Reversing the Green Backlash:
Why Large Hospitality Companies Should Welcome “Credibly Green” Competitors

Cornell Hospitality Report
Vol. 11, No. 14, August 2011

by Michael Giebelhausen, Ph.D., and HaeEun Helen Chun, Ph.D.

This report was produced with the assistance of McDonald’s USA, a senior partner of the Cornell Center for Hospitality Research.
Advisory Board

Niklas Andréen, Group Vice President Global Hospitality & Partner Marketing, Travelport GDS
Ra’anan Ben-Zur, Chief Executive Officer, French Quarter Holdings, Inc.
Scott Berman, Principal, Real Estate Business Advisory Services, Industry Leader, Hospitality & Leisure, PricewaterhouseCoopers
Raymond Bickson, Managing Director and Chief Executive Officer, Taj Group of Hotels, Resorts, and Palaces
Stephen C. Brandman, Co-Owner, Thompson Hotels, Inc.
Raj Chandnani, Vice President, Director of Strategy, WATG
Benjamin J. "Patrick" Denihan, Chief Executive Officer, Denihan Hospitality Group
Brian Ferguson, Vice President, Supply Strategy and Analysis, Expedia North America
Chuck Floyd, Chief Operating Officer–North America, Hyatt
Gregg Gilman, Partner, Co-Chair, Employment Practices, Davis & Gilbert LLP
Tim Gordon, Senior Vice President, Hotels, priceline.com
Susan Helstab, EVP Corporate Marketing, Four Seasons Hotels and Resorts
Jeffrey A. Horwitz, Chair, Lodging + Gaming, and Co-Head, Mergers + Acquisitions, Proskauer
Kevin J. Jacobs, Senior Vice President, Corporate Strategy & Treasurer, Hilton Worldwide
Kenneth Kahn, President/Owner, LRP Publications
Kirk Kinsell, President of Europe, Middle East, and Africa, InterContinental Hotels Group
Radhika Kulkarni, Ph.D., VP of Advanced Analytics R&D, SAS Institute
Gerald Lawless, Executive Chairman, Jumeirah Group
Mark V. Lomanno, CEO, Smith Travel Research
Betsy MacDonald, Managing Director, HVS Global Hospitality Services
David Meltzer, Senior Vice President, Global Business Development, Sabre Hospitality Solutions
William F. Minnock III, Senior Vice President, Global Operations Deployment and Program Management, Marriott International, Inc.
Mike Montanari, VP, Strategic Accounts, Sales - Sales Management, Schneider Electric North America
Shane O’Flaherty, President and CEO, Forbes Travel Guide
Thomas Parham, Senior Vice President and General Manager, Philips Hospitality Americas
Chris Proulx, CEO, eCornell & Executive Education
Carolyn D. Richmond, Partner, Hospitality Practice, Fox Rothschild LLP
Susan Robertson, CAE, EVP of ASAE (S01(c)6) & President of the ASAE Foundation (S01(c)3), ASAE Foundation
Steve Russell, Chief People Officer, Senior VP, Human Resources, McDonald’s USA
Michele Sarkisian, Senior Vice President, Maritz
Janice L. Schnabel, Managing Director and Gaming Practice Leader, Marsh’s Hospitality and Gaming Practice
Trip Schneck, President and Co-Founder, TIG Global LLC
K. Vijayaraghavan, Chief Executive, Sathguru Management Consultants (P) Ltd.
Adam Weissenberg, Vice Chairman, and U.S. Tourism, Hospitality & Leisure Leader, Deloitte & Touche USA LLP

Cornell Hospitality Reports, Vol. 11, No. 14 (August 2011)

© 2011 Cornell University. This report may not be reproduced or distributed without the express permission of the publisher.

Cornell Hospitality Report is produced for the benefit of the hospitality industry by The Center for Hospitality Research at Cornell University

Rohit Verma, Executive Director
Jennifer Macera, Associate Director
Glenn Withiam, Director of Publications

Center for Hospitality Research
Cornell University
School of Hotel Administration
489 Statler Hall
Ithaca, NY 14853

Phone: 607-255-9780
Fax: 607-254-2922
www.chr.cornell.edu
Thank you to our generous Corporate Members

Senior Partners
ASAE Foundation
Carlson Hotels
Hilton Worldwide
McDonald’s USA
Philips Hospitality
SAS
STR
Taj Hotels Resorts and Palaces
TIG Global

Partners
Davis & Gilbert LLP
Deloitte & Touche USA LLP
Denihan Hospitality Group
eCornell & Executive Education
Expedia, Inc.
Forbes Travel Guide
Four Seasons Hotels and Resorts
Fox Rothschild LLP
French Quarter Holdings, Inc.
HVS
Hyatt
InterContinental Hotels Group
Jumeirah Group
LRP Publications
Marriott International, Inc.
Marsh’s Hospitality Practice
Maritz
priceline.com
PricewaterhouseCoopers
Proskauer
Sabre Hospitality Solutions
Sathguru Management Consultants (P) Ltd.
Schneider Electric
Thayer Lodging Group
Thompson Hotels
Travelport
WATG

Friends
Berkshire Healthcare • Center for Advanced Retail Technology • Cruise Industry News • DK Shifflet & Associates
• ehoteller.com • EyeforTravel • 4Hotellers.com • Gerencia de Hoteles & Restaurantes • Global Hospitality Resources • Hospitality Financial and Technological Professionals • hospitalityinside.com • hospitalitynet.org • Hospitality Technology Magazine • Hotel Asia Pacific • Hotel China • HotelExecutive.com • International CHRIE
• International Hotel Conference • International Society of Hospitality Consultants • iPerceptions • JDA Software Group, Inc. • J.D. Power and Associates • The Lodging Conference • Lodging Hospitality • Lodging Magazine
• USA Worldwide, Inc. • Milestone Internet Marketing • MindFolio • Mindshare Technologies • PhoCusWright Inc. • PKF Hospitality Research • Resort and Recreation Magazine • The Resort Trades • RestaurantEdge.com • Shibata Publishing Co. • Synovate • The TravelCom Network • Travel + Hospitality Group • UnFocus • USA Today
• WageWatch, Inc. • The Wall Street Journal • WWIH.COM • Wyndham Worldwide
Reversing the Green Backlash:

Why Large Hospitality Companies Should Welcome “Credibly Green” Competitors

by Michael Giebelhausen and HaeEun Helen Chun

ABOUT THE AUTHORS

Michael Giebelhausen, Ph.D., is an assistant professor of marketing at the Cornell University School of Hotel Administration. He earned his Ph.D. in Marketing from Florida State University, (and a “Ductorate” from Walt Disney University). His research focuses on consumer behavior in service settings. He teaches Marketing Research, Marketing Principles, and Marketing Management for Services.

HaeEun Helen Chun, PhD., is an assistant professor of marketing at the Cornell School of Hotel Administration. Helen earned her Ph.D. in Business Administration (Marketing) from the Marshall School of Business at University of Southern California. Her research interests include consumer experience management in the service context, with a focus on the role of consumer anticipation, memory, gifting, and sensory marketing. She teaches Consumer Behavior, Marketing Principles, and Marketing Management for Services.

The authors express their appreciation for the research support provided by McDonald’s USA.
EXECUTIVE SUMMARY

This report presents three studies suggesting that when a large restaurant or hotel company announces the adoption of green practice consumers may react in contrary fashion and decrease their evaluation of that company. First, an in-depth interview project among students at the School of Hotel Administration suggests that individuals are deeply skeptical when large corporations and chains promote their sustainability initiatives, as compared to small independent operators. Seeking circumstances in which a large company could gain sustainability credibility, two follow-up experiments further examine the interaction of a restaurant chain’s green practice adoption and the presence or absence of a small, highly credible competitor. The results indicate that, in the absence of a credible competitor, consumers’ liking of a large hospitality company may actually decrease when the company announces the adoption of a green practice (e.g., organic or locally sourced ingredients). Ironically, then, in markets where there is no credibly green competitor, large corporations may be better off not promoting their sustainability initiatives. The opposite is true, however, when consumers are aware of credible independent firms involved in green practices. Under these circumstances, evaluations of a large company are improved. Initially we hypothesized that the large company would need to imitate the competitor’s program to reverse the green backlash effect. However, the results of a survey of a nationwide panel of consumers suggests that a reversal of the green backlash can occur even if the large company is engaged in a different green activity. The key mechanism was credibility or trustworthiness of the company with regard to the green practice.
The hospitality industry has wholeheartedly taken up the banner of sustainability. Restaurants are promoting their use of locally sourced organic ingredients, hotels announce reductions in their carbon footprint, ski areas are installing wind powered chairlifts, and industry leaders are discussing how to establish standards for sustainability.¹

This apparent enthusiasm for all things green has well founded reasons. From an operations standpoint, simple practices such as switching to compact fluorescent light bulbs and starting linen re-use programs have resulted in substantial savings—both in terms of costs and natural resources.² With regard to human resources, recent research suggests that employees working at an organization committed to sustainability may experience greater job satisfaction.³ From a sales perspective, other recent research suggests that individuals are willing to pay more for hospitality services that incorporate green features.⁴

Indeed, a LEED certification is a central component of some hotels’ marketing strategy.⁵ Last but not least, being a bit easier on the planet just seems like the right thing to do.


⁴ Susskind and Verma, op. cit.

It is not surprising that hospitality companies should want to inform consumers about their sustainability initiatives. Unfortunately, the promotion of green innovations has caused consumers to suspect companies of exaggerating the environmental friendliness of their practices. Some firms are thought to overpromote their sustainability, a practice known as greenwashing. A recent survey by the Carbon Trust warns of a potential backlash as consumers grow ever more suspicious of companies’ sustainability promotion efforts.6 This may be a particularly relevant concern for the hospitality industry. When thinking about the hospitality industry, a number of things come to mind, including indulgence, luxury, convenience, and simply having fun. None of these concepts, one might argue, are closely related with the concept of responsibility (environmental or otherwise). When individuals encounter information that is inconsistent with their previous conceptions, it warrants additional attention and consideration.7 Thus, when a hospitality organization positions itself as being green, consumers’ suspicions may be raised even more than with a consumer package goods company.

One might suspect that, in addition to industry, the size of the company also matters. A recent Gallup poll found 67 percent of Americans dissatisfied with the size and influence of major corporations in the country today, the highest level since Gallup first asked this question in 2001.8 This is perhaps not surprising. In recent years, large corporations have received a large amount of negative press. Corporate greed and questionable ethics are commonly offered as the cause of everything from the downturn in the economy to environmental disasters. It is, however, still possible to be a “green giant.” Large companies such as Whole Foods, Google, Ikea, Microsoft, and SC Johnson made the top ten in a 2010 survey evaluating consumer perceptions of brand greenness.9

The studies presented here use the term “large” to denote a particular type of hospitality organization. This rather vague term raises the question of what we mean by large. In the qualitative study, suspicions surrounding sustainable hospitality were most often mentioned in the context of global hospitality brands that have existed for decades and for which environmental friendliness has not heretofore been a core competency. Also, these brands tended to be mid-market brands rather than those that occupy the high end or luxury market. In keeping with the insights gained from the exploratory study, studies 2 and 3 examined brands that fit this description (that is, large, well-known, mid-market brands). In summary, this report uses the term “large” to describe a corporate entity with a well-established brand identity that does not necessarily have strong associations with pro-environmental practices.

Study 1: Exploratory ZMET Interviews

The findings presented here as Study 1 are the result of a Cornell University marketing research class project. For this project, students received training in the Zaltman Metaphor Elicitation Technique (ZMET), an in-depth interview technique involving a number of steps designed to tap into areas of the consumer’s conscious not accessible via traditional marketing research methods.10 A key premise of ZMET, supported by research in cognitive psychology, is that images are the fundamental building blocks of our thoughts.11 Thus, much of the interaction between the researcher and participant during a ZMET interview consists of discussing a collection of 12 to 15 pictures assembled by the participant prior to the interview. Pictures are selected by the participants based on the extent to which they represent the participant’s key thoughts and feelings regarding the research question. In this case the research question posed to participants was, “What are your thoughts and feelings regarding sustainable hospitality?”

Each of the 50 students in the class interviewed one other student. This interview was recorded and transcribed. Each student then conducted a “grounded theory” analysis of their transcript. Grounded theory refers to “insights garnered from data, systematically gathered and analyzed.”12 In this empirical analysis, each line of the interview transcript is examined (i.e., coded) with the goal of identifying recurring themes. The resulting codes from all transcripts are then combined and further distilled into code families, which are then integrated into a conceptual map that details the linkages between the various concepts.13 The results are the product of a highly methodical process of documenting and analyzing a set of quantifiable data. For the final step, the students were placed in groups of six

6 www.carbontrust.co.uk (2011), “Only 7% of the Public Believe Company Claims of Action on Climate Change,” (as viewed April 4, 2011)
13 For a detailed description, see: Ibid.
or seven where they compared their individual maps and looked for common themes. The student researchers presented the most important themes together with a supporting quote and the related image to the class and to several industry professionals.

Key Findings

Among the insights generated by this project was that seven of the eight groups identified distrust of environmental claims to be a fundamental theme. However, unlike the Carbon Trust survey presented above, it appeared that the students’ distrust was less about the initiatives themselves and more about the motivation driving the company to pursue those initiatives. Illustrative quotes and corresponding pictures from the groups’ presentation are found in Exhibit 1. As shown, a typical quote went something like this:

“Sometimes I can't help but think so many of these companies who have this whole green initiative like if they really care about the environment or they're really just trying to look good so they can make more money.”

Note: ZMET interview participants selected the images shown to depict their feelings and to provide a basis for further discussion.
While it was not always explicitly stated, it appeared that "large" companies were the primary target of this distrust. The concept of "green" was more associated with being independent or outside of the mainstream. Images of "hippies" were linked to the idea of sustainability by one out of five participants. Green credibility, it would appear, is only accessible to small independent hospitality companies.

“I disapprove of [big companies] having such power because I just think that big companies... do whatever they want... maybe take away opportunities from other people because they just have so much money and that money gives them power to do kind of what they want to do.”

Another theme identified by six of the eight groups was confusion regarding the sustainability initiatives themselves. Many mentioned the need for third-party certifications of green activities (though some indicated distrust regarding certification bodies). Others mentioned the need for more education regarding sustainability. This uncertainty was not only in reference to the practice itself, but also to its effect on the guest experience.

**Discussion**

The findings of this project are consistent with those of other recent studies, but these results may provide some additional insights. It would seem that the participants in this study have well formed (negative) opinions of large corporations, but are unsure about what activities are truly green and have substantial consequences for the environment. Thus, when large companies announce a sustainability initiative, it seems crucial that they need to convey the credibility of their green practices as well. It is also worth noting that these results are somewhat surprising given this participant group. One would think that college students would generally be more educated about sustainability and would favor any company with green practices. By all accounts, this study was biased in favor of sustainability. The fact that so many respondents expressed a deep suspicion of large companies’ sustainability initiatives and a reluctance to purchase green products may indicate a green marketing backlash. Studies 2 and 3 are designed to further examine whether promoting green practices might decrease evaluations of a company and whether copying a credibly green competitor might reverse this effect.

**Study 2: Locally Sourced Ingredients**

The results of Study 1 indicated that sustainability initiatives by small companies are viewed as credible while those by big companies are not. Interestingly, recent research by Wilson, Robinson, and Darke has demonstrated that a large company can bolster its green credibility through the friendly acquisition of a credibly green competitor (e.g., Colgate-Palmolive...
When large companies announce a sustainability initiative, it seems crucial that they also need to convey the credibility of their green practices. Not every large company has the ability or desire to purchase a competitor—or an established green brand—simply to improve their image. However, perhaps it is possible for a large company to generate the same effect by aligning oneself with a credible competitor in another way, even by simply imitating that competitor’s practices. Study 2 was designed to test, under controlled conditions, whether a large restaurant chain’s promotion of a sustainability initiative would incur a green backlash. An equally important objective was to determine whether this backlash effect would occur when the large company’s sustainability initiative was similar to that of a credibly green competitor. We summarize these two ideas in the following hypotheses:

H1: In the absence of a credibly green competitor, there will be a negative effect of promoting a green practice on evaluations of a large company.

H2: The presence of a credibly green competitor with a similar practice will reduce the green backlash effect described in H1.

Method
We conducted an on-line experiment with 189 undergraduate students to test these two hypotheses. The students participated in the experiment in exchange for course extra credit. Guided by the criteria discussed above, we selected Red Lobster as the “large” company brand. The experiment consisted of a 2 x 2 between subject design: Red Lobster’s green practice was not mentioned, or Red Lobster announces a locally sourced ingredient; crossed with a credibly green competitor is absent or is present. Respondents were randomly assigned to one of the four resulting conditions.

We asked respondents to imagine that they had experienced one of the four scenarios corresponding to the experimental conditions. The context of this study was a spring break trip to St. Augustine, Florida. We asked them to imagine that they decided to look for a seafood restaurant while waiting for their friends who would be arriving in three hours. As they were driving, they encountered a billboard for Red Lobster, which depicted the Red Lobster logo, a picture of a pie, and directions to the restaurant. For the one-half of the participants (in the locally sourced ingredient condition), the billboard read: “Now serving pie made from locally grown Florida key limes!” For the other half (no green practice condition), the billboard slogan read: “Now serving an expanded selection of desserts!” Additionally, half of the participants also experienced the “competitor present” condi-

to positive). These items were averaged to form a composite measure of brand evaluations ($\alpha = .98$). Next, we measured individual differences in their overall approach to sustainable or green behavior by asking respondents to indicate the extent to which they agree with the following four statements (again on a 9-point scale where 1 = completely disagree; 9 = completely agree): “I would be willing to pay more for food produced in an environmentally sustainable

tion and were shown a billboard for a small competitor with a credibly green practice, reading: “Over 80% of our seafood is sustainably sourced from local Florida fishermen.” Those assigned to the competitor absent condition saw no second billboard. Exhibit 2 shows the billboards.

Participants were then asked to indicate their overall evaluations of Red Lobster using three 9-point evaluation scales (dislike to like; unfavorable to favorable; and negative to positive). These items were averaged to form a composite measure of brand evaluations ($\alpha = .98$). Next, we measured individual differences in their overall approach to sustainable or green behavior by asking respondents to indicate the extent to which they agree with the following four statements (again on a 9-point scale where 1 = completely disagree; 9 = completely agree): “I would be willing to pay more for food produced in an environmentally sustainable

Get yourself in a spring break state of mind and imagine that you actually experienced the following scenario.

Your friends talked you into joining them on a trip to St. Augustine Florida over spring break. One of your friends has access to a family vacation home in St. Augustine and you were able to find a very cheap flight. Your flight has landed, but the rest of your friends will not be arriving for three hours. It is 11:00 and you have not eaten breakfast so you decide to pick up the rental car and find someplace to have lunch while you wait for your friends. Being this close to the ocean makes you hungry for a fish sandwich, so you decide to look for a seafood restaurant. As you are driving you see the billboard below.

On the opposite side of the road is another billboard

Exhibit 2

Study 2 scenario example

Get yourself in a spring break state of mind and imagine that you actually experienced the following scenario.

Your friends talked you into joining them on a trip to St. Augustine Florida over spring break. One of your friends has access to a family vacation home in St. Augustine and you were able to find a very cheap flight. Your flight has landed, but the rest of your friends will not be arriving for three hours. It is 11:00 and you have not eaten breakfast so you decide to pick up the rental car and find someplace to have lunch while you wait for your friends. Being this close to the ocean makes you hungry for a fish sandwich, so you decide to look for a seafood restaurant. As you are driving you see the billboard below.

On the opposite side of the road is another billboard

Exhibit 2

Study 2 scenario example

Get yourself in a spring break state of mind and imagine that you actually experienced the following scenario.

Your friends talked you into joining them on a trip to St. Augustine Florida over spring break. One of your friends has access to a family vacation home in St. Augustine and you were able to find a very cheap flight. Your flight has landed, but the rest of your friends will not be arriving for three hours. It is 11:00 and you have not eaten breakfast so you decide to pick up the rental car and find someplace to have lunch while you wait for your friends. Being this close to the ocean makes you hungry for a fish sandwich, so you decide to look for a seafood restaurant. As you are driving you see the billboard below.

On the opposite side of the road is another billboard
The results of Study 2 provide support for H1 and H2 regarding the potential for a green backlash effect and whether imitating a credibly green competitor might reverse this effect. However, in retrospect, it is not entirely clear that our manipulation addresses the intended question. In particular, it is debatable whether Red Lobster’s local sourcing of a single dessert ingredient would be seen as similar to the credible competitor’s claim of locally sourcing 80 percent of their seafood. We made this comparison for verisimilitude, because we didn’t think that it is feasible for most large organizations to implement green practices on the same scale as small independents. Our motivation when designing this study was to present participants with a green practice that a large company might actually be able to execute. However, in pursuit of ecological validity, we may have strayed from our original purpose and presented a green practice perceived by consumers to be different from that of the credible competitor. Additionally, while Study 2 confirmed our predictions regarding the proposed effect, we did not directly address the process by which the reversal was attained. Study 3 was designed to investigate this process and also replicate the results of Study 2 with particular attention to the similarity of the two companies’ green practices.

Study 3: Chainwide Organic Ingredients

In addition to clarifying the issue of perceived practice similarity and replicating the green backlash effect, Study 3 provides an opportunity to examine the process through which the presence of a credible competitor reverses this backlash effect. In particular, we predict that the perceived credibility of the large company mediates this effect.

H3: The mechanism reversing the green backlash effect described in H1 and H2 is the perceived credibility behind the large company’s green actions.

Method

For this study, we surveyed 433 panelists from a national marketing research company. Of the respondents, 47 percent were male; seventy-seven percent were Caucasian, 9 percent African American, 4 percent Asian, 4 percent Hispanic, and 1 percent Native American; their ages ranged from 19 to 90, and the average age was 47. McDonald’s was chosen as a brand to represent a large hospitality company for Study 3.

This time we used a 2x3 between subjects design. The two McDonald’s variables were that the firm announced its use of organic sandwich toppings, versus no mention; this was set against three possibilities for the competitor variable: no competitor, credibly green competitor (different practice), credibly green competitor using organic sandwich toppings.

For the scenarios in this study, respondents were asked to imagine that they were walking down a street near where they work and they decided to grab lunch. One-third of the respondents read that there was a McDonald’s at the corner of the street (no competitor condition), and the other two-thirds read that there was a McDonald’s at the corner of the street and an “Earth Burger,” a restaurant featuring locally raised free-range beef, across the street (credibly green competitor condition). The information about McDonald’s was presented such that half of the respondents were told that McDonald’s was advertising their use of locally grown organic vegetables for all sandwich toppings. For the other half of respondents, there was no mention of the McDonald’s organic topping practice (no mention condition). Of
the participants exposed to “Earth Burger,” half were told that this credible competitor uses locally grown organic vegetables for all sandwich toppings (see Exhibit 4).

After reading the scenario, participants reported their evaluations of McDonald’s using the same 3-item evaluation measure used in study 2.\textsuperscript{15} Also, as with Study 2, individual differences in overall approach to sustainable or green behavior and demographic data were collected. To control for participants’ quick-service patronage, we collected information about the respondents’ monthly frequency of eating out in a QSR. In study 3, a measure of perceived credibility was also included to examine potential mediating processes. Using seven-point scales, participants reported the extent to which they thought McDonald’s was committed to the green or sustainability initiative (1 = not at all committed; 7 = very committed), whether McDonald’s practice of using organic vegetable toppings is effective in conveying its green initiative (1 = not at all effective; 7 = very effective), and whether McDonald’s is credible (trustworthy) in conveying its green initiatives (1 = not at all credible or trustworthy; 7 = very credible or trustworthy). These four items were averaged to form a composite measure of credibility (α = .94).

Results

We examined the differences in the evaluations of McDonald’s between the “no mention” and “organic sandwich toppings” conditions, depending upon the presence of a credibly green competitor and the type of the green practices adopted by “Earth Burger” (see Exhibit 5 for the results). When there was no competitor present, the McDonald’s mention of the organic toppings decreased consumers’

\textsuperscript{15} We also measured respondents’ behavioral intentions toward McDonald’s (“how likely is it that you would go to McDonald’s for lunch?”) with 2-item, 7-point intention scales. However, due to the lack of reliability with the measure, we dropped it from our analyses.
overall evaluations of the brand, confirming our prediction about the sustainability backlash effect (M = 5.19 to M = 4.79). However, their overall evaluations of the brand increased when McDonald's announced a green practice regardless of whether their practice is similar to (M = 4.64 to M = 4.91) or different than (M = 4.40 to M = 4.83) that of the credibly green competitor (see Exhibit 3). Interestingly, the dissimilar green practice actually seemed to produce the most positive results. Since there was no interaction effect observed between the two competitor-present conditions, we combined them and conducted a 2 x 2 ANCOVA (McDonald's green practice or no practice, crossed with credibly green competitor or no competitor) on evaluations of the brand. Respondents' green tendencies, QSR eating frequency, gender, and age were control variables. As predicted, the analysis revealed a significant interaction effect (F(1,401) = 3.72, p = .05).

We further tested H3 regarding whether credibility would mediate the observed effect. Participants' evaluations regarding the credibility or trustworthiness of a McDonald's green practice had a positive effect on their evaluations of the brand (b = .75, t = 17.29, p < .001). Additionally, the observed significant interaction effect between a company's green practice and the presence of a credibly green competitor was rendered insignificant when consumers' beliefs about credibility or trustworthiness of a company's green practice was controlled (from F(1,401) = 3.72, p = .05 to F(1,400) = 1.79, p = .18). Consumers' beliefs about credibility or trustworthiness of a company's green practice remained as a significant factor (F(1,400) = 287.51, p < .001), confirming that perceived credibility or trustworthiness of a green practice served as a mediator.

**Discussion**

Study 3 replicated the results obtained in Study 2 and also provided evidence that perceived credibility functions as the underlying mechanism. However, what was particularly interesting about Study 3 was the insights gained regarding the type of green practice a large company should pursue. In contrast to what was originally hypothesized, the results appear to indicate that it is not necessary to implement a practice similar to that of a credibly green competitor. Indeed, the biggest positive effect was when the large company's practice was not at all similar to that of the credibly green company. Thus, it is simply the presence of this competitor in the market that matters when the large company promotes green initiatives.

**General Discussion and Managerial Implications**

Despite obvious concerns about greenwashing accusations, large companies should not interpret this report's findings as recommending abandonment of green initiatives. Even if consumers are skeptical, restaurants and hotels benefit from adopting environmentally friendly business practices—and building credibility of those practices will create positive customer attitudes. Second, having green initiatives in place will allow a large firm to quickly match any claim by a credible small competitor. Indeed, a large hospitality organization might even consider creating its own competition: launching a separate brand with an environmentally friendly position and then adopting one of their practices. Large hotel chains have launched boutique brands, and they could certainly do the same with green brands.

We cannot explain why a large company's green practices become more credible in the presence of a credibly green competitor. However, it could be argued that the presence of a credible competitor actually manipulates consumers' knowledge regarding a practice's credibility. Showing that someone credible is doing a particular practice validates that practice. However, as consumers become more educated regarding green practices, this type of validation may not be necessary. Future research should investigate the extent to which learning is responsible for the effects observed in studies 2 and 3. Perhaps large companies simply need to educate consumers regarding the efficacy of their sustainability initiatives. However, it also seems likely that, given the extent to which consumers distrust large companies, these educational efforts might be in vain. Perhaps the best strategy for big business is to adopt a variety of sustainability practices, but not promote those practices until a credibly green competitor threatens to steal away market share.
Advancing Business and Personal Success

Explore, develop and apply ideas with global hospitality leaders and expert Cornell professors.

Professionals from around the world are invited to attend 3-day, 10-day or online courses at the world’s leading institute for hospitality management education in:

- Strategic Leadership
- Finance
- Foodservice
- Human Resources
- Marketing
- Operations
- Real Estate

Visit our website to apply.

The Executive Path
Hospitality Leadership Through Learning

Complete program information and applications available online:
www.hotelschool.cornell.edu/execed

Phone +1 607 255 4919 Email exec_ed_hotel@cornell.edu
Cornell Center for Hospitality Research
Publication Index
www.chr.cornell.edu

Cornell Hospitality Quarterly
http://cqx.sagepub.com/

2011 Reports

Vol. 11, No. 12  Creating Value for Women Business Travelers: Focusing on Emotional Outcomes, by Judi Brownell, Ph.D.

Vol. 11, No. 11  Customer Loyalty: A New Look at the Benefits of Improving Segmentation Efforts with Rewards Programs, by Clay Voorhees, Ph.D., Michael McCall, Ph.D., and Roger Calantone, Ph.D.

Vol. 11, No. 10  Customer Perceptions of Electronic Food Ordering, by Sheryl E. Kimes

Vol. 11, No. 9  2011 Travel Industry Benchmarking: Status of Senior Destination and Lodging Marketing Executives, by Rohit Verma, Ph.D., and Ken McGill

Vol. 11 No 8  Search, OTAs, and Online Booking: An Expanded Analysis of the Billboard Effect, by Chris Anderson Ph.D.

Vol. 11 No 7  Online, Mobile, and Text Food Ordering in the U.S. Restaurant Industry, by Sheryl E. Kimes, Ph.D., and Philipp F. Laqué

Vol. 11 No 6  Hotel Guests’ Reactions to Guest Room Sustainability Initiatives, by Alex Susskind, Ph.D. and Rohit Verma, Ph.D.

Vol. 11 No 5  The Impact of Terrorism and Economic Shocks on U.S. Hotels, by Cathy A. Enz, Renáta Kosová, and Mark Lomanno

Vol. 11 No 4  Implementing Human Resource Innovations: Three Success Stories from the Service Industry, by Justin Sun and Kate Walsh, Ph.D.

Vol. 11 No 3  Compendium 2011

Vol. 11 No 2  Positioning a Place: Developing a Compelling Destination Brand, by Robert J. Kwortnik, Ph.D., and Ethan Hawkes, M.B.A.

Vol. 11 No 1  The Impact of Health Insurance on Employee Job Anxiety, Withdrawal Behaviors, and Task Performance, by Sean Way, Ph.D., Bill Carroll, Ph.D., Alex Susskind, Ph.D., and Joe C.Y. Leng

2011 Hospitality Tools
Vol. 2 No 1  The Game Has Changed: A New Paradigm for Stakeholder Engagement, by Mary Beth McEuen

2011 Industry Perspectives
No. 7  MegaTips 2: Twenty Tested Techniques for Increasing Your Tips, by Michael Lynn

2011 Proceedings
Vol. 3 No. 5  Building Brands in the Internet Age: Analytics, Loyalty, and Communication, by Glenn Withiam

Vol. 3 No. 4  Brave New World: Online Hotel Distribution, by Glenn Withiam

Vol. 3 No. 3  Social Media and the Hospitality Industry: Holding the Tiger by the Tail, by Glenn Withiam

Vol. 3 No. 2  The Challenge of Hotel and Restaurant Sustainability: Finding Profit in “Being Green,” by Glenn Withiam

Vol. 3 No. 1  Cautious Optimism: CHRS Examines Hospitality Industry Trends, by Glenn Withiam

2010 Reports
Vol. 10 No. 18  How Travelers Use Online and Social Media Channels to Make Hotel-choice Decisions, by Laura McCarthy, Debra Stock, and Rohit Verma, Ph.D.

Vol. 10 No. 17  Public or Private? The Hospitality Investment Decision, by Qingzhong Ma, Ph.D. and Athena Wei Zhang, Ph.D.


Vol. 10 No. 15  The Impact of Prix Fixe Menu Price Formats on Guests’ Deal Perception, by Shuo Wang and Michael Lynn, Ph.D.

Vol. 10 No. 14  The Future of Hotel Revenue Management, by Sheryl Kimes, Ph.D.

Vol. 10, No. 13  Making the Most of Priceline’s Name-Your-Own-Price Channel, by Chris Anderson, Ph.D., and Radium Yan, D.B.A

Vol. 10, No. 12  Cases in Innovative Practices in Hospitality and Related Services, Set 4, by Cathy A. Enz, Ph.D., Rohit Verma, Ph.D., Kate Walsh, Ph.D. Sheryl E. Kimes, Ph.D., and Judy A. Siguaw, D.B.A
Cornell Center for Hospitality Research
Publication Index

Vol. 10, No. 11 Who’s Next? An Analysis of Lodging Industry Acquisitions, by Qingzhong Ma, Ph.D. and Peng Liu, Ph.D.


Vol. 10, No. 9 Building Customer Loyalty: Ten Principles for Designing an Effective Customer Reward Program, by Michael McCall, Ph.D., Clay Voorhees, Ph.D., and Roger Calantone, Ph.D.

Vol. 10, No. 8 Developing Measures for Environmental Sustainability in Hotels: An Exploratory Study, by Jie J. Zhang, Nitin Joglekar, Ph.D., and Rohit Verma, Ph.D.

Vol. 10, No. 7 Successful Tactics for Surviving an Economic Downturn: Results of an International Study, by Sheryl E. Kimes, Ph.D.

Vol. 10, No. 6 Integrating Self-service Kiosks in a Customer-service System, by Tsz-Wai (Iris) Lui, Ph.D., and Gabriele Piccoli, Ph.D.

Vol. 10, No. 5 Strategic Pricing in European Hotels, 2006–2009, by Cathy A. Enz, Ph.D., Linda Canina, Ph.D., and Mark Lomanno

Vol. 10, No. 4 Cases in Innovative Practices in Hospitality and Related Services, Set 2: Brewerz, ComfortDelgro Taxi, DinnerBroker.com, Iggy’s, Jumbo Seafood, OpenTable.com, PriceYourMeal.com, Sakae Sushi, Shangri-La Singapore, and Stevens Pass, by Sheryl E. Kimes, Ph.D., Cathy A. Enz, Ph.D., Judy A. Siguaw, D.B.A., Rohit Verma, Ph.D., and Kate Walsh, Ph.D.

Vol. 10, No. 3 Customer Preferences for Restaurant Brands, Cuisine, and Food Court Configurations in Shopping Centers, by Wayne J. Taylor and Rohit Verma, Ph.D.

Vol. 10, No. 2 How Hotel Guests Perceive the Fairness of Differential Room Pricing, by Wayne J. Taylor and Sheryl E. Kimes, Ph.D.

Vol. 10, No. 1 Compendium 2010

2010 Roundtable Retrospectives


2010 Industry Perspectives

No. 6 The Future of Meetings: The Case for Face-to-Face, by Christine Duffy and Mary Beth McEuen

No. 5 Making Customer Satisfaction Pay: Connecting Survey Data to Financial Outcomes in the Hotel Industry, by Gina Pintore, Ph.D., Dan Seldin, Ph.D., and Arianne Walker, Ph.D.

No. 4 Hospitality Business Models Confront the Future of Meetings, by Howard Lock and James Macaulay

2009 Reports

Vol. 9, No. 18 Hospitality Managers and Communication Technologies: Challenges and Solutions, by Judi Brownell, Ph.D., and Amy Newman


Vol. 9 No 16 The Billboard Effect: Online Travel Agent Impact on Non-OTA Reservation Volume, by Chris K. Anderson, Ph.D.

Vol. 9 No 15 Operational Hedging and Exchange Rate Risk: A Cross-sectional Examination of Canada’s Hotel Industry, by Charles Chang, Ph.D., and Liya Ma

Vol. 9 No 14 Product Tiers and ADR Clusters: Integrating Two Methods for Determining Hotel Competitive Sets, by Jin-Young Kim and Linda Canina, Ph.D.

Vol. 9, No. 13 Safety and Security in U.S. Hotels, by Cathy A. Enz, Ph.D.

Vol. 9, No. 12 Hotel Revenue Management in an Economic Downturn: Results of an International Study, by Sheryl E. Kimes, Ph.D.

Vol. 9, No. 11 Wine-list Characteristics Associated with Greater Wine Sales, by Sybil S. Yang and Michael Lynn, Ph.D.

Vol. 9, No. 10 Competitive Hotel Pricing in Uncertain Times, by Cathy A. Enz, Ph.D., Linda Canina, Ph.D., and Mark Lomanno