bristol, Rhode Island, USA

Abstract

Purpose – The purpose of this study is to explore environmental attitudes and how such attitudes, when combined with a specific cost, can affect environmental behavior. Environmental attitudes are important to study due to the rising belief by building occupants that they are owed safe, healthy, environmentally responsible, and comfortable living environments. Universities around the world are responding to such demands as the majority of prospective college students and their parents claim that the environmental record is a determining factor in their selection of a university. Therefore, this study examines the environmental responsibility levels of a sample student population and to explore how these scores, along with gender, impact their willingness to pay for studying and living in green buildings.

Design/methodology/approach – An online survey consisting of three parts was administered to undergraduate university students to measure environmental responsibility, willingness to pay and demographic variables. Statistical analyses including ANOVA, *t*-tests and correlation were conducted to explore relationships among variables.

Findings – Results of statistical analyses show a direct correlation between environmental responsibility and willingness to pay for green buildings, as defined by a leading green building assessment system. Results also show that female students are more environmentally responsible than males.

Practical implications – Successful generalizations of the findings of this research may lead to better marketing of green buildings to the general public.

Originality/value – Findings present a unique opportunity for university administrations to develop more focused messages when communicating their environmental record with current and potential students.

Keywords LEED, Green marketing, Sustainability, Environmental responsibility, Campus sustainability, Green buildings

Paper type Research paper

1. Introduction

There are many benefits to sustainability in the built environment, such as increased productivity in commercial buildings, decreased indoor air quality-related health

International Journal of Sustainability in Higher Education
Vol. 16 No. 3, 2015
pp. 327-340

1467-6370
DOI 10.1108/IJSHE-04-2013-0029

problems and cost savings because of more efficient use of resources within the building (Celik *et al.*, 2009). In addition to many benefits to their owners and occupants, green buildings also respect ecosystems as a whole and, in various ways, attempt to become a part of the natural environment, as opposed to working against it (Fitch and Bobenhausen, 1999; Roper and Beard, 2006). Despite the ongoing discussions regarding what is sustainable or how sustainable is a building; these attempts all represent a concern for the environment at some level.

Studies show that education, training and incentives are causing university students to become more concerned with their environment and the environment of the next generation (Levy and Dilwali, 2000). Providing the opportunity to live in a sustainably built environment has become an important differentiating factor among universities around the world and is becoming increasingly important to students in terms of both how they adopt sustainable practices and their choice of a university. The majority of students and their parents are making acceptance decisions based on a university's environmental commitment (Princeton Review, 2012).

Many universities are taking their sustainability efforts seriously in an attempt to attract students by ranking high on green organization lists, such as the "Green Colleges List" issued by The Princeton Review, the US Green Building Council (USGBC) or the Sierra Club Sustainability Report Card each year.

This study assumes a significant connection between sustainability and environmental concerns and recognizes that more students care about the environment and want to live sustainably. Authors measure college student's level of environmental responsibility to determine which specific type of sustainability the students are looking for in their environment. Do students prefer their dorms to be sustainable? If so, which aspect about the built environment is most valuable to students who have varying levels of environmental concern? Results can help universities understand what students are looking for and, therefore, provide more motivation for sustainably built universities.

Understanding the different factors that affect environmental behavior can aid in the development of more effective messages to help promote sustainable practices. From a broader perspective, delivering the right message to consumers can further promote eco-friendly behaviors such as the willingness to spend more on a greener built environment, lowering the cost of new green technologies and providing a long-term and affordable sustainable environment for all. Authors seek to uncover the types of sustainable practices that are important to students, in an effort to promote sustainability in a more effective way.

2. USGBC and Leadership in Energy and Environmental Design

As building green is becoming more popular among populations, it is critical to identify what makes a building "green", or "greener" than another one. The US Environmental Protection Agency (2012) defines green building as:

> […] the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation and deconstruction.

In an effort to standardize the definition of green buildings, many organizations developed green building assessment systems. One of the popular green building assessment and certification systems was developed by USGBC. USGBC introduced a

rating system in 2000 to assess newly constructed buildings based on various environmental criteria and identify them as green at Certified, Silver, Gold, and Platinum levels. USGBC's rating system is called Leadership in Energy and Environmental Design (LEED), and as of the end of 2012, more than 11,000 non-residential buildings in the USA, as well as over 1,000 in other countries, have been LEED certified (USA Green Building Council, 2013). The most current version of the LEED system evaluates new and existing buildings in the following major categories (USA Green Building Council, 2012):

- *Sustainable Sites (SS)*: Encourage strategies that minimize the impact on ecosystems and water resources.
- *Energy and Atmosphere (EA)*: Promote better building energy performance to reduce environmental and economic impacts associated with excessive energy use.
- *Water Efficiency (WE)*: Promotes smarter use of water, inside and out, to reduce potable water consumption.
- *Materials and Resources (MR)*: Encourage the use of sustainable building materials and reducing waste.
- *Indoor Environmental Quality (IEQ)*: Promote better indoor air quality and access to daylight and views.

3. Environmental responsibility

Universities are in the perfect position to behave sustainably and further educate the population on sustainability issues. Unfortunately, there is limited information on perceptions of sustainability in higher education (Eagan and Orr, 1992; Earl *et al.*, 2003; Emanuel and Adams, 2011).

Consumer perception regarding sustainability is an important factor to consider when analyzing environmentally responsible behavior. Consumer environmental responsibility is defined as:

> […] a state in which a person expresses an intention to take action directed toward remediation of environmental problems, acting not as an individual consumer with his/her own economic interests, but through a citizen consumer concept of societal-environmental well-being (Stone *et al.*, 1995, p. 601).

Previous research shows that the intention to behave sustainably can be predicted more accurately by adding environmental responsibility into the equation (Kaiser *et al.*, 1999; Arbuthnot, 1977; Granzin and Olsen, 1991; Hines *et al.*, 1986/1987). Kaiser *et al.*'s (1999) study explained 50 per cent of the variance of ecological behavior intention involves the inclusion of environmental knowledge, environmental values and responsibility feelings. However, in one of the two studies run using a more homogeneous student sample, the direct influences of environmental knowledge ($p = 0.07$) and environmental values ($p = 0.14$) dropped to insignificance, proving that one's *responsibility* feelings regarding the environment were the main predictor ($\beta = 0.59$).

Further evidence for the use of environmental responsibility to predict environmental behavior can be found in the theory of reasoned action (Ajzen and Fishbein, 1980), where behavior is composed of attitudes and subjective norms. Kaiser *et al.* (1999) expanded the theory of reasoned action by substituting the components of

attitudes and subjective norms for factual knowledge and environmental responsibility as predictors of ecological behavioral intention and found that these two factors predicted some of their respondents' ecological behavior. They found empirical evidence that feelings of personal obligation (i.e. feelings of responsibility) appear to be promising as a domain of social thinking, especially when it comes to environmental decision-making.

Gender is the demographic variable most consistently reported as an effective differentiator in environmental attitude (Karpiak and Baril, 2008; Kopelman *et al.*, 2002; Schultz, 2001; Arnocky and Stroink, 2010). Previous researchers report that women have greater concern for the environment than men (Kopelman *et al.*, 2002) and less apathy toward the environment (Karpiak and Baril, 2008). Schultz (2001) reported significant gender differences with women scoring higher than men on concerns related to the self, others and the biosphere. Li's (2003) study even found that women reported recycling household waste more frequently than men.

4. Environmental behavior

Although scoring high in environmental responsibility is a great first step toward a more sustainable lifestyle, behaving sustainably is the next. One study found that, although people may say that they have concern for the environment, they might not actually recycle. In other words, they have a positive attitude toward sustainability but may not turn their positive attitude into an actual change in behavior (Kaiser *et al.*, 1999).

Whether an individual acts on an attitude is a function of two components:

(1) the level of environmental attitude; and

(2) the difficulty of that particular behavior, which is the total of all costs involved with the behavior (Kaiser *et al.*, 2010).

According to Campbell (1963), an environmental attitude can be defined by an assortment of specific behaviors with valid quantitative knowledge about its difficulty (Kaiser *et al.*, 2010). As difficulty can be quantified as cost of an action, researchers can forecast an individuals' attitude level on the basis of *willingness to pay* for an environmental behavior.

Existing research is inconclusive in showing whether consumers are actually willing to pay more for green products (Laroche *et al.*, 2001; Loureiro *et al.*, 2001; Royne *et al.*, 2011; Vlosky *et al.*, 1999). With regard to gender difference in environmental behavior, one study found that women reported recycling household waste more frequently than men (Li, 2003). But research does confirm that consumers choose among cost-effective behaviors (Campbell, 1963), convenient, socially accepted and less demanding behaviors (Kaiser *et al.*, 2010) to showcase their commitment to an attitude. The more effort required to implement an attitude, or the higher the cost, the more committed to the attitude the individual seems.

5. Research questions

This study focuses on uncovering students' environmental attitudes and behaviors in accordance with their level of environmental responsibility and the cost associated with enacting that behavior. Although the majority of previous studies in this area assess students' knowledge and perceptions of sustainability, this study explores student levels of environmental responsibility in seven categories and compares these findings

to their willingness to pay for sustainability in their build environment. Such detailed analysis can help take research on sustainability in higher education to the next level, with an effort toward finding the right message to help market and advance sustainability across college campuses. The basis of this study relies on a few research questions as detailed below:

RQ1. How environmentally responsible are students?

RQ2. Can level of consumer environmental responsibility predict environmental behavior?

RQ3. Are there demographic differences in the level of consumer environmental responsibility and/or selected behavior?

Based on this research, authors hypothesize that:

H1. There is a difference in environmental responsibility of students based on gender, where women are more environmentally responsible than men.

H2. Students with high levels of environmental responsibility are more willing to pay for sustainable development in their built environment.

In addition, as it is hypothesized that women are more environmentally responsible than men, and environmental responsibility is shown to lead to environmental behavior, then:

H3. There is a difference in the environmental behavior of students based on gender, where women are more willing to pay for sustainability in the built environment than men.

H4. Students' willingness to pay for sustainability in the built environment varies among at least one of the different aspects of green building assessment categories.

6. Methodology

To answer the research questions, authors created a single survey with three main sections:

- *Part I*: ECOSCALE measure: environmental responsibility of students.
- *Part II*: Behavioral Measure: willingness to pay for sustainable development in their built environment (using LEED categories to define green buildings).
- *Part III*: Demographics.

First, a survey was created to measure the level of environmental responsibility of subjects. Then, LEED category descriptions were provided to subjects to help define aspects of green buildings. After reading these descriptions, subjects were asked their willingness to pay for such green initiatives. Demographic information was then collected.

Figure 1 presents the aforementioned three parts, their contents and how they relate to each other to further clarify the methodology. The following sections will describe the sample group and survey instrument.

6.1 Sample

An online survey was distributed to 162 undergraduate students at a New England University in the USA between the ages of 18 and 22 years. Prior to survey distribution, a series of pilot tests were run with smaller samples of students, and adjustments were made. Specifically, descriptions of each LEED category (obtained from USGBC) were tested for clarity, and open-ended questions were added to promote detailed responses. A total of 145 surveys were received within a two-week period with a response rate of 91.77 per cent. The sample is representative in terms of gender with 47.4 per cent males and 52.6 per cent females.

6.2 Survey instrument

6.2.1 ECOSCALE. First, authors wanted to determine how respondents scored on several dimensions of consumer environmental responsibility. Weigel and Newman (1976) found that using compound measures for attitude and behavior can help develop more general and reliable measures with more predictive power. Therefore, respondents' environmental responsibility is measured in seven categories using 30 questions as defined and developed by the ECOSCALE (Stone *et al.*, 1995). This scale measures: opinions and beliefs, awareness, willingness to act, attitude, action taken, ability to act and knowledge regarding the environment. All items are scored on a 5-point scale, ranging from *strongly disagree* to *strongly agree*, or from *never* to *always*. Item scores are summed within each dimension to form dimension indices, and all 30-item scores are summed to form one overall ECOSCALE composite score. Authors use the ECOSCALE composite score to investigate the research questions. The seven subcategories of ECOSCALE are reported only for further introduction of descriptive statistics and are not included as either dependent or independent variables within the statistical analyses.

6.2.2 LEED category descriptions. Epstein (1979) found that aggregating across multiple different behaviors from a domain can lead to more reliable concept measures and higher proportions of explained variance in behavior. Therefore, ECOSCALE questions are followed by descriptions of LEED categories which fall under multiple different behaviors, such as initiatives in SS and EA. The LEED system provides a specific context to analyze students' perceptions of each of its category's implementation at their university.

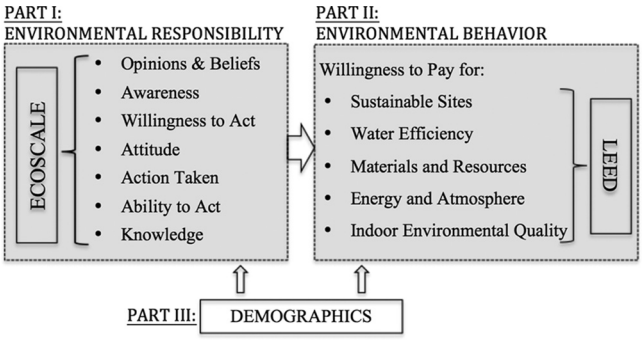

Figure 1.
Study methodology explained in three parts

6.2.3 Willingness to pay. After the LEED categories are defined, subjects are asked whether they are willing to pay for each initiative. The answer to this question helps uncover how willing students are to act on their sustainable attitudes. In this study, *willingness to pay* is measured using a *willingness to accept refund* question. Authors find that by uncovering what consumers are not willing to give up, researchers can better understand how to further promote to and involve consumers in their built environment. Conventional microeconomic theory implies that an individual is on the margin willing to pay just as much for obtaining a good as he or she is willing to accept forsaking it (Biel *et al.*, 2011). In this study, respondents are shown the definition for SS, for example, and then asked, "How likely are you to accept a refund of 1 per cent of your tuition if your university focused less on SS issues on your campus?" This method allows authors to assign a random but single consistent value to all categories and compare environmental responsibility and its relation to specific LEED categories, thereby creating a context and real-world application for this study. Authors can use this method to uncover whether environmental responsibility translates into environmental behavior, or willingness to pay for a sustainability initiative, as defined by LEED. Authors acknowledge that the chosen value, which is 1 per cent refund in this study, may impact the overall willingness to accept a refund but should not have an impact on initial relative preferences among different LEED categories. All items are scored on a 5-point scale, ranging from *very unlikely* to *very likely*. The survey concludes with demographic questions.

6.3 Analysis

Prior to the analysis, normality assumptions were checked and approved for the ECOSCALE distribution. Factor and reliability analyses were also conducted on the ECOSCALE to verify the validity of the scale. Results of factor and reliability analysis were used to justify elimination of 4 of the 30 ECOSCALE questions that illustrated low Cronbach's alpha values ($\alpha < 0.15$). The remaining 26 questions appeared to have good internal consistency, $\alpha = 0.833$; thus, their average was used to calculate environmental responsibility of the subjects.

ECOSCALE scores and gender of subjects constituted the independent variables, whereas scores calculated using students' willingness to accept a refund for each category of LEED and their overall LEED averages constituted the dependent variables of the study. All variables used in the study utilized a Likert scale, ranging from 1 to 5. Scores closer to 5 were considered to present a higher level of environmental responsibility on the ECOSCALE. Consistently in the next section of the survey, scores closer to 5 presented a higher willingness to pay for each LEED category.

ANOVA, independent samples and paired samples *t*-tests were conducted to measure variance within groups with different environmental responsibility levels and genders. Additional partial and bivariate correlation analyses were conducted to investigate the existence and strength of relationships between variables. For further analysis, authors evaluated the overall mean and median values of environmental responsibility scores and conducted mean comparison analyses of the willingness to pay among students below and above an environmental responsibility score of 3.5, which is the median ECOSCALE score for the subjects. This study reports only on the statistically significant variance as was determined to be less than or equal to 5 per cent ($p <= 0.05$).

7. Results

The mean values and standard deviations of 145 subjects' ECOSCALE scores are shown in Table I. The highest mean score within the ECOSCALE categories is 4.06 (SD = 0.646) in the Knowledge category, whereas the lowest mean score is found in the Willingness to Act category with an average score of 2.99 (SD = 0.689) (Table I).

The distribution of composite ECOSCALE scores of subjects is given in Figure 2. Figure 2 also illustrates the grouping of students into high and low ECOSCALE scores on both sides of the median line (~3.5). This median split approach was not used as method of analyses to prove or reject any hypotheses but as an additional statistical approach only to further describe the sample population and to support or question the results of conventional correlation analyses.

Data were analyzed via the general linear model in SPSS. The independent variables included environmental responsibility and gender. The dependent variables were subjects' willingness to pay for five major LEED categories. Additional tests were also conducted, in which combined LEED averages calculated as an average of scores in five categories were used as a dependent variable.

An independent samples *t*-test revealed a statistically significant difference between the mean values of environmental responsibility of female students ($M = 3.645$, SD = 0.402) and of male students ($M = 3.363$, SD = 0.462), $t(133) = 3.793$, $p < 0.001$, thus supporting *H1*. Furthermore, cross-tabulation descriptive analyses between variables revealed that 68.8 per cent of male received a low environmental responsibility score

ECOSCALE categories	Mean	SD	*N*	*t*	df	Significance (two-tailed)
Opinions and beliefs	3.94	0.573	145	82.660	144	< 0.001
Awareness	3.32	0.685	145	58.439	144	< 0.001
Willingness to act	2.99	0.689	145	52.221	144	< 0.001
Attitude	3.92	0.577	145	81.804	144	< 0.001
Action taken	3.29	0.636	145	62.340	144	< 0.001
Ability to act	3.13	0.814	145	46.342	144	< 0.001
Knowledge	4.06	0.646	145	75.606	144	< 0.001
ECOSCALE composite score	3.52	0.464	145	91.456	144	< 0.001

Table I. Descriptive statistics for ECOSCALE scores

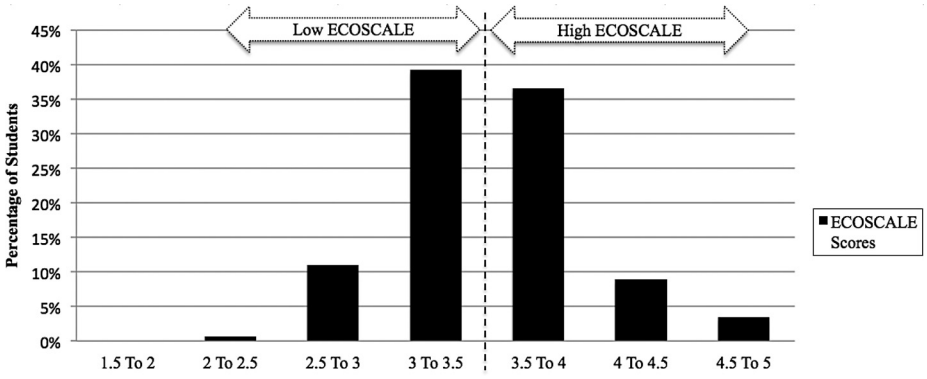

Figure 2. ECOSCALE composite score histogram

(less than or equal to 3.5), whereas only 38 per cent of female subjects scored less than or equal to 3.5 on the ECOSCALE.

The combined LEED average of students was 3.22 (SD = 1.01). Based on the data illustrated in Table II, the majority of the subjects were willing to pay for all LEED categories with the exception of the SS category. The number of subjects who are not willing to pay is slightly over the number of those who are willing to pay for the SS category. Overall distribution of the subjects' combined LEED averages is given in Figure 3. The largest frequency (24.13 per cent) of subjects' overall LEED average was in the range of 3.5-4.0, whereas the lowest frequency (6.90 per cent) was in the 1.5-2.0 range.

While controlling for gender, a partial correlation analysis revealed strong correlation between environmental responsibility and combined LEED averages, $r(132) = 0.402$, $p < 0.001$, thus supporting *H2*. Furthermore, when subjects were grouped into low and high levels of environmental responsibility, an independent samples *t*-test revealed a statistically reliable difference between the mean values of combined LEED averages of subjects with high ECOSCALE scores ($M = 3.573$, SD = 1.134) and that of students with low ECOSCALE scores ($M = 2.885$, SD = 0.948),

$N = 145$	Strongly not willing to pay and not willing to pay Count	(%)	Strongly willing to pay and willing to pay Count	(%)
SS	62	42.76	59	40.69
EA	52	35.86	77	53.10
WE	44	30.34	77	53.10
MR	45	31.03	73	50.34
IEQ	42	28.97	75	51.72

Note: $N = 145$ includes subjects who remained neutral in their responses

Table II. Count and percentage of the subjects willing to and not willing to accept a refund in five LEED categories

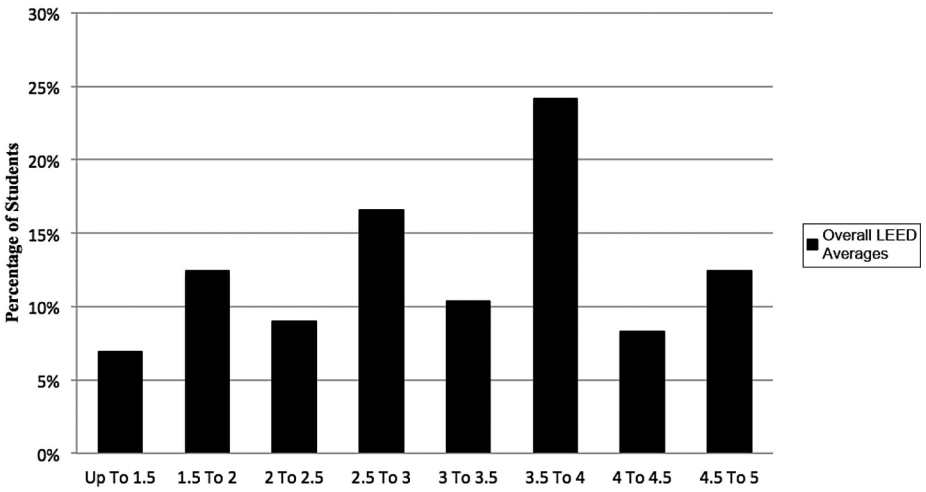

Figure 3. Overall LEED averages

$t(143) = 3.966$, $p < 0.001$. Likewise, 60.6 per cent of those subjects who received an ECOSCALE score higher than 3.5 also received a combined LEED average higher than 3.5. In addition, 70.3 per cent of those subjects who received a score less than or equal to 3.5 in ECOSCALE, also received a score less than or equal to 3.5 in combined LEED average.

Partial correlation analyses among combined LEED averages and gender, while controlling for environmental responsibility (ECOSCALE), revealed no significant correlation, $r(132) = 0.098$, $p = 0.129$, in four of the five LEED categories. However, the authors identified a weak positive relationship between gender and the willingness to pay for the MR category of LEED while controlling for environmental responsibility, $r(132) = 0.189$, $p = 0.029$.

When each LEED category was analyzed, partial correlation analysis revealed that the scores associated with LEED categories are significantly correlated at various strengths with environmental responsibility. Among all the LEED categories, SS has the strongest significant correlation with the environmental responsibility, followed by MR and EA categories, whereas IEQ and WE has significant but weaker correlations (Table III). Similarly, further investigation of the subjects within each LEED category shows that 54 per cent of subjects with a low ECOSCALE score (< 3.5) are not willing to pay for the SS category. 69 per cent of those subjects who received a high ECOSCALE score (> 3.5) are willing to pay for the EA category. Of those subjects with a low ECOSCALE score, only 24.30, 37.80 and 33.80 per cent are willing to pay more, respectively, in SS, EA and MR categories. These percentages increase to 43.4 and 48.6 per cent in WE and IEQ categories, respectively.

In addition, results present a statistically significant difference in the median values of willingness to pay for different LEED categories, $\chi^2(4) = 17.663$, $p = 0.0013$, thus supporting *H4*. Median willingness to pay for SS is 3 (1-5), whereas all other categories have the same median of 4 (1-5). To identify between which categories the difference lies, post-hoc analysis with Wilcoxon signed rank tests were conducted with a Bonferroni correction applied, resulting in a significance level set at $p < 0.005$. Results show that there is a statistically significant decrease in the median willingness to pay for SS when compared to EA ($Z = -3.047$, $p = 0.0023$), WE ($Z = -3.134$, $p = 0.0017$), MR ($Z = -3.553$, $p = 0.0003$) and IEQ ($Z = -2.819$, $p = 0.0048$). However, there is no significant difference between the median values of willingness to pay for EA, WE, MR and IEQ categories. Although willingness to pay for SS was found to be significantly less than the other categories, correlation between students' environmental responsibility and their willingness to pay for SS was the highest among all the LEED categories (Table III). In other words, environmental responsibility made a bigger impact on the willingness to pay for SS than on the willingness to pay for the other LEED categories.

Table III.
Correlation results between environmental responsibility and willingness to pay for LEED categories

ECOSCALE	SS	EA	WE	MR	IEQ
Correlation	0.455	0.366	0.254	0.374	0.219
p (two-tailed)	< 0.001	< 0.001	0.004	< 0.001	0.012
df	127	127	127	127	127

8. Discussion

This study evaluated relations between environmental responsibility, willingness to pay and gender in an attempt to understand environmental attitudes and behaviors of university students. Results indicate that there is a difference in environmental responsibility of students based on gender where women are more environmentally responsible than men, confirming the study by Kopelman *et al.* (2002). Results show a direct correlation between environmental responsibility and willingness to pay for green buildings as defined by the LEED building assessment system. Therefore, as the level of environmental responsibility of an individual increases, willingness to pay for a sustainably built environment also increases. In other words, as the student population becomes more environmentally responsible, their willingness to pay for a more sustainably built environment also increases. By building green buildings, such as those assessed by the USGBC through their LEED certification system, universities can now provide a way for the students to behave more sustainably on a daily basis. As a result, if universities learn the level of environmental responsibility of their current and potential students, they are more likely to make more suitable choices in becoming more sustainable, specifically in built environment-related decisions.

Authors identified a significant but weak correlation between female students and their willingness to pay for the *material and resources* category. As the act of recycling falls in this category, this result is similar to Li's (2003) finding where women were more likely to recycle or behave sustainably. This study could not, however, find a direct relationship between gender and willingness to pay for sustainability in the built environment in the other four LEED categories. This means that, although women may appear to be more willing to pay for green buildings, this trend is due to their higher environmental responsibility rather than their gender. In other words, we cannot assume a difference between the willingness of a female and male student to pay for sustainable buildings if they have similar environmental responsibility levels.

Independent of their environmental responsibility, this study found no significant differences in the students' willingness to pay for different LEED categories, except for *SS*. Results indicate that students are *less* willing to pay for the *SS* category of LEED. However, it is critical to be aware that there is a relatively higher correlation between willingness to pay for *SS* and the students' overall environmental responsibility. Therefore, before developing their marketing messages, universities should research the environmental responsibility levels of their target student population. Universities' emphasis on the *SS*-related messages should increase as the environmental responsibility of their students increase. In contrary, universities can expect a relatively higher willingness to pay for *IEQ* and *WE* aspects of campus buildings, especially when the student population has low environmental responsibility. Results also suggest that universities can market the sustainability of the *MR*-related aspects of their campus buildings more as the female percentage of student population increases.

9. Conclusion

Sustainability in the built environment is a growing concern for many students on their campuses. Some universities have already started to implement sustainability

not only in their daily operations but also in their built environment by building and renovating in accordance with international green building assessment systems such as LEED. The findings of this study can help not only universities but also building owners, managers and professionals (designers and contractors) to make better decisions about their campus sustainability efforts. The findings of this study can also help craft more focused messages to communicate their chosen sustainability efforts with their current and potential clients and/or occupants. Successful implementation of the findings of this research may lead to better marketing of green buildings to the general public. However, there is still a need for further research to generalize willingness to pay for sustainable buildings for various demographics.

This study found that a student's gender impacts environmental responsibility, and environmental responsibility impacts willingness to pay for green buildings. Future research may use different populations and focus on other potential variables such as age, class standing, race, income, political orientation and educational background. In addition, different subcategories of environmental responsibility can be investigated to identify specific connections to a group's or an individual's willingness to pay for green buildings. Future research may also allow subjects to choose the refund amount they are willing to accept, so further variations among their willingness to pay for different LEED categories can be determined.

Successful execution of future research and the implementation of studies such as the one presented in this paper can lead to a faster and well-funded growth of sustainability in the built environment as well as a better general understanding of environmental behavior.

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About the authors

Sharmin Attaran (PhD, University of Illinois at Chicago) is an Assistant Professor of Marketing at Bryant University. She obtained her PhD in Marketing and Entrepreneurship from the University of Illinois at Chicago, her MBA from California State University Bakersfield, and her BA in Economics from the University of California at Los Angeles. Her research interests include sustainability marketing, social entrepreneurship, social media marketing and consumer behavior. Her teaching experience includes courses in Sustainability Marketing, Consumer Behavior, Retail Management, Foundations of Marketing, and Sales Management. Her research aims to refine marketing communication strategies to promote sustainability in the built environment. Sharmin Attaran is the corresponding author and can be contacted at: sattaran@bryant.edu

Bilge Gokhan Celik (PhD, University of Florida) is an Assistant Professor of Construction Management (CM) at Roger Williams University (RWU). He earned his Ph.D. in Design, Construction, and Planning from University of Florida, and his M.Sc. and B.Sc. degrees in Architecture from Anadolu University. His research focuses on sustainability in the built environment, optimization of green building performance, occupants' perception and marketing of green buildings, and improving CM education. His teaching experience includes graduate and undergraduate courses in Sustainable Construction, Project Management, Project Control, Estimating, Planning and Scheduling as well as Construction Finance and Accounting. Bilge Gokhan Celik is a LEED Accredited Professional with a Building Design and Construction specialty (LEED AP BD+C).