

RRR

ROSEN RESEARCH REVIEW

WINTER 2021



**Rosen College of
Hospitality Management**

UNIVERSITY OF CENTRAL FLORIDA

LEADERS IN RESEARCH

At the Dick Pope Sr. Institute for Tourism Studies at the UCF Rosen College of Hospitality Management, we use applied research to tackle industry challenges and develop hands-on leadership-development programs. Industry partners benefit from access to dozens of researchers at a dedicated research institute that has been solving hospitality and tourism concerns for more than 40 years. Learn more at hospitality.ucf.edu.



**Rosen College of
Hospitality Management**

UNIVERSITY OF CENTRAL FLORIDA

We have high hopes for 2022!



It's been almost two years since the COVID-19 pandemic created global havoc and negatively impacted the hospitality and tourism industry. Today it looks like we are rounding the corner to a new future, thanks to vaccines, treatments and health protocols. The pandemic brought travel to a halt, shuttered restaurants and hotels, and led us to look at the industries that bring so much pleasure in a new light. For researchers who study hospitality and tourism trends, habits and practices, the pandemic provided great opportunities for research. Academics who live and breathe hospitality studied how COVID-19 changed the travel landscape, how it introduced Artificial Intelligence (AI) into industries at a faster pace, how workers and managers adapted and showed resilience, how it made travelling with items to ensure healthy outcomes is the norm, and not the exception. Safety, security and staying healthy while still experiencing what hospitality brings are keys to recovery for the industry, and our researchers share those findings and others in this winter issue of the **Rosen Research Review** magazine.

We invite you to read the winter 2021 issue of the **Rosen Research Review**, online and in hardcopy. Its 10 articles share critical research. This fifth issue of the magazine shares research on essential workers, what impacts COVID-19 has had on the mental health of restaurant employees, and how the foodservice industry is recovering. In addition to research about the impacts of COVID-19, articles also focus on senior living communities and how decisions are made to relocate to a living situation offering support for aging populations. There is an article on facial recognition systems, which have gained a footing, since the pandemic. Researchers also take a look at space tourism, its highs and lows. This issue's thought leader article focuses on Phillippe Gas, Chief Executive Officer

of the Qiddiya Investment Company. Gas is a former Disney executive. Qiddiya is a project that combines entertainment, sports, arts and attractions, in addition to real estate and community services. It is under development in Riyadh, Saudi Arabia's capital and main financial hub.

The **Rosen Research Review**, produced by UCF Rosen College of Hospitality Management in collaboration with Research Features has been providing important research directly to the leaders and managers of the hospitality industry for two years. We are proud to say that readership has steadily increased, with more and more partners sharing the electronic version of the magazine with their colleagues and friends. Our commitment to life-long learning is evident in the work we do at the college, educating the future leaders of the hospitality industry, and the research we share. We are dedicated to delivering information that our partners can use for the betterment of the industry and society as a whole.

With cooler temperatures, it is the perfect time to sit down, maybe by the fireplace, and read the **Rosen Research Review**. The magazine will provide food for thought and action going into 2022.

Dean and William C. Peepert Preeminent Professor in Destination Marketing

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Rosen Research Focus | Dr. Robertico Croes, Dr. Kelly Semrad and Dr. Manuel Rivera

WHY EMPLOYEES ARE LEAVING AND WILL NOT RETURN TO WORK IN THE HOSPITALITY INDUSTRY

COVID-19's labor legacy is a wake-up call for U.S. hospitality

An important new report by Rosen College researchers should be taken as a wake-up call for the tourism and hospitality industry in the U.S. following the COVID-19 pandemic.

["The state of the hospitality industry 2021 employment report: COVID-19's labor force legacy"](#) reveals that many hospitality employees who were unable to work as a result of the pandemic have since left the industry for good. As a result, even though demand for hospitality is beginning to increase, the sector faces a serious labor shortage which is unlikely to be resolved soon.

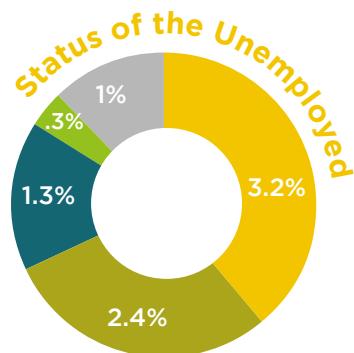
The report identifies poor remuneration and the low quality of jobs as the main reasons for employees' unwillingness to return to the industry. As authors Dr. Robertico Croes, Dr. Kelly Semrad and Dr. Manuel Rivera explain, the "cat is out of the bag" regarding the adverse circumstances related to working in tourism and hospitality, especially in front-line positions.

THE STUDY

Hospitality was one of the industries that was hit hardest by COVID-19. Before the pandemic, the industry accounted for nearly 14 million, or 10%, of US jobs. According to Economic Policy Institute figures, the industry had shed 3.5 million jobs by the end of 2020. The losses disproportionately affected service, minority, and women workers, all of whom were already identified as having low-wage and low-hour employment.

For their investigation into the pandemic's impact on the U.S. hospitality industry, the Rosen College researchers surveyed nearly 1,000 hospitality workers across the U.S. Respondents were from all states including Puerto Rico, with one-third of the respondents coming from Florida, New York, Texas, and California. The results paint a telling picture of how the pandemic has already impacted the industry's workforce and will continue to do so in the coming years.

The report reveals that 30% of hospitality employees express negative feelings about their work experience. Respondents regard

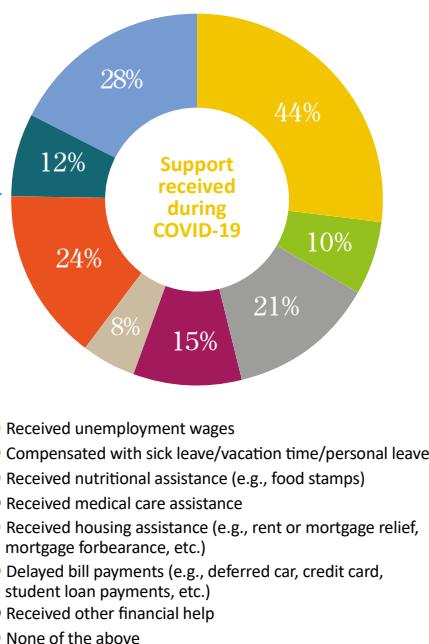
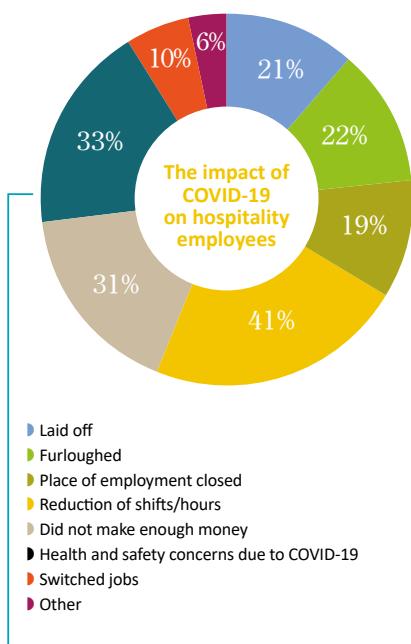


- Unemployed and looking for work in the tourism and hospitality industry
- Unemployed and looking for work in other industries not related to tourism and hospitality
- Unemployed, looking for work, and pursuing educational opportunities
- Unemployed, not looking for work, and pursuing educational opportunities
- Unemployed and not looking for work nor pursuing educational opportunities

hospitality as a poor employment option because the industry fails to provide workers with a number of basic necessities such as adequate time off, which means that many employees can't care for their families and do not have a good work-life balance. Even more

THE IMPACT OF COVID-19 ON HOSPITALITY EMPLOYEES AND MITIGATION EFFORTS

Note: Responses exceed 100% because respondents could select more than one.



importantly, working conditions are seen as unfavorable and income as inadequate.

The study also found that 59% of those who reported being unemployed during the pandemic would not return to the hospitality industry, while 30% of those still employed in the industry are considering quitting their jobs. Most of the employees considering quitting were single, white females with a high school education or less, who earn less than \$25,000 a year. Reasons given for not returning to or quitting their jobs include the aforementioned working conditions and low income as well as a perceived lack of career advancement in the industry and concerns about the pandemic.

Additionally, the study asked respondents about vaccination status. The findings suggest that hospitality employees are largely unvaccinated as a group, and would not encourage others to get vaccinated.

TIME FOR RE-ASSESSMENT

Economic forecasts had previously anticipated that the hospitality industry would bounce back as more people became vaccinated against COVID-19, allowing venues to re-open and the public to return. However, while tourists have been quick to make travel plans and locals have been keen to revisit restaurants and attractions, hospitality employees are less eager to return. As a result, despite increasing demand, hospitality businesses face a serious

not yet done with the tourism and hospitality industry: If the industry does not find innovative strategies to address the issues raised by the research, the exodus of employees is likely to continue.

Above all, the researchers highlight the need for better wages, enhanced career benefits, and improved working conditions, particularly for the lowest paid employees. The pandemic inadvertently gave employees the time they needed to research alternate options. They learned that other industries offer better employment packages to comparatively lower-skilled workers, because businesses need them in order to operate. Those who have not yet left hospitality are now demanding similar treatment.

Unwanted labor conflicts may therefore be around the corner. The signs are already there that the labor shortage will continue,

THE HOSPITALITY SECTOR FACES A SERIOUS LABOR SHORTAGE.

labor shortage and this is likely to impact consumer satisfaction.

The report attributes the labor shortage to employees “re-assessing” their working lives. As a result of being laid off or otherwise out of work during the pandemic, many hospitality workers have had time to find alternative jobs and careers that offer what they’re looking for: better working conditions, and more money.

Recent quit numbers from the U.S. Bureau of Labor Statistics support the report’s dire warnings. The statistics show that in September 2021 alone, over 863,000 hospitality employees quit—twice as many as the national quit level. The Rosen College researchers are concerned that this could affect the quality of the tourist experience, just as overseas visitors are beginning to return following the U.S.’s decision to lift the international travel ban. Their concern is not only for the coming season: tourists who are dissatisfied with their experience may not return or recommend a destination, which could have a long-term effect on industry employment levels.

TIME FOR CHANGE

The report’s authors warn that business owners need to be aware that COVID-19 is

and people will continue quitting their jobs, until there is major reform. COVID-19’s most positive legacy for the tourism and hospitality sector may be that workers’ lives improve, because satisfied employees provide a higher and happier level of service, which in turn creates more satisfied customers.



Dr. Roberto Croes

Dr. Croes is Associate Dean, Research & Administration; Director, Dick Pope Sr. Institute for Tourism Studies; and Professor at the Rosen College



Dr. Kelly Semrad

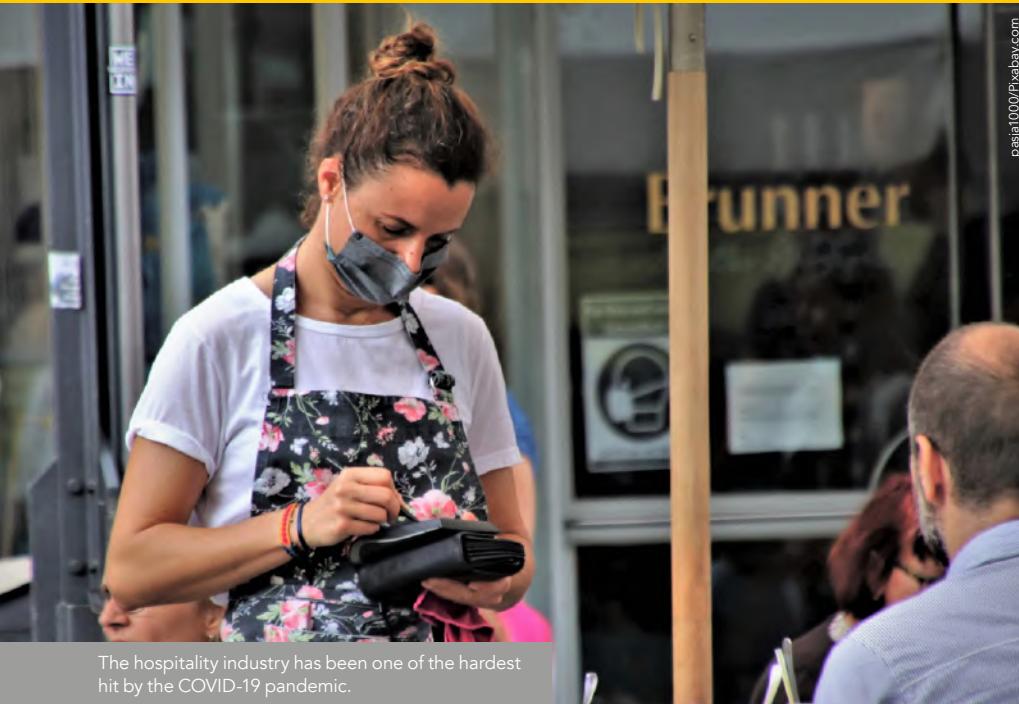
Associate Professor, UCF Rosen College of Hospitality Management: Econometric Analysis of Firms and Enterprises, Pricing Strategies and Event Promotions



Dr. Manuel Rivera

Assistant Dean; Associate Professor, Rosen College of Hospitality Management; Editor in Chief International Journal of Hospitality Management

THE IMPACT OF COVID-19 ON RESTAURANT WORKERS



The COVID-19 pandemic has hit many business sectors hard, none more so than the hospitality industry. Restaurant employees were already known to report high levels of depression and anxiety, as well as alcohol and drug use. How has the pandemic contributed to these problems? In the first study of its kind, Dr. Diego Bufquin, Dr. Jeong-Yeol Park and Dr. Robin Back from UCF Rosen College of Hospitality Management, along with two collaborators, examine the relationships between restaurant employees' work status, mental health, substance use, and career turnover intentions during the pandemic.

In addition to millions of lives lost, the COVID-19 pandemic has taken a heavy toll on businesses worldwide. The hospitality industry has been one of the hardest hit. In 2020, when restaurants and foodservice establishments had to close or be restricted to take-out, pick-up or delivery only, the National Restaurant Association reported that two-thirds of US restaurant workers—8 million people—lost their jobs through being furloughed or laid-off.

Even when restaurants re-opened in a restricted capacity, many diners stayed away,

preferring to stay home to eat, or to eat out less often. As a result, in July 2020 Yelp reported that, of the 26,000 restaurants listed on its website, nearly 16,000 would not be reopening. Employees of the restaurants that did reopen worked in very different, and possibly more stressful circumstances, not least through the risk of exposure to the virus.

We know from the National Institute of Mental Health that one in five Americans live with a mental illness. A recent study found that 80% of hospitality employees believe that mental health issues, for example feeling

depressed, anxious or manic, represent a major challenge for the industry. In addition, alcohol and substance use—both of which are known to be a problem in the industry—can be linked to mental health issues. It is also known that high alcohol and substance use can contribute to career dissatisfaction and career turnover.

Researchers at UCF Rosen College of Hospitality Management have carried out the first study of its kind into the effect that COVID-19 has had on restaurant employees. Published in the prestigious *International Journal of Hospitality Management*, it examines the relationships between



Employees who continued to work through the pandemic reported a significantly higher degree of psychological distress.

restaurant employees' work status, mental health, substance use, and career turnover intentions during the pandemic. The research has been conducted by Dr. Diego Bufquin, Dr. Jeong-Yeol Park and Dr. Robin Back.

EXPECTATIONS AND HYPOTHESES

A literature review conducted at the beginning of the study informed the 12 hypotheses that Bufquin, Park and Back subsequently investigated. The review identified two markers of mental health: psychological wellbeing and psychological distress. The researchers hypothesized that these would both be affected by work status: that is whether someone is working, furloughed, or has been laid off.

Research also suggested that the restaurant industry has one of the highest rates of illicit

drug use and is ranked the third highest for alcohol consumption. It was hypothesized from this that drug and alcohol use would both be affected by work status. In addition it was hypothesized that both drug and alcohol use would decrease with psychological wellbeing and increase with psychological distress.

The review found that substance use was a factor that affected career turnover intentions. This gave rise to the separate hypotheses that drug use and alcohol use would increase career turnover intentions.

Hospitality is known to be a labour-intensive and stressful industry. Accordingly, the researchers hypothesized that psychological wellbeing would decrease career turnover intention and that psychological distress would increase it.

TWO-THIRDS OF U.S. RESTAURANT WORKERS—8 MILLION PEOPLE—LOST THEIR JOBS THROUGH BEING FURLOUGHED OR LAID OFF DURING THE PANDEMIC.

METHODOLOGY OF THE STUDY

To test their hypotheses, the Rosen researchers compiled a self-reported questionnaire which was sent to non-managerial restaurant employees and former employees who had worked in the industry immediately prior to the pandemic. Participants in the survey, which took place in June 2020, were aged 18 and over, and equally split between people in employed, furloughed, and laid-off work status categories. Some 585 samples were analyzed for the study.

Recognised screening tests were used to measure mental health, drug use, and alcohol use, and career intention was measured according to another respected study. Participants were asked to respond to all questions according to a range of options on a seven-point Likert scale.

Demographic data revealed that 60% of participants identified as male and 40% identified as female. Almost half were aged 18 to 30, and just over half had a four-year college degree. Regarding work status, 40% were still working in the restaurant industry, 35% were laid off and 25% were furloughed.

The study took a two-stage approach to analysis. The validity of the constructs was first tested and confirmed using the multivariate procedure of confirmatory factor analysis (CFA). Structural equation modelling (SEM) was then used to analyse the relationships between the variables measured. SEM is a set of statistical procedures which capture the causal relationships between variables. SEM enables the quantification of behaviour and also accounts for errors in measurement.

INTRIGUING RESULTS

Of the 12 hypotheses identified for Bufquin, Park and Back's study, three were supported, three were partially supported, and six were not supported. The results indicate that there is no significant influence of work status on psychological wellbeing, though there is some influence of work status on psychological distress. Employees who continued to work through the pandemic reported a significantly higher degree of psychological distress. However, those who were laid off showed no difference in psychological distress compared with those who were furloughed.

It was confirmed that psychological distress significantly increased both drug and alcohol use.



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Employees' work status was hypothesized to have a significant effect on participants' use of drugs and alcohol. The results from the study showed that although working employees had a higher tendency to use both drugs and alcohol compared with furloughed staff, there was no significant influence found for laid-off staff when compared with furloughed staff.

Regarding the link between mental health and drug and alcohol use, although the original hypothesis was that psychological wellbeing would decrease drug and alcohol use, the results suggest the opposite. However, it was confirmed that psychological distress significantly increased both drug and alcohol use.

The results did not, as had been anticipated, indicate that career turnover intentions are influenced by drug use, though alcohol use did significantly decrease career turnover intentions. In addition, psychological distress and psychological wellbeing were both found to increase career turnover intentions.

WHAT DOES THIS MEAN?

Given that several of the study's hypotheses were not supported by the results, COVID-19 appears to have changed the way employees



think about work—or the lack of it—and the effect that it has on people's lives.

Bufquin, Park and Back commented: "Results of this study revealed that work status affects employees' mental health differently during a pandemic than previously reported in studies conducted prior to the pandemic. More specifically, the current study revealed that employees who were still working during the COVID-19 pandemic experienced higher levels of psychological distress, drug use, and alcohol use than those who had been furloughed. Furthermore, the current study also revealed that psychological wellbeing increases drug and alcohol use, thereby contradicting previous studies."

The researchers suggest that higher levels of drug and alcohol use and psychological distress experienced by employees who worked during the pandemic could be

explained by increasingly stressful working conditions. Employees were required to adapt quickly to challenging new working conditions, and also risked exposure to the virus. A fall in the number of customers also resulted in reduced income, due to the loss of gratuities on which many restaurant workers depend.

While the study did not confirm an association between unemployment and lower psychological wellbeing, the Rosen College research team suggests this might be as a result of the benefits and tax credits that furloughed and laid-off workers received. As a result they were perhaps not as worried about money as their employed former colleagues.

The researchers argue that the fact that a positive link was found between psychological wellbeing and drug and alcohol use could be explained by people having more time on their hands during the pandemic. Increased alcohol sales and alcohol consumption have generally been observed during the pandemic. Other reports have suggested there has been a general increase in substance use, particularly among younger adults, racial/ethnic minorities and essential workers.

MANAGING EMPLOYEES DURING THE PANDEMIC

Bufquin, Park and Back's study fills a significant gap in the literature and suggests practical ways in which restauranteurs might improve the lives of their employees. They find that restaurant businesses should do more to consider the stresses and strains experienced by employees, and also to prioritize their wellbeing. In particular, they should adopt strategies to mitigate the risks to which employees are exposed, both physically and financially.

For example, partially furloughing employees and having more people working part-time would allow employees to reduce the risk of exposure to the virus, give them more time to recover from the additional strains of working in the pandemic, and allow them to access some unemployment benefits. Restaurant businesses should also coach staff in how to deal with stress, and inform them about external sources of support. In addition, restaurant businesses should consider the impact on employees of having a reduced income because of reduced gratuities.

EMPLOYEES WHO CONTINUED TO WORK THROUGH THE PANDEMIC REPORTED A SIGNIFICANTLY HIGHER DEGREE OF PSYCHOLOGICAL DISTRESS.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Diego Bufquin, Dr. Jeong-Yeol Park, Dr. Robin Back and two collaborators examine the impact of COVID-19 on employees in the restaurant industry.

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PERSONAL RESPONSE

Your research provides an important insight into the effects of the pandemic on restaurant workers. Going forward, based on your findings, what is the most important thing that restaurant businesses could do to improve the lives of their workers?

“ To create a hospitable atmosphere for restaurant customers, the first step is to focus on the mental health and wellbeing of front- and back-of-house staff members. In order to destigmatize mental health in the workplace, restaurant owners and/or operators could offer their employees “mental health days”, sit down with an employee and listen to his/her concerns, implement programs like therapy reimbursement or gym reimbursement, and empower employees to truly act as a team. Moreover, with the current uncivil behaviors demonstrated by some customers during the pandemic, it is necessary for managers to ask their employees to inform them about such behaviors, and to communicate that their restaurant will not tolerate abuse from customers. ”



Dr. Diego Bufquin



Dr. Bufquin has a multicultural background that has led him to live and work in a variety of countries. In the hospitality industry, Dr. Bufquin has had the opportunity to work at several hotels and restaurants. His research mostly focuses on the areas of consumer and organizational behavior.

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Dr. Jeong-Yeol Park



Dr. Park has conducted multiple research studies that have examined potential travellers' purchase behaviour at online travel agencies, restaurant customers' behaviour, and demand analysis for hospitality industries. Currently, he teaches Hospitality Industry Financial Accounting and Research Methods in Hospitality and Tourism.

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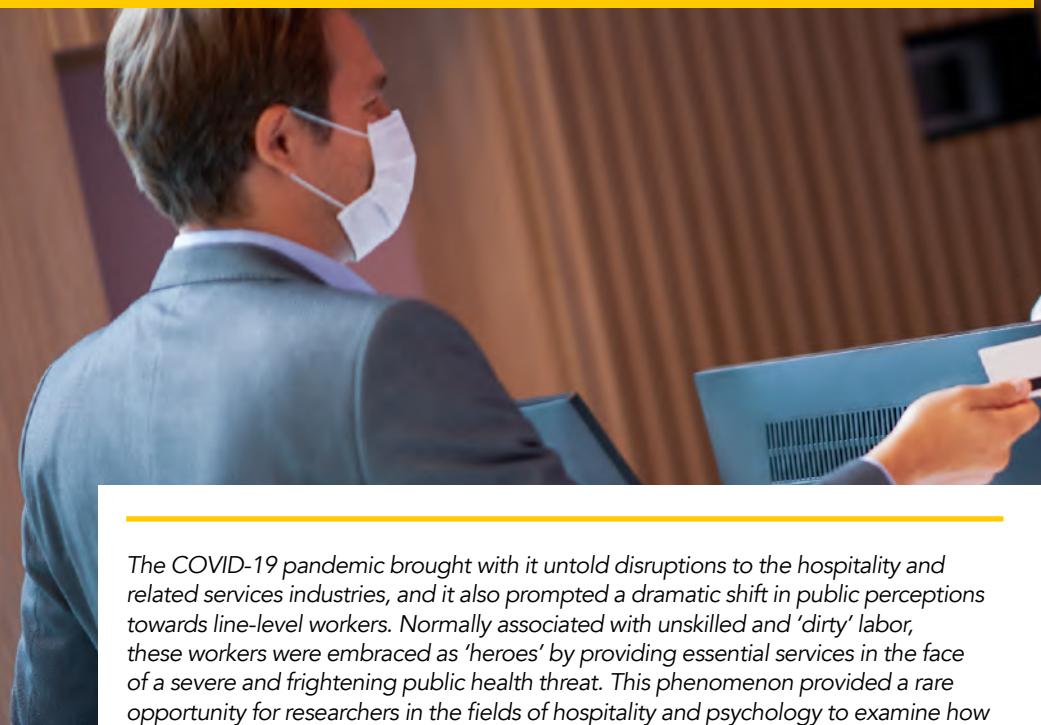
Dr. Robin Back



Dr. Back has over 25 years of experience in the retail, travel and tourism, and alcoholic beverage industries on three continents. His research is mainly focused on consumer behavior and marketing, with a primary interest in the business of wine. He teaches a number of beverage-related courses at both graduate and undergraduate level.

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ESSENTIAL WORKER HEROES



The COVID-19 pandemic brought with it untold disruptions to the hospitality and related services industries, and it also prompted a dramatic shift in public perceptions towards line-level workers. Normally associated with unskilled and 'dirty' labor, these workers were embraced as 'heroes' by providing essential services in the face of a severe and frightening public health threat. This phenomenon provided a rare opportunity for researchers in the fields of hospitality and psychology to examine how those workers, and the society they served, made sense of this perceptive shift.

Americans are probably most familiar with the concept of heroes in capes and costumes on the big screen. The budgets these blockbusters command, and the revenues they produce would suggest we place high value on their exploits. The COVID-19 pandemic has thrown a light on a lesser-appreciated team of heroes, whose uniforms are more utilitarian and whose work circumstances are far less glamourous. However, the genuine threat posed by the global coronavirus pandemic demanded they step up, albeit reluctantly, to shield and serve others. Their newfound heroism demanded that they, and those they served, significantly reappraise their roles. How they did this is the focus of an important collaboration between UCF Rosen College's Dr. Cynthia Mejia and a research team with UCF's Targeted Research Training Program (TRT) based at the UCF College of Sciences Department of Psychology.

As the COVID-19 pandemic shut down all but essential services, those involved in these services were thrust not only into the spotlight, but up close to the pandemic's front lines, disproportionately exposing them to the dangers of the virus. The media and the U.S. Government were quick to champion healthcare workers and the nobility of their profession. However, the provision of food and other essential services soon made Americans realize the importance of the long supply chains and the largely vulnerable workers necessary to bring those services to their door. Workers within such services as hospitality, retail grocery, food service, consumer retail, and taxi and transportation services found themselves suddenly considered 'heroes' —a far cry from their usually stigmatized occupations, often tainted as 'dirty work.' Dr. Mejia and the TRT research team were interested in how this group dealt with their new 'hero' status and how those outside the

The research focused on line-level—essential, customer-facing, low-paid and low-level—workers.

group balanced this with previous perceptions of work in the services industries.

Dr. Mejia and her team turned to the driving force of this perceived status shift: the news media. Newspapers and TV in the United States were vital in shaping the hero narrative, so the researchers employed a critical discourse analysis methodology to scan and code the language used to describe essential workers. They examined the language used within a range of 46 news sources, including transcripts from nationally televised news sources such as



Researchers wanted to understand how attitudes to service work changed during the pandemic.



New Africa/Shutterstock.com

CNN, MSNBC, ABC and Fox News; university newspapers; and mainstream news outlets, for the period March 30 to May 31, 2020—the early wake of the pandemic in the U.S. Their focus was how the workers, considered the 'In-Group', and society in general, the 'Out-Group', used language to frame the character and role of essential workers.

TELLING TURNS OF PHRASE

In psychology, the concept of In-Groups and Out-Groups lies within social identity theory—the belief that individuals categorize

WHAT VALUE DID A HERO STATUS HOLD IF IT CARRIED WITH IT A REAL THREAT TO THE HEALTH OF LOVED ONES?

themselves into groups, identify themselves with perceived positive traits within each group, and continually compare their group to Out-Groups. Importantly, when external forces such as societal stigma, threaten the identity of a group, In-Group members are motivated to protect their group's positive identity. Throw in a dramatic turn of events that amplifies that threat, such as a pandemic, and you have a unique research opportunity.

Using the Nexis Uni database, Dr. Mejia and her team scanned the news sources using keywords such as 'essential worker', 'essential employee', 'critical infrastructure worker', 'critical infrastructure employee', 'hero', 'identity', and 'stigma'. The search excluded healthcare workers to focus on reports and news about line-level essential workers in hospitality, retail grocery, food service, transportation, and consumer retail—essential, customer-facing, low-paid and low-level workers, who didn't enjoy a similar societal status as workers in healthcare. The text level data were then coded based on current literature on stigma and coping mechanisms of service workers who conduct 'dirty' work. A cluster mapping analysis helped organize the data according to frequency, revealing relationships between the In- and Out-Groups. In this study, the In-Group was taken

to represent the essential service workers, excluding health workers, and the Out-Group was reflective of the wider public, or what can be thought of as 'societal "outsiders"'. Finally, they identified and assembled overarching themes to help explain this rare phenomenon, especially the perceived dramatic shift in Out-Group perceptions of line-level service employees and their work.

The language in the news sources helped identify two overarching themes: 'dangerous work' and 'coping mechanism'; the latter separated further into 'In-Group or Out-Group' coping and a more unified 'Call to Action' coping.

Telling in the research was that there was little improvement in the perceived conditions of the workers—the perceived stigma, and the breadth, depth and proportion of its 'dirtiness'; if anything, especially for the In-Group, conditions were worse in the face of coronavirus. An example in the research was a line-level restaurant worker invoking images of a battlefield: 'I am practically bathing in hand sanitizer. I fear that I'm a soldier on the front line, bound to be the first to fall. Over cheeseburgers'. The Out-Group largely echoed the sentiment around conditions, commenting



What was previously purely a means to a paycheck was now 'inspiring'.

to the occasion to protect the health and safety of essential service workers. Finally, the Out-Group expressed their readiness to reframe the perceptions of the occupations of essential service workers, although anecdotally, the intensity around these good intentions has waned. Dr. Mejia presents a rare opportunity for these workers as a case in point: an argument for better pay before the U.S. House of Representatives on May 25, 2020:

'The question is, should we rectify a situation where people are actually worse off financially for showing up in an essential job, and should we recognize their willingness to put themselves at risk, which these individuals did, for two-plus solid months with a very modest [paycheck]?'

on the surging death toll among line-level workers with limited access to personal protective equipment (PPE), and coping by encouraging fundraising initiatives to help secure PPE.

A clear narrative emerged from the In-Group, continually exposed to the public while doing their jobs, of the risk of contracting the virus and infecting their own families. What value did the hero status hold if it carried with it a real threat to the health of loved ones?

The 'essentialness' of the new 'heroes' work was a common thread for both In- and Out-Groups. Truck drivers would emphasize that without them, 'None of you would get anything,' and those safely tucked away in lockdown would acknowledge that, 'Everyone, whether it is the farmworkers who are picking the food, or whether it's an MTA bus driver [is essential].'

DEALING WITH IT

So how did essential workers grapple with their sudden thrust to the frontline? In examining In-Group discourse in the source documents, Dr. Mejia and her team identified several coping mechanisms. Firstly, looking inwards, there was stronger favoritism within the group—a stronger 'bond', if you will. They also actively countered the popular perceptions of their work, emphasizing their role as a lifeline to society's continuity, and reframed their work: what was previously purely a means to a paycheck was now 'inspiring', and their jobs were a source of

camaraderie. The In-Group also employed outward defensive tactics as a coping mechanism, blaming customers without masks and pointing to the poor pay they received for such dangerous, essential work.

For the Out-Group, coping with their perceptions of essential workers' hero status came largely through confronting or countering previous perceptions and then broadcasting their support—for example, farmers who made plans to get products directly to consumers were championed as 'innovative'. The new situation also encouraged the re-examination of the ethics of remuneration and the reframing of low-paid essential workers dealing with 'dirty' work in the face of COVID, compared with those in society who transitioned seamlessly to stay-at-home work. The Out-Group weren't averse to blame, either. Their focus was invariably on those who didn't wear masks; employers for not protecting their staff; the U.S. Government for its perceived myriad failures in testing, tracing, and PPE rollout; and a broad range of 'others' for not rising

AN OPPORTUNITY FOR CHANGE

It's tempting to look at the COVID-19 pandemic and its impacts in a purely negative light, but if there's one thing clear in the work of Dr. Mejia and her colleagues at UCF's Targeted Research Training Program, it's that the pandemic created a rare event. Their research shows that during the pandemic's early days, there was a period of alignment of opinion in the discourse of line-level workers and those who usually dismiss their occupations as unskilled and non-essential. Both group members recognized the value and shortfalls in current protections for essential, stigmatized workers.

This is an opportunity for a dramatic change in the conditions for line-level workers within the hospitality and related services industries. It is an appropriate time to address some of the inequities they face—low pay, lack of health insurance and an absence of ancillary services, such as daycare.

Because not all heroes can always help, sometimes they need help themselves.

THIS IS AN OPPORTUNITY FOR A DRAMATIC CHANGE IN THE CONDITIONS FOR LINE-LEVEL WORKERS WITHIN THE HOSPITALITY, RETAIL GROCERY, FOOD SERVICE, CONSUMER RETAIL AND TAXI AND TRANSPORTATION SERVICES.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Cynthia Mejia and team studied the change in public perceptions towards previously stigmatized service worker roles as a result of COVID-19 and representation.

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The Sunshine ERC Targeted Research Training Program at UCF aims to train the next generation of workplace professionals to identify and address threats to health, safety, and well-being in the hospitality/tourism industry. This program focuses on the underserved population of hospitality and tourism workers who have a wide and unusual range of risks in their jobs. The primary goal of the TRT is to develop and assess interventions aimed at promoting worker health, safety, and well-being. For more information, please see: <https://sciences.ucf.edu/psychology/sunshine/about-the-trt-program/>

PERSONAL RESPONSE

Your research prompts a serious re-evaluation of the status of line-level workers in the hospitality sectors; where's the best place to start?

Evidenced in the recent challenges with line-level labor shortages in the hospitality industry, the results of this study prompt a serious re-evaluation of some of the structural issues needed to support these workers into the future. In addition to a liveable wage, a good place to start would be to include healthcare, childcare, education, training, and development benefits to line-level workers who represent the silent force that fuels society.

Dr. Cynthia Mejia

Dr. Cynthia Mejia is an Associate Professor and the Interim Chair of the Department of Foodservice and Lodging Management. Dr. Mejia served as a faculty member in this department at UCF Rosen College of Hospitality Management since 2013.



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RESTAURANTS POST COVID-19

A menu of financial recovery strategies



When you're suddenly forced to close 1,800 restaurant dining rooms without any certainty of being able to reopen them any time soon, you need to act decisively and prioritize if you plan to be around for a grand reopening. For Darden Restaurants and their market-leading US brands, those priorities during lockdown were 'look after the people – look after the cash!' Dr. Elizabeth Yost, Dr. Murat Kizildag and Dr. Jorge Ridderstaat of UCF Rosen College of Hospitality Management investigate the company's achievement.

When great disasters strike there is no time to plan an instant response; those who can mitigate the damage and recover fastest are those who already have relevant contingency plans in place.

Between 2002 and 2006, the world experienced its first major exposure to the SARS (severe acute respiratory syndrome) virus which infected 8,096 people and claimed 774 lives across some 25 countries. Although many business sectors were affected, the 'non-essential' sectors of travel, food service, and leisure felt the dual impact of enforced closure and consumers' unwillingness to risk possible infection.

This novel paper from Dr. Elizabeth Yost, Dr. Murat Kizildag and Dr. Jorge Ridderstaat, focuses on the lessons learned for the

restaurant sector, identifying strategies for both survival and recovery. The paper then considers the practical application of these strategies, exploring the leading full-service restaurant company in the U.S., Darden Restaurants, as a case study of survival and revival as the pandemic's impact begins to decrease.

A VULNERABLE SECTOR

As identified by the researchers, the restaurant sector was, perhaps, impacted more quickly and dramatically than many others. The lockdowns of early 2020 used legislation to close restaurant doors, but the ongoing fear of the virus has continued to slow the influx of diners, even as restaurants open their doors again.

Eating out, especially in the full-service restaurant sector, is not an essential activity, and for many people it can easily be postponed to safer times. For the restaurants though,



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THE STAFF WERE VIEWED AS INVESTMENTS THAT NEEDED THE SAME CAREFUL MANAGEMENT AS ALL OTHER ASSETS.

the longer the customers stay away, the less positive the prognosis for the business.

Many restaurants will never reopen; whole chains have gone to the wall, their cash reserves exhausted and the future too uncertain to buy time through additional borrowing or by attracting emergency investment. But many have survived and, some will argue, will emerge from this pandemic leaner and even more resilient than before.

A CASE STUDY: DARREN RESTAURANTS

Darden Restaurants is one of those. Parent company to a host of iconic U.S. brands, such as Olive Garden Italian Kitchen, Longhorn

Steakhouse, Eddie Vis Prime Seafood, and many more, there must be very few Americans who do not know or frequent at least one local Darden restaurant.

The research team posed a number of open-ended questions to the Darden executives, covering broad operational issues together with specific financial strategies. In their paper, the Rosen College research team discuss the insights gained from these interviews to identify the financial strategies that have firstly enabled survival and, secondly, resulted in a rapid return to positive financial performance as lockdown has eased across the U.S.

The researchers from Rosen College contend that an inductive approach to a single company case study, taking a results-driven approach to assessing financial strategy, will provide more robust and rich ideas for the industry as a whole.

DARDEN: SIMPLY BETTER THAN THE REST?

So, did Darden Restaurants emerge from the pandemic bruised, but far from beaten, simply because of its size? Not according to the Darden executives and the Rosen College researchers. In fact, its sheer size and geographic spread throughout the U.S. meant that it was particularly vulnerable to state-by-state and district-by-district lockdown variations.

Did Darden survive the pandemic because it had enough cash reserves to keep itself afloat? Well, the company does have deep pockets, but that is because strong liquidity has always been at the heart of its contingency planning, as well as its growth planning.

Did Darden survive by brutally cutting all costs? Although the company closed 1,800 dining rooms which impacted the lives of 150,000 employees, looking after their people has been another cornerstone of strategy across all the Darden brands. When the restaurants were forced to close, the staff were viewed as investments that needed the same careful management as all other assets.

KEEPING THE CASH FLOWING

One of the key strategies for dealing with the closure of dining rooms is to put all expansion and avoidable refurbishment capital investment on hold. Additionally, advertising and marketing spend should be cut dramatically as there is little point in huge marketing expenditure when the market is neither allowed nor inclined to dine out.

In order to regain valuable revenue, restaurants could focus on the take-out market. Darden managed this by increasing marketing spend for these services and extending it to include a 'butcher shop of raw meats and goods' for home preparation.

But there are very few industries where total costs and sales are in direct proportion, and the restaurant business is certainly not one of them. Sales may drop dramatically, but overheads



Darden's brands include Olive Garden, Yard House and The Capital Grille.

THE RESEARCHERS IDENTIFIED THAT A STRONG BALANCE SHEET AND A RAPID RESPONSE TO EMERGING REALITIES ARE CRITICAL TO SURVIVING SUCH BUSINESS 'SHOCKS' AS THE PANDEMIC.

and financial commitments do not stop, so more decisive action usually is required.

The next survival strategy that Darden adopted was negotiating with suppliers for more favorable terms. This reduced purchasing costs and/or extended payment terms; potentially this was easier for a company the scale of Darden, but not impossible for even single unit operations showing a proactive approach to the challenges.

One major cost that must be addressed in such uncertain times is the staff and support employees. The approach that Darden took was influenced by their core values that all employees be treated with fairness. Initially the company reduced the immediate negative effects by paying emergency sick pay for two weeks to hourly paid workers in the disrupted restaurants and put in place furlough arrangements throughout the hierarchy. In order to maintain staff loyalty, senior executives took a 50% pay cut and the CEO voluntarily sacrificed his entire salary entitlement.

PLANNING FOR THE RECOVERY PHASE

Although many restaurants would be tempted simply to buckle down and try to weather

the storm, one of the strategies that allowed Darden to thrive throughout the pandemic was its ability to plan for the future, a lesson that other companies should follow.

When interviewed by the Rosen College researchers, the Darden executives revealed that they initially secured liquidity with a loan and a public offering. Then they focused on forecasting, as a more optimistic forecast of cash flow allowed Darden to repay its credit but retain access to it if another lockdown made it necessary.

Understanding the business' historical operating costs is also one of the methods that Darden modelled, enabling the company to produce a leaner financial management model as the restaurant sector began to recover post-COVID.

Additionally, the paper recognizes that poor menu planning can lead to inefficiencies in purchasing, storage and preparation, and service. Focus on this aspect was able to reduce costs for operations which continued to trade through the pandemic and has become a key part of the strategy for recovery and on into the, hopefully, brighter future.

NEW CHALLENGES

The 'unlocking' phase was complicated by the somewhat variable decisions of local regulators and a whole host of new challenges faced the industry after lockdown started to ease.

First among these was enticing customers back into the newly reopened restaurants against a continuing backdrop of uncertainty. Many were suffering 'cabin fever' effects of enforced isolation so took the first opportunities to restart their social lives, but others were far more uncertain and needed considerable persuasion.

In order to encourage reluctant diners, Darden Restaurants employed a number of strategies to overcome their reservations.

Marketing campaigns highlighted the safety precautions being taken in their restaurants, including the limits on seating capacity to enable social distancing, and the increased hygiene protocols.

The next challenge was to continue return momentum, once the customers started dining out again. Darden handled this by emphasizing food quality and variety during the menu planning operation, making the dining out option even more attractive. This was further supported by pricing initiatives to encourage repeat custom.

The researchers discovered that one of the key factors to survival was the retention of employees; Darden had managed this by retaining the loyalty of their key staff members by proving their commitment to treating their employees fairly despite the difficulties posed by COVID-19.

CONCLUSION

The researchers identified that a strong balance sheet and a rapid response to emerging realities are critical to surviving such business 'shocks' as the pandemic. Darden Restaurants' story of the past two years has shown that much can be done to mitigate damage and be ready for recovery.

The company's early return to a positive cash flow, together with a more profitable business model going forward, should be evidence that all restaurant businesses should be working towards the best, but also ready for the worst—if, when, and in whatever form, it comes.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Elizabeth Yost, Dr. Murat Kizildag and Dr. Jorge Ridderstaat used Darden Restaurants as a case study in financial recovery strategies in the restaurant industry, post COVID-19.

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PERSONAL RESPONSE

Were the Darden executives surprised at the level of operational costs they were able to save by reviewing menu planning across the brands?

|| The Darden Executives made very calculated decisions based on their robust understanding of leveraging scale and resources, so we don't believe they were surprised by the cost savings. We believe they know their operations at each brand intimately and were able to determine the best ways to survive the pandemic. This required the ability to make cost-saving streamlined decisions at the corporate Restaurant Support Center in addition to each brand's operations. The success of the company is dependent upon both areas of business operations, something that the executives have an understanding of, both at high and detailed levels. ||



Dr. Elizabeth Yost

Dr. Elizabeth Yost is currently an Assistant Professor at the UCF Rosen College of Hospitality Management.

Previously, Dr. Yost was the Manager of Ethics and Compliance for Darden Restaurants, one of the world's largest full-service restaurant operating companies with annual sales of more than \$6 billion.



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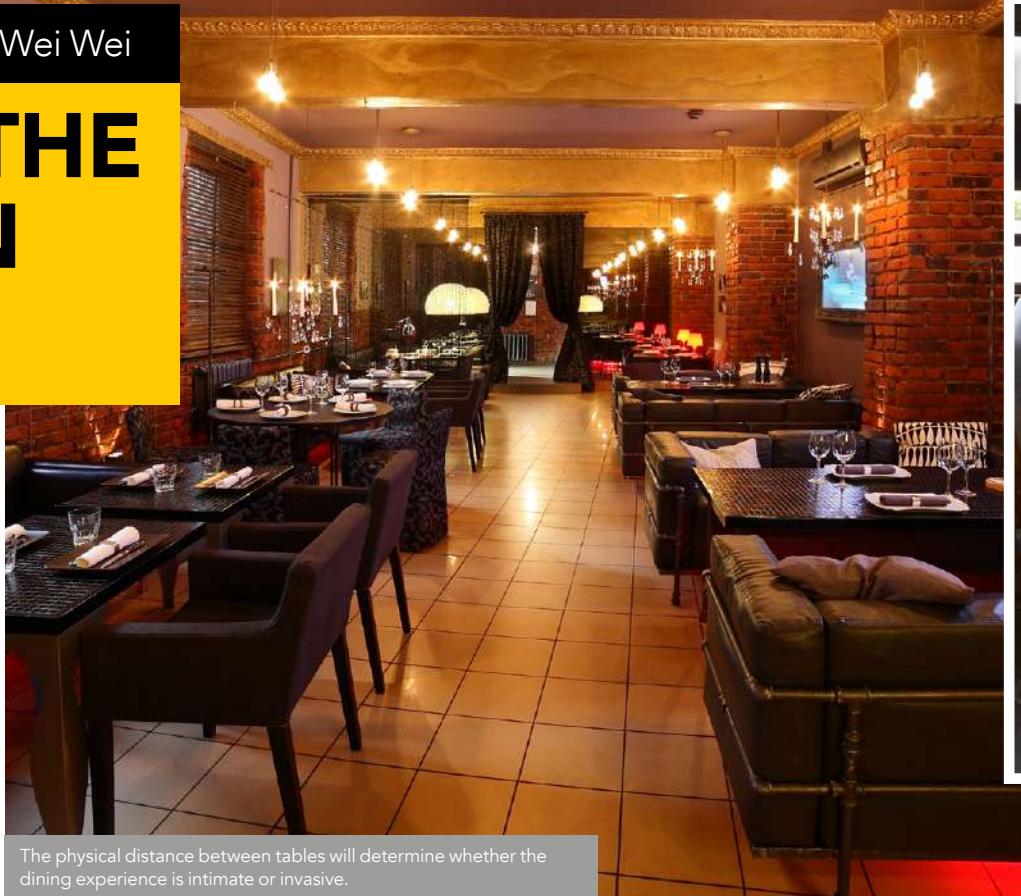
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TURNING THE TABLES ON COVID-19

The COVID-19 pandemic all but eviscerated the restaurant industry. Around the world, businesses shut doors. For some this would prove to be forever, and those that did reopen were stifled by strict social-distancing regulations and the challenge of how best to rearrange their servicescapes to meet regulations and still provide an enjoyable dining experience. The big question: how best to do this? Dr. Wei Wei from UCF Rosen College of Hospitality Management and her collaborators examined the issues of built density and customer power to uncover a vital piece of the puzzle.

Few sectors were more adversely affected by the COVID-19 pandemic than the hospitality sector. Hotel rooms remained empty and restaurants and bars closed their doors, some never to open again; others survived by shifting focus to takeaways. For those restaurants that held the line during the lockdown and eventually reopened under strict social distancing guidelines, adjusting the layout and furnishings to provide a safe and enjoyable dining experience was a new frontier, with no available research to guide them. Dr. Wei Wei of the UCF Rosen College of Hospitality Management and collaborators set out to change that.

Restaurant customers have a distinct reaction to the number of people in the space and the distribution of the furnishings. While a busy restaurant suggests it is justifiably popular, too many people can tip the balance into feeling crowded. Similarly, the physical distance between tables will determine whether the dining experience is intimate or



The physical distance between tables will determine whether the dining experience is intimate or invasive.

invasive. The configuration of a restaurant's furnishings, its built density, is crucial in determining customers' enjoyment and, importantly, their intentions to revisit and recommend it—getting the balance right is a science. This is challenging during the normal ebb and flow of customer behavior, but when the COVID-19 pandemic, and the resultant social distancing rules, forced owners to completely rethink how they configured their restaurants, there were no guidelines as to what would make an unusual dining experience enjoyable.

Dr. Wei and her colleagues set out to address this lack of guidance. They aimed to explore how dining experiences were affected by the built density shifts that were necessary to meet social distancing regulations. Their

research had two parts: the mediating effect of perceived territoriality—a customer's assumed personal space—and the moderating effect of a customer's sense of power, defined as the 'perception of an asymmetric control over resources in a given social situation.' Central to their hypothesis was that an adjacent empty table is better than an open space for a more enjoyable dining experience. Current research suggests an empty restaurant table serves as a 'fence,' symbolically imparting territorial rights to that table as well as a customer's own. Remove the empty table, and the customer loses that 'territory,' and, as a result, the dining experience is negatively affected.

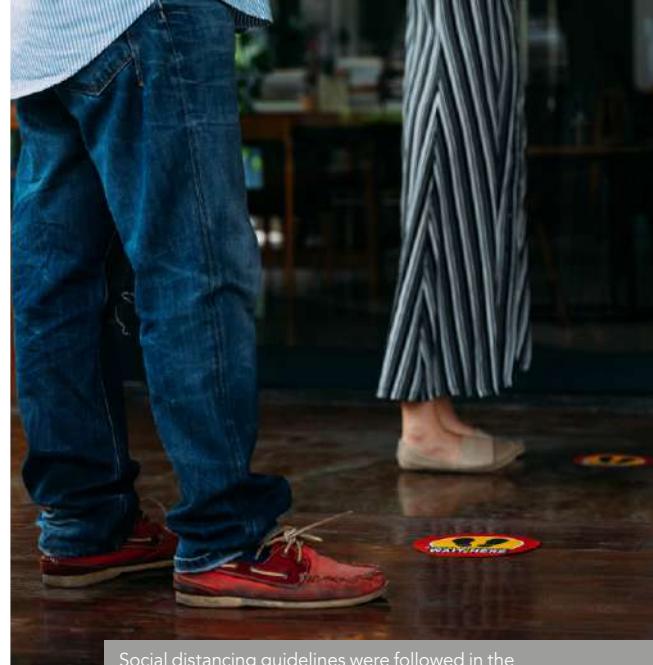
But how could this hypothesis be tested under COVID restrictions?

THE CONFIGURATION OF A RESTAURANT'S PHYSICAL DENSITY IS CRUCIAL IN DETERMINING CUSTOMERS' ENJOYMENT AND, IMPORTANTLY, THEIR INTENTIONS TO REVISIT.



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COVID-19 meant that restaurants could no longer operate at full capacity.



Social distancing guidelines were followed in the researchers' scenario.



Respondents were asked about both indoors and outdoors dining.

PRESENTING DIFFERENT DINING SCENARIOS

Dr. Wei and her colleagues surveyed regular restaurant customers through Amazon Mechanical Turk. Using various screening processes, such as checking whether respondents had eaten out in the past three months, the researchers eventually narrowed the list down to 327 respondents. Most were between the ages of 26 and 40, Caucasian, had a college degree and an annual household income of between \$40,000 and \$59,999. The gender balance was relatively even. The respondents were asked to indicate their perceived risk of eating

at restaurants—both indoors and outdoors—during COVID-19. These values were included as control variables. The respondents were also asked questions to evaluate their personal sense of power, such as whether they found it easy to influence others, or if they usually make decisions in personal and business relationships.

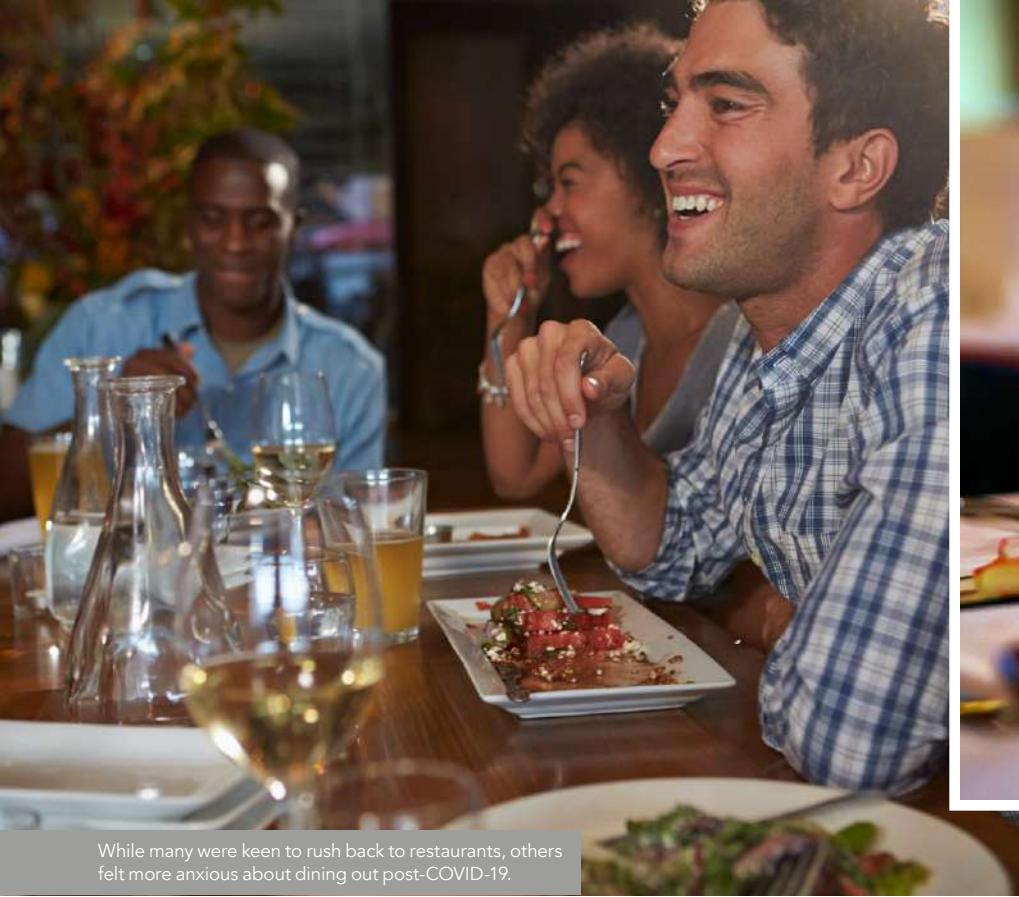
The researchers presented the respondents with the following scenario: 'Imagine that you and a family member have decided to go out to dinner. The image you are about to see represents a restaurant in the downtown area of a medium-sized city. This restaurant is a casual

restaurant that you have never been to before. The average price of an entree is \$15. Similar types of restaurants would include Applebee's or TGI Friday's.' They were informed that when they walked in, there were few customers and that the staff wore masks, as did customers until they received their food. The restaurant was also following strict social distancing guidelines to ensure the distance between customers was at least six feet. Then the scenario branched: They were told either that the restaurant had removed some tables to meet those guidelines or that adjacent tables would be empty. The researchers then showed them one of two images of the restaurant with its corresponding built density—either low (fewer tables with customers) or high (empty tables between the same number of customers).

Dr. Wei and her colleagues were interested in the respondents' immediate impressions of the restaurant (positive or negative), whether it was a restaurant they'd probably revisit, and if they considered the dining area crowded. By factoring in the self-measured power variables, the researchers were then able to evaluate the relationship between personal power and built density, and how that impacts a customer's enjoyment and intention to revisit and recommend.

ABOUT POWER AND TERRITORIALITY

The research showed that people with low levels of perceived personal power felt more comfortable with the prospect of eating at a restaurant with a high built density—a restaurant floor full of tables but with every



While many were keen to rush back to restaurants, others felt more anxious about dining out post-COVID-19.



needs to instill confidence and enthusiasm in prospective customers.

IT BECAME CLEAR THAT, ALTHOUGH THE RESEARCH FOCUSED ON HOW BEST TO SEAT RESTAURANT CUSTOMERS UNDER COVID-19 RESTRICTIONS, THE OUTCOMES HAD BROADER IMPLICATIONS.

other table empty—over one where every other table was removed to meet social distancing guidelines. According to Dr. Wei, the high built density allowed 'low-power' consumers to empower themselves. For them, an adjacent empty table presented an opportunity to appropriate more personal space and control—something denied them if that space was vacant, rendering their personal space limited to their own table.

What interested Dr. Wei and her colleagues was that 'low-power' customers in a high-built density scenario restaurant were more likely to revisit and recommend that restaurant.

'Powerful' respondents, on the other hand, showed no real preference for either density environment. This didn't surprise the researchers—classical psychological literature tells us that human behavior is a product of an individual and their environment,

and 'powerful' people are generally less affected by their environment's social and physical aspects.

It became clear that, although the research focused on how best to seat restaurant customers under COVID-19 restrictions, the outcomes had broader implications.

RESTAURANT MANAGERS TAKE NOTE

The COVID-19 pandemic and the associated demands for social distancing have created numerous challenges for restaurant owners and managers. Foremost are decreased guest traffic and how to ensure the health and safety of employees and those few guests allowed to dine at any one time. Beyond this, the primary concern is how to make those customers feel safe and enjoy themselves to a point where they would willingly revisit and recommend a restaurant. If any restaurant is to bounce back from this pandemic, it

The research of Dr. Wei and her colleagues is so valuable here. Imagine a restaurant catering to office workers reluctantly returning to work after over a year working from home. They're probably feeling a little overwhelmed. The knowledge that placing an empty table next to them would broaden their confidence and contribute to a more enjoyable dining experience holds significant value for restaurant managers.

Dr. Wei's research may have shed light on how restaurant managers should adapt their service space to meet social distancing regulations demanded during a serious health epidemic, but it also adds constructive insight into how customers in general value territory when dining. Being aware that territoriality is a key determinant in how low-power customers especially perceive a dining experience, restaurant managers now have an opportunity to re-examine their servicescapes.

That's why this research should encourage future studies to examine the phenomenon differently by observing customers' behavior in actual restaurant settings and making inferences based on contextual realism by measuring actual satisfaction after a meal or a customer's likelihood of returning to a restaurant.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Wei and her collaborators researched how restaurants' built density can impact consumer enjoyment during dining experiences.

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PERSONAL RESPONSE

How can the insights from your research guide restaurant managers under normal circumstances?

While this research was conducted with the COVID-19 pandemic as its backdrop, it is worth noting that under normal circumstances, individuals' preexisting personality, health condition, job status, family conflict, and social interactions can all influence their feelings of power. Given that consumers' reaction to a physical servicescape was found to be influenced by their sense of high versus low power, restaurant managers should design their servicescape configurations according to the customer profile they cater to. Strategies (e.g., built density) that help customers feel a greater sense of control and ownership during a service consumption would yield positive outcomes. In addition, the implications of this research extend beyond the restaurant industry to diverse service settings where consumers may feel a lower level of power and control, such as healthcare, airports, international tourism attractions, etc.

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Dr. Wei's research achievements, she has won

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The COVID-19 pandemic forced many restaurants to close their facilities.

A TASTE FOR EDUCATION AND RESEARCH

Something's cooking in the kitchen labs



Rosen College's state-of-the-art kitchen labs, are equipped with restaurant-grade equipment.

Pots, pans and commercial kitchen equipment are not the only things found in UCF Rosen College of Hospitality Management's kitchen labs. A component for hospitality education and research, the college's labs teach fourth year medical students to practice culinary medicine with a grain of salt, flip the kegs on undergraduates brewing beer, and serve as taste-and-test kitchens for restaurant brands looking to spice up a menu.

If you arrive at the number one hospitality college in the nation and are greeted with the fragrant aroma of spices and hops, don't question your nose. Something is cooking. Or maybe there is a blonde ale brewing. UCF Rosen College of Hospitality Management has state-of-the-art kitchen labs, equipped with top-of-the-line stoves, coolers, broilers and more. The equipment in the three kitchen labs, one specifically designed for demonstrations, was provided by Hestan, a world-class manufacturer of restaurant-grade kitchen equipment for the back of house

in restaurants and catering facilities, and an industry partner to the college. On the brewing side, or should we say the beverage side of the house, the Anheuser-Busch Beer & Wine Lab houses an extensive wine collection for the wine classes taught at the college; it was recently equipped with a system of Blichmann kettles and a fermenter, that will teach the next generation of brewmasters the art of making beer and ales in the college's Beverage Management Certificate program.

While this equipment may suggest that UCF Rosen College has a culinary school

component to its educational offerings, that's just one ingredient in the purpose for the labs. When fourth year medical students from UCF's College of Medicine enter the labs, they are there to learn how to treat their future patients using food as medicine in a Culinary Medicine course. According to data from the Centers for Disease Control, from 1999–2000 through 2017–2018, obesity prevalence in the United States increased from 30.5% to 42.4%. Obesity-related health risks include heart disease, stroke, type 2 diabetes and certain types of cancer. These are among the leading causes of preventable, premature death, and with Culinary Medicine, medical students are learning what foods, spices, portions and methods of cooking, can help make their patients healthier. When researchers noted that nearly 80% of the chronic diseases faced by those in the U.S. are preventable through lifestyle changes, food was a major factor that could be controlled. Poor diet has been identified as



Rosen College is experimenting with one of the oldest drinks in the world: beer.

the top contributor to early death and lost healthy life years in the U.S. and dietary risks are associated with 11 million deaths across the globe annually. However, only an average of 20 hours is spent on nutrition content in U.S. medical schools—this is equivalent to approximately one week of the total average hours of instruction. In the Culinary Medicine program, the medical students have two full-day classes (eight hours), twice a week for six weeks. They take out-of-the-classroom visits to farms and ranches, and participate in cooking partnerships with the local hospitals and dietitians who work with populations who reside in food deserts.

The textbook definition of Culinary Medicine is as follows: Culinary Medicine (CM) is an evidence-based field that brings together nutrition and culinary knowledge and skills to assist patients in maintaining health, and preventing and treating disease by choosing high-quality, healthy food in conjunction with appropriate medical care. CM can be thought of as the applied, laboratory portion of a nutrition curriculum for medical trainees. CM training can be provided as part of medical and residency curricula, training programs for those in allied health professional fields, or incorporated later as continuing (medical) education. Good CM courses address basic healthy food preparation and acquisition (i.e., where to purchase or otherwise get food) skills while taking into consideration time, financial resources, and cultural food traditions of patients aiming to make dietary changes. Rosen College's chef instructors teach the almost-doctors about ingredient choices, that salt is not the only spice, and

options for meat-substitutions. They get the instruction before they establish a practice with patients.

"We teach the medical students that a few fresh herbs and a squirt of citrus, the acid from a lime or lemon, can be a substitute for a teaspoon of salt and still deliver the same flavor in a meal," said Chef Robb Seltzer, an instructor in the Culinary Medicine program who has over 40 years of experience managing food service operations including: restaurants, convention centers, stadiums and racetracks, food service distribution and importing. "It's about balancing flavors. There is experimentation to determine what spices, fruits, vegetables, grains and low-fat proteins, can produce the same satisfying sensations for the palate that one can get from deep fried french-fries, dredged in salt."

When the fourth year medical students complete the Culinary Medicine program, they have learned how to cook a variety of meals, using methods such as broiling, baking, sautéing, and even raw preparation, to produce meals that they and their future patients can embrace for better health.

On the beverage side of research, Rosen College is experimenting with one of the oldest drinks in the world: beer. Beer is made from just four ingredients—grain, hops, yeast and water. Students have a chance to learn about the ancient craft thanks to two brand-new, recently installed stainless steel 15-gallon Blichmann kettles and a fermenter. Chef Jonathan Judy, an associate instructor at UCF Rosen College, teaches the course

Quality Brewing and Fine Beer. Chef Judy, as he is known to his students, recently became a level-one Cicerone—a beer certification similar to the sommelier certification in wine. Why is beer brewing a taught skill and a much sought-after talent for future foodservice industry professionals? Last year alone the craft beer industry contributed \$62.1 billion and more than 400,000 jobs to the U.S. economy, according to the Brewers Association. Quality Brewing and Fine Beer is one of 10 courses that students can take to earn an undergraduate certificate in beverage management. Students also take courses in supply chain and logistics, law and management.

Periodically, UCF Rosen College's kitchen labs are used by industry restaurant partners for menu development and experimentation. Consider the burger you had for lunch. Its blend of meats and toppings may have come from proprietary research conducted at the college. Courses in sanitation and safety are also keys to the curriculum in the Restaurant and Foodservice Management Bachelor of Science degree program. With the COVID-19 pandemic, more emphasis was put on the cleanliness of surfaces, food handling practices, and storage. When one dines at a restaurant, gets take-out, or receives a meal from a specialty gourmet food producer, one wants assurances that what we are consuming has been prepared in a manner that will not be detrimental to health or life.

Sometimes a kitchen is just that, a kitchen. However, at UCF Rosen College of Hospitality Management it is a laboratory to teach the future leaders of the restaurant and foodservice management industry that research, curriculum and technical skills can make or break their future careers.



Susan Vernon-Devlin
Manager, Communications and Marketing, UCF Rosen College of Hospitality Management



Chef Robert Seltzer
M.Ed, Director of Food & Beverage Operations, Instructor, UCF Rosen College of Hospitality Management

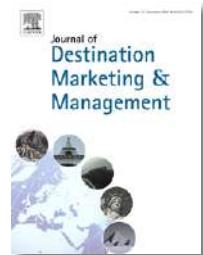
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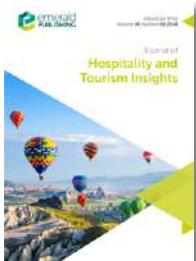


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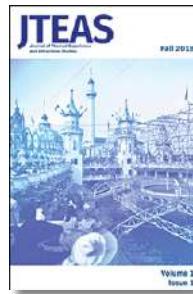
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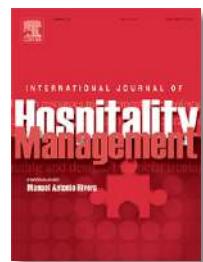
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DICK POPE SR. INSTITUTE FOR TOURISM STUDIES



The Dick Pope Sr. Institute for Tourism Studies is based at the University of Central Florida.

In 1979, the University of Central Florida established the Dick Pope Sr. Institute for Tourism Studies (DPI), after receiving \$25,000 from the Florida Public Relations Association (FPRA), Orange Blossom Chapter. The name honors the late Dick Pope Sr., the former owner of Cypress Gardens, one of Florida's first modern-day attractions, and the first commercial tourist entrepreneur in Florida.

The Institute was established for the purpose of (1) conducting proprietary and public domain research, (2) promulgating information to the public at large about the contributions of the hospitality and tourism industry, especially along economic, sociological, environmental, and quality-of-life dimensions, and (3) carrying out credit and non-credit educational activities.

Since 2005, DPI has secured over \$1.4 million in contracts and grants for research purposes. Its extensive client list includes:
categorical sampling
destination management organizations
convention and visitor bureaus
hotels
hospitals
vacation homes
restaurants
theme parks

DPI has also played a significant role in facilitating over \$4 million in non-credit educational programs with international partners. UCF's Rosen College doctoral students are extraordinarily essential to the Institute's ability to meet its objectives and its commitments. In addition, contracts and grants funded through DPI have been an invaluable source of external funds to support graduate assistantships for the doctoral students.

APPLIED INNOVATIVE RESEARCH

The Dick Pope Sr. Institute for Tourism Studies is the intelligent choice for private and public domain hospitality research, both domestically and abroad. We have conducted research for organizations in countries as widespread as Australia, Canada, Japan, New Zealand, South Africa, Ecuador, Aruba and South Korea.

IMPROVING THE QUALITY OF TOURISM

We are dedicated to increasing the benefits of tourism through research, public awareness and education. We invite you to visit the Dick Pope Sr. Institute for Tourism Studies digital collection to access our portfolio of research, publications, and white paper series. You may access the digital collection via this link: <https://stars.library.ucf.edu/dickpopeinstitute/>



Doctoral students from UCF's Rosen College contribute to the research at DPI.



Rosen College of Hospitality Management, is among the top five hospitality and tourism colleges.

In 1983, the Institute's advisory board successfully lobbied the Florida University System's Board of Regents and created the Hospitality Management undergraduate degree program at UCF. Its successor, UCF Rosen College of Hospitality Management, is among the top five hospitality and tourism colleges in the world with five undergraduate degrees, a master's degree and a Ph.D. program in hospitality management.

FACTORS AFFECTING SENIORS' RELOCATION TO SENIOR LIVING COMMUNITIES



The 1960s' counterculture generation is coming of senior age. This is the generation who witnessed the Civil Rights Movement, protested against the Vietnam War, and went to Woodstock. What they expect in retirement is radically different from their parents. So what are the factors that affect whether or not they choose to move into senior living communities? In one of the first studies of its kind, UCF Rosen College of Hospitality Management's Dr. Suja Chaulagain, Dr. Abraham Pizam, Dr. Youcheng Wang and Dr. Denver Severt look at the motivational factors that influence seniors' decision-making.

We live in an aging world. Due to increasing life expectancy and the number of babyboomers reaching retirement age, the US Census Bureau estimates that by 2030, more than 20% of US residents will be aged 65 or older. By 2050 the figure is expected to be 22%—an estimated 89 million Americans. According to the US Department of Health and Human Services, by the same time around a third of those aged 65 or older will need to relocate to a senior living community.

The senior living community sector—already worth an estimated half a trillion dollars annually—is set to grow. However, social norms are changing and the 1960s' counterculture generation that is coming to retirement

age is radically different from their parents' generation. Today's seniors are healthier, more active and better educated. They also enjoy a higher standard of living, greater purchasing power, marry late and have fewer children, and have longer life expectancy. What seniors now expect from a senior living community is a model that resembles a luxury hotel with additional leisure facilities and activities programmes, and optional support and healthcare packages.

In one of the first studies of its kind, UCF Rosen College of Hospitality Management's Dr. Suja Chaulagain, Dr. Abraham Pizam, Dr.

Youcheng Wang, Dr. Denver Severt and a collaborator have researched the motivational factors that affect seniors' intentions to move to senior living communities. Published in the prestigious *International Journal of Hospitality Management*, their study particularly looked at the influence of 'push' and 'pull' factors and the mediating role of perceived barriers in influencing seniors' decision-making.

The research is based on the Theory of Migration proposed by Ernst Ravenstein in the late 19th century and developed by Everett Lee in the 1960s. Ravenstein argued that migration is affected by both the destination's

BY 2030 MORE THAN 20% OF US RESIDENTS WILL BE AGED 65 OR OLDER.



For some couples, only one of them requires additional support.

attracting, or 'pull' features, and the place of origin's repelling, or 'push' features. Lee added to Ravenstein's theory and proposed that relocation is also affected by intervening obstacles and personal factors.

SHOULD I STAY, OR SHOULD I GO?

Following a review of the academic literature, Chaulagain, Pizam, Wang and Severt identified five push factors that might prompt seniors to relocate: health fears; social and family-related matters; housing and property-related worries; psychological concerns; and economic issues.

Health fears include a decline in physical and mental health and cognitive status, as well as worries about disability and hospitalization. Social and family matters include the need for extra help to care for a spouse, or full-time help if a spouse who was acting as their carer dies, as well as social isolation if children move away. Housing and property worries vary from a home being too big or having too many stairs, to maintenance being too difficult or expensive. Psychological concerns include feelings of loneliness and insecurity, as well as fear of crime and worries about declining health. Economic issues might include a decline in economic status and the rising costs of living, mortgage/rent and housing maintenance.

The researchers also identified pull factors that might prompt relocation. These include tangible and intangible service features and facilities which the Rosen research team grouped into three areas: facility-related factors; socio-psychological factors; and environmental factors.

Facility-related factors include the size, design, layout and quality of the accommodation and community, as well as transport and amenities, for example on-site healthcare, and policies such as allowing people to bring home furniture and belongings. Socio-psychological factors include feeling safe, for example not at risk of crime or worrying what would happen if they had a fall, as well as the desire to be around other people and enjoy social opportunities. Environmental factors include geographical location and attractiveness, as well as proximity to facilities for shopping and healthcare, and being close to family and friends.

GIVING SENIORS A REASON TO STAY PUT

The researchers found little empirical research that studied the perceived barriers for those who are thinking about relocating to a senior living community. However, the limited number of studies on general long-term care planning

suggested five themes: family-related barriers; economic barriers; psychological barriers; socio-cultural barriers; and structural barriers.

Family-related barriers include being a carer for a spouse or adult disabled child, or having responsibilities to other members of the family. Economic barriers include the cost of relocation, including down-payments and monthly fees, which may not seem like a sound investment. Psychological barriers include the stress of relocation, fear of the unknown and concern about losing familiar support systems, as well as worries about loss of autonomy and moving to an environment where people are even older and more frail than they are. Socio-cultural barriers include the fact that people from some cultural backgrounds may regard it as unacceptable for seniors not to be looked after by their families, while others may perceive relocation as rejection by the family. Structural barriers include geographical distance from family, and lack of knowledge about what today's senior living communities are like.

Today's senior living communities offer ample recreation and socialization opportunities.



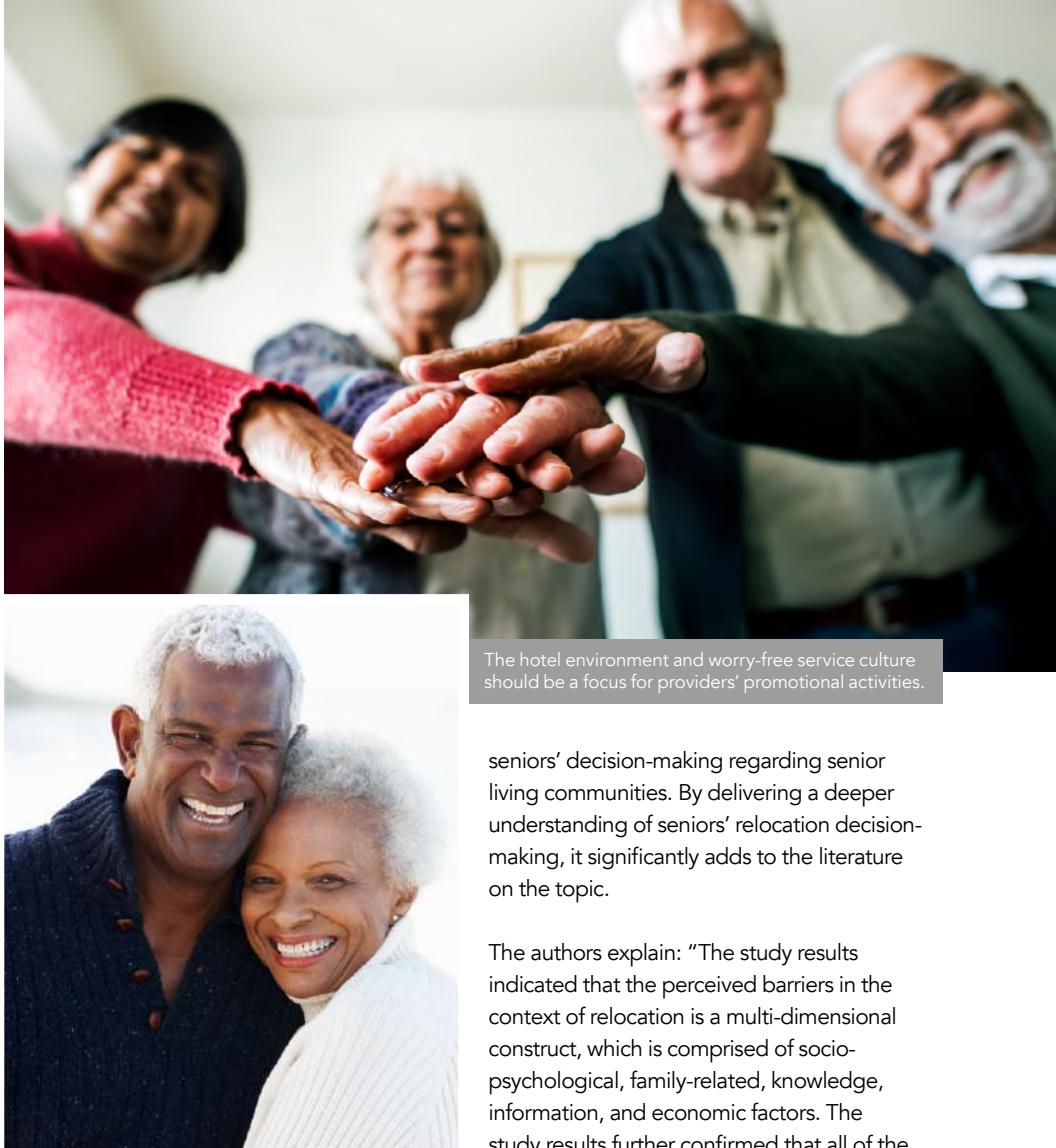
FINDING OUT WHAT SENIORS WANT

Chaulagain, Pizam, Wang, Severt and their collaborator developed hypotheses in line with the push and pull factors and barriers identified in the literature review. They expected to find that, while push and pull factors affect relocation decisions, barriers would also have a mediating role, with some carrying more weight than others. A rigorous methodology was developed for their subsequent two-phase sequential exploratory mixed-method study.

Six focus group interviews were held and recorded, each involving eight to 12 seniors aged 65 or older who were either living in their own homes or had recently moved to a senior living community. Open-ended questions were used to facilitate discussion on the factors that motivate relocation decisions. The qualitative information gathered from the groups was then analyzed, coded and categorized, and the emerging themes checked against findings from the literature review.

This information was used to design an online survey which, after piloting, gathered quantitative data from 363 seniors aged 65 or older who were living in their own homes. Participants were asked to agree or disagree with statements according to a seven-point Likert scale. Structural equation modelling analysis was then used to study the resulting data.

The results of the survey confirmed that seniors' intentions to move to a senior living community are positively influenced by health, social and family, and housing and property-related push factors, and also by facility-related pull factors. Environment- and location-related pull factors were not found to have a positive influence. Factors that negatively influenced decision-making were found to be family-related, economic, socio-psychological, and knowledge and information barriers.



The hotel environment and worry-free service culture should be a focus for providers' promotional activities.

seniors' decision-making regarding senior living communities. By delivering a deeper understanding of seniors' relocation decision-making, it significantly adds to the literature on the topic.

The authors explain: "The study results indicated that the perceived barriers in the context of relocation is a multi-dimensional construct, which is comprised of socio-psychological, family-related, knowledge, information, and economic factors. The study results further confirmed that all of the perceived barriers had a significant negative impact on seniors' intention to relocate."

The study's findings have wider implications for senior living community operators, healthcare facilitators and government agencies. In particular, they suggest that senior living community operators should focus their promotional activity on the healthcare that they offer, the hotel environment and worry-free service culture they provide, as well as recreation and socialization opportunities.

Recommendations also include that families, friends and prospective residents should all be included within target marketing, and educational sessions should be held to educate everyone about the facility so that all stakeholders can be included in decision-making. Senior living community operators should also consider pricing structures that attract senior couples, where only one has an immediate support requirement, and offer flexible ownership and payment plans.

**BY DELIVERING A DEEPER
UNDERSTANDING OF SENIORS'
RELOCATION DECISION-MAKING, [THIS
STUDY] SIGNIFICANTLY ADDS TO THE
LITERATURE ON THE TOPIC.**

RESEARCHERS IN FOCUS

PERSONAL RESPONSE

Most of the hypotheses you developed from the literature review were supported by the results of the research investigation. However, environment- and location-related pull factors were not found to have a positive influence on seniors' relocation decisions. Did this surprise you and if so how/why?

Yes, we didn't expect to find this result since environment- and location-related factors were found to be important factors in relocation decisions in prior literature. So, it was surprising. However, a logical explanation could be that seniors may not feel the need to be near their children, family, or other amenities and services as seniors are able to maintain connections over long distances through communication devices and social media, and are comfortable travelling with convenient transportation systems. Furthermore, amenities and social opportunities provided by the senior living communities may be more important for seniors than the location and environment features of these communities.

RESEARCH OBJECTIVES

Chaulagain, Pizam, Wang and Severt provide insight into the factors that affect the senior population's decisions when it comes to choosing senior living communities.

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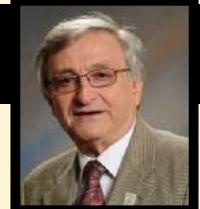


Dr. Youcheng Wang is the Dean and preeminent chair professor in destination marketing at the Rosen College of Hospitality Management at University of Central Florida and a fellow of the International Academy for the Study of Tourism. His research and consulting interest focuses on hospitality marketing and management, destination marketing and management, customer relationship management, information search behavior, collaborative strategies, and technology management.

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Dr. Abraham Pizam



Abraham Pizam is the founding dean (2000–2018) of Rosen College of Hospitality Management at the University of Central Florida. Currently he serves as Professor and Linda Chapin Eminent Scholar Chair in Tourism Management. Professor Pizam is widely known in the field of Hospitality and Tourism Management and has conducted research projects, lectured, and served as a consultant in more than 30 countries. He is Editor Emeritus of the International Journal of Hospitality Management and serves on the editorial boards of 26 academic journals.

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SOCIAL REPRESENTATIONS OF SPACE TRAVEL

Space tourism regularly receives media coverage, but so far, there has been little research around public opinions towards space travel. Dr. Asli D.A. Tasci, Dr. Alan Fyall and Dr. Xiaoxiao Fu from UCF Rosen College of Hospitality Management used the Social Representations Theory to investigate public attitudes to space travel and uncover how and why these attitudes are formed. They discovered that commercial space organizations have a strong influence on public opinion, which can be further enhanced if they incorporate more scientific knowledge and evidence.



VSS Unity during its test flight. The spacecraft will provide suborbital spaceflights to passengers.

The popular TV show, Star Trek, says that space is the final frontier. On October 13, 2021, William Shatner who played Captain Kirk in the show became the oldest person to travel into space at the age of 90. Many others are keen to experience what it is like to leave the Earth's atmosphere. In 2020, Virgin Galactic claimed that 700 ticket deposits had been paid for departures from 'Spaceport America' in New Mexico, whilst SpaceX has revealed they are planning to launch 10-day tourist trips to the International Space Station. In 1967, hotelier Baron Hilton first talked about building hotels on the moon. At the time, it seemed a distant dream, but over the last few years, space tourism has become more of a reality.

WHAT IS SPACE TOURISM?

Space tourism is defined by the Rosen researchers as "commercial activity offering customers direct or indirect experience with space travel". It includes all commercial organizations that offer the opportunity for consumers to partake in activities and experiences that are related to space travel. There are three main types of space tourism—terrestrial space tourism, suborbital space tourism, and orbital space tourism—which vary hugely in terms of cost and involvement, making it difficult to predict the potential size of the space tourism market.

When we think of space tourism, it is usually the suborbital kind operated by organizations such as Virgin Galactic, SpaceX and Tesla. These organizations hope to offer commercial flights at such high speeds that the traveller experiences weightlessness and can view the curvature of the Earth. Orbital space tourism is a more extreme option where tourists orbit 125 miles above the Earth and may stay there for a number of days or weeks. The final type is terrestrial space tourism, which is much more accessible to the general public. Tourists do not physically enter space but can experience similar sensations through virtual reality, space camps, and theme parks, as well as enjoying general interest activities such as space museums, rocket launches, and astronomical observations.

MEASURING ATTITUDES TO SPACE TRAVEL

In recent years, some attempts have been made to explore the demand for space tourism. Much of the focus has been on the technicalities surrounding the more intensive

experiences, as well as issues relating to the cost of it. Both of these aspects are barriers that may prevent commercial space tourism from becoming a reality. However, little exploration has taken place around what consumers actually think about space tourism, and what social representations shape these views.

Recently the UK's Prince William, The Duke of Cambridge, expressed public views that indicated saving the Earth should be prioritized ahead of space travel. This could lead to space tourism being viewed as an environmentally damaging activity. In contrast, the public may see space tourism as an amazing opportunity, or as a leap forward in scientific discovery. Understanding public opinion will help to identify and address any barriers that might hinder growth in this new tourism sector.

Dr. Asli D.A. Tasci, Dr. Alan Fyall and Dr. Xiaoxiao Fu from Rosen College wanted to address the lack of research in this area by undertaking a study to assess how the public

THE RESEARCHERS FROM ROSEN COLLEGE WERE THE FIRST TO USE SOCIAL REPRESENTATIONS THEORY TO UNDERSTAND HOW PEOPLE MAKE SENSE OF SPACE TOURISM.



Virgin Galactic 2018



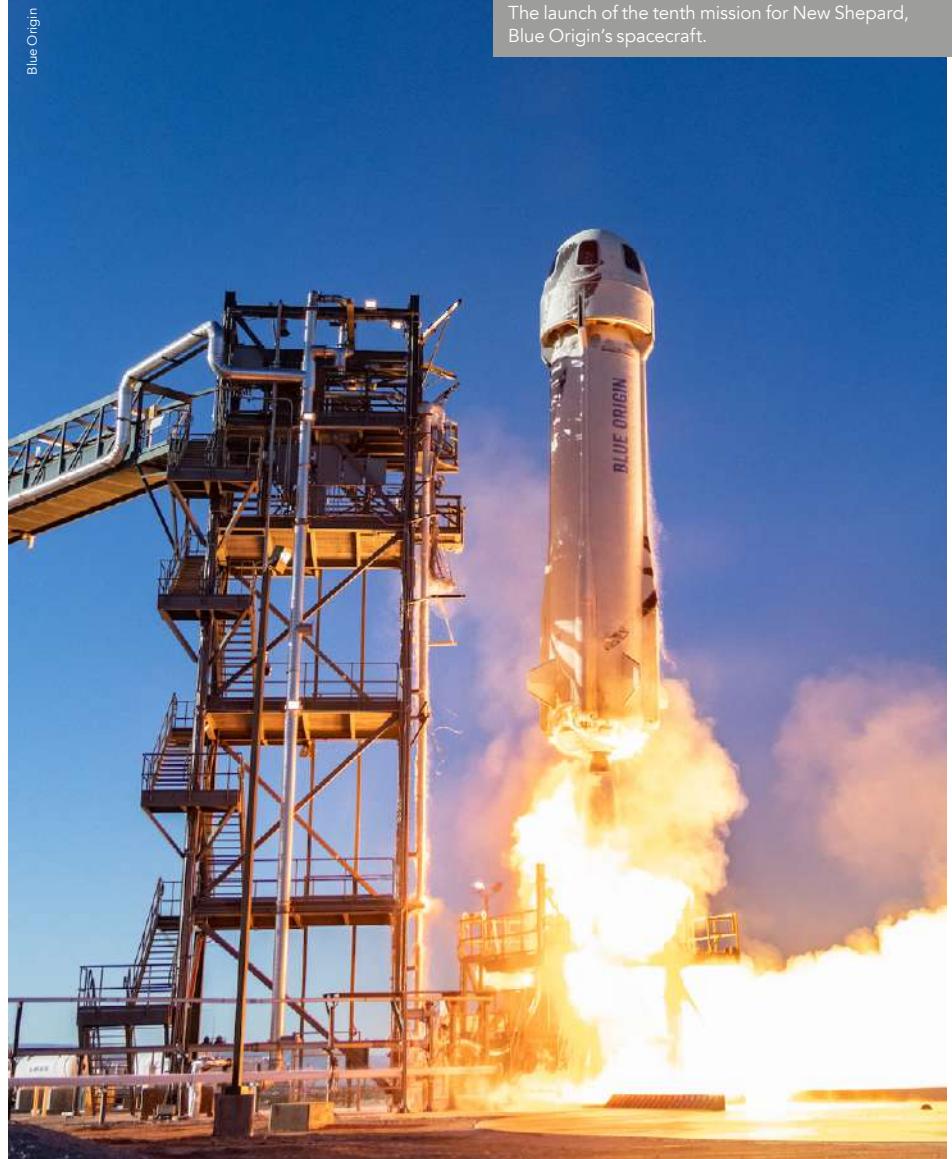
Inside one of Virgin Galactic's spaceflights with three people onboard.

perceives space tourism. Their intention was to investigate attitudes towards commercial space travel, as well as uncovering what influences the public's opinions around this topic. The researchers hope their findings will support professionals in the tourism industry to anticipate any potential pitfalls, as well as predict consumer appetite and behaviour for space tourism.

SOCIAL REPRESENTATIONS THEORY

The Rosen College team used the Social Representations Theory as a framework to underpin their research since one of the study's main aims was to evaluate and model the information sources that the public have used to create their social representations around space travel.

The Social Representations Theory was first popularised in the 1980s by Moscovici. He believed that social representations enable us to function collectively within society, by helping us to cope with novel phenomena. Social representations connect reality to the social and cultural world within which we exist. These social representations are in the form of information, beliefs or even practices that we use to make sense of something that is unfamiliar. When encountering a new concept which we have not personally experienced, this theory suggests we integrate new information with existing knowledge to help translate what is alien into a context that is



The launch of the tenth mission for New Shepard, Blue Origin's spacecraft.

Blue Origin personnel pose in front of the New Shepard Crew Capsule after a successful 2021 mission.



personal information is relevant when making the new and unfamiliar seem real in relation to space travel.

The highest rated objectifications were scientists, individuals, and organisations that deal with space travel and tourism. Tasci, Fyall and Fu noted that, despite scientists being the most representative, their visibility was not as high as commercial organizations such as Virgin Galactic, SpaceX and Tesla. These commercial organizations have a strong influence on positive social representations and can improve the public's attitudes towards space tourism. The researchers believe that this influence could be enhanced if these organizations were to incorporate more scientific knowledge into their key messaging and communications, potentially using documentaries and serious media broadcasts as a medium to share this information. Although highly popular in the box office, space-related movies and actors were the lowest-rated objectifications. This makes sense considering the critiques around false portrayals within many space movies.

familiar and understandable. Space tourism is a current topic of public interest that is very much in the mainstream media, despite few people having experienced it. It has become related to certain symbols, personas, names, and images, raising questions around environmental, economic, and social benefits and costs. The Rosen College researchers believed that whilst seeking answers to these questions, the public will look at different sources of information, which in turn will feed into creating social representations.

A further aim of the study was to identify *anchors*—elements that use the familiar to give meaning to new concepts—and *objectifications*—elements that make abstract concepts become more tangible and easier to communicate—within social representations. The Rosen College team also wanted to investigate the public's own

This study was the first to use social representations to explore the concept of space tourism. As a result, the Rosen College researchers needed to identify any potential 'information, icons, personas, figures, images, symbols, metaphors and names' that may have been seen in the media or online before asking for the public's opinions. Faculty at Rosen College who have an interest in the subject reviewed the compiled list of potential information prior to the development of a survey. Once the survey had been reviewed, 474 members of the U.S. public completed the survey. These participants rated the relevance of the different information sources relating to space tourism using a 7-point Likert scale.

RESULTS AND IMPLICATIONS

The results revealed that anchors and objectifications of social representations

TO INFINITY AND BEYOND?

Despite being featured regularly in the media, prior to this study there had been little research or literature around attitudes towards space tourism. The researchers from Rosen College were the first to use the Social Representations Theory to understand how people make sense of space tourism. In order to take their research a step further, they agreed that future studies should also incorporate non-conscious data from drawings, word associations and observed behaviors, as well as a more diverse participant population to understand how culture, region, personality and profession may influence people's views.

Tasci, Fyall and Fu have highlighted some key sources that can be utilized to improve attitudes towards space tourism. They also found the public to have a fascination and wonder in relation to space travel, that provides much optimism for the success of this new tourism sector. In the famous words of astronaut Neil Armstrong, this piece of research is one small step in understanding civilians' attitudes towards space travel but will hopefully enable industry professionals to make one giant leap towards the strategic development of sustainable space tourism.

COMMERCIAL ORGANIZATIONS HAVE A STRONG INFLUENCE ON POSITIVE SOCIAL REPRESENTATIONS AND CAN IMPROVE THE PUBLIC'S ATTITUDES TOWARDS SPACE TOURISM.

attitudes towards taking part in space tourism, as well as their actions to support others in undertaking both commercial and scientific space travel. They hope their findings will help those seeking to develop space tourism and provide reassurance for anyone who may have concerns about this type of enterprise.

influence attitudes around space travel in different ways. The most influential sources of information are scientists and documentaries. The least influential sources are co-workers, celebrities, and religious leaders, which rely on personal opinions. However, anchors were from both public and personal sources, implying that

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Asli D.A. Tasci, Dr. Alan Fyall and Dr. Xiaoxiao Fu research public attitudes towards space tourism.

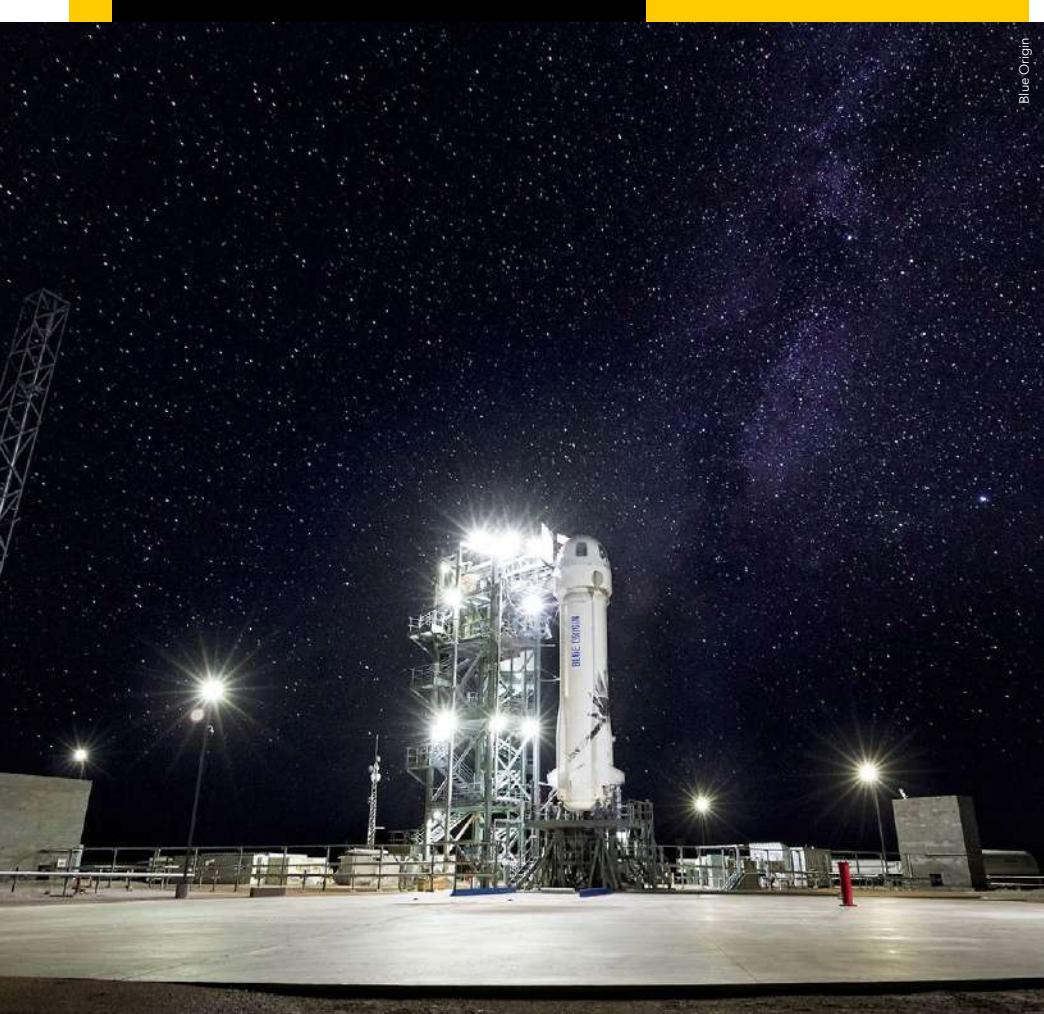
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PERSONAL RESPONSE

What impact do you hope your research findings will have upon the space tourism industry?

“ The findings offer the industry a window into the complex minds of the common folks who make up their own reality of novel phenomena such as space tourism. The industry will realize that ordinary people use the most accessible information from the most visible sources and create their own subjective reality. The industry will see the value in engaging in strategic partnerships with all stakeholders and generating accurate and positive content to ensure the public’s reality is close to the objective reality about space tourism. ”



Dr. Asli D.A. Tasci

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STEPPING INTO A BRIGHTER FUTURE

Wearable tech and employee wellness programs

The hospitality sector presents a range of unique workplace challenges, which can affect the implementation and success of wellness initiatives. In a recent study, Dr. Edwin N. Torres and Dr. Tingting Zhang from UCF Rosen College of Hospitality Management conducted a wellness intervention incorporating a wearable device, with the aim of improving various aspects of hotel employee wellness. The results from the study showed a range of benefits following the two-week intervention, both to employees and their employers. However, the authors also noted key drawbacks which should be taken into account in the design of any future employee wellness programs.

The researchers were keen to quantify the effect of technology-based interventions specifically.

recent study by UCF Rosen College's Dr. Edwin Torres and Dr. Tingting Zhang shines a light on the impact of wearable technology on employee wellness programs (EWPs). Their research specifically involves employees in the hotel industry, who have a unique set of work circumstances and challenges. Results were promising in several key wellbeing areas, yet one aspect of wellness was found to be too great a challenge for their intervention without making wider changes to working conditions.

EMPLOYEE WELLNESS PROGRAMS

We are now at a point where industry and society recognise the importance of promoting wellbeing among the workforce. Responding to increasing healthcare costs and developing greater social responsibility, employers tend to recognise a need for EWPs. They are regarded as important for fostering wellbeing among

employees. This results in increased budgets for EWPs, as businesses recognise that promoting wellness can help to improve work productivity and performance.

Indeed, in reviewing the existing literature, Torres and Zhang found evidence that promoting employee wellness leads to business benefits, including reduced spending on healthcare, reduced absenteeism, fewer workplace accidents, and improved working relationships. Furthermore, EWPs send the message to employees that their organization cares about their wellbeing.

HEALTH AND WELLBEING

RISKS IN HOSPITALITY

Hospitality is a particularly challenging setting in which to establish an EWP due to the nature of the industry and individual job roles. However, this also makes implementing EWPs in the hospitality sector all the more important. The very nature of the work means that there

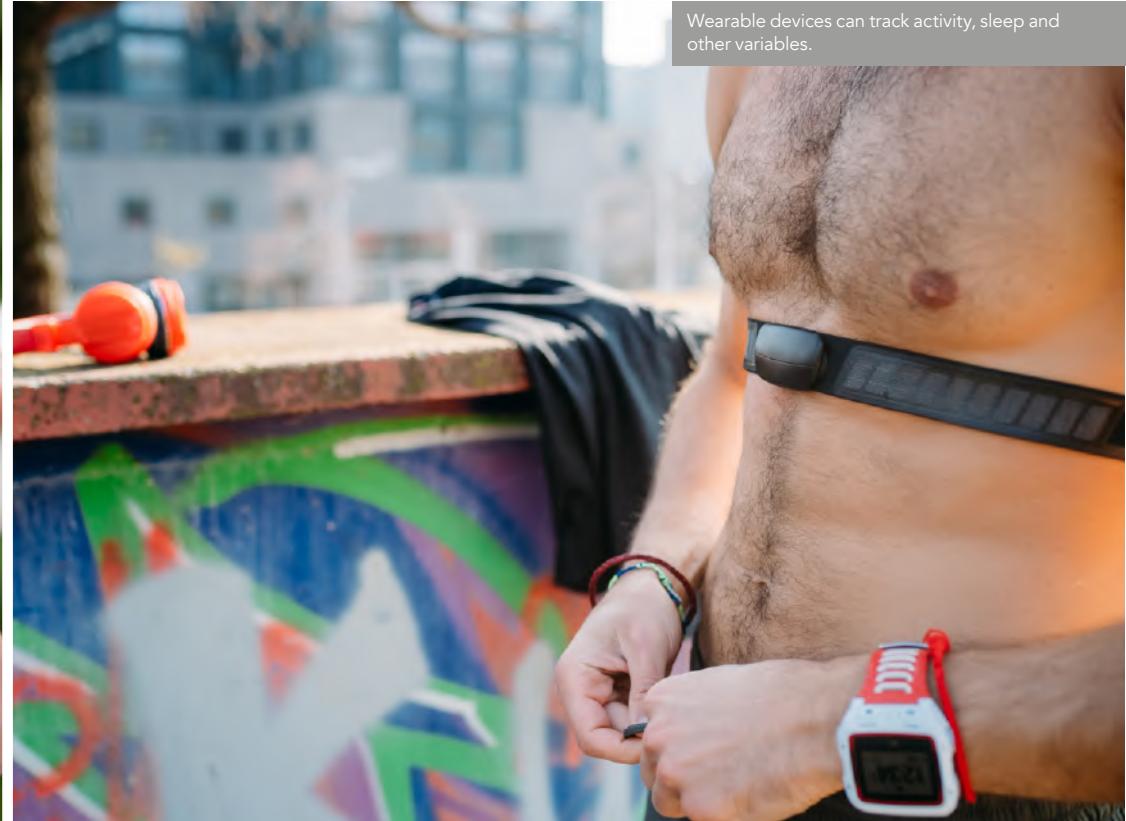
is a higher than average rate of injury. For example, among housekeeping staff there is a rate of injury of 7.9 employees per 100, and among restaurant cooks there is a rate of acute trauma of 4.0 per 100.

Hospitality is also associated with high staff turnover, stressful work, low pay, and shift work, all of which have knock-on effects on sleep, susceptibility to metabolic diseases, and issues surrounding work-family balance. Job insecurity is a common concern for individuals working in the hospitality sector. As irregular hours are common and rates of pay tend to be low, this leads to financial insecurity.

WHY EWPs ARE IMPORTANT IN HOSPITALITY

Previous studies on EWPs demonstrate wide ranging benefits, including reductions in: health insurance claims, sick leave, mental health issues (depression, stress, and anxiety), and injuries. These benefits also include





Wearable devices can track activity, sleep and other variables.

increased self-control, cardiovascular activity, job satisfaction, productivity, and employee relations. Yet while the benefits of EWPs have been widely discussed in previous research, Torres and Zhang note a need to quantify the effect of technology-based interventions specifically, such as wearable devices like the Fitbit. They recognized that in the uniquely challenging work environments of the hospitality sector, technology could help to facilitate health habits.

The researchers found a range of demographic and social factors influencing participation in EWPs in the hospitality sector, noting that those

least likely to participate are those most likely to benefit. Barriers to participation include a lack of time, incentive, and convenient location, while other factors influencing participation include co-worker, supervisor, and union influence, as well as culture, family situation, and workplace policies.

INTEGRATING TECHNOLOGY INTO EWPs

The benefit of incorporating new technologies into EWPs is that it allows researchers to quantify health behaviors. Wearable devices like the Fitbit, for example, allow for the tracking of activity, sleep and other variables. This leads to improvements in productivity and wellbeing, while also helping to prevent injury.

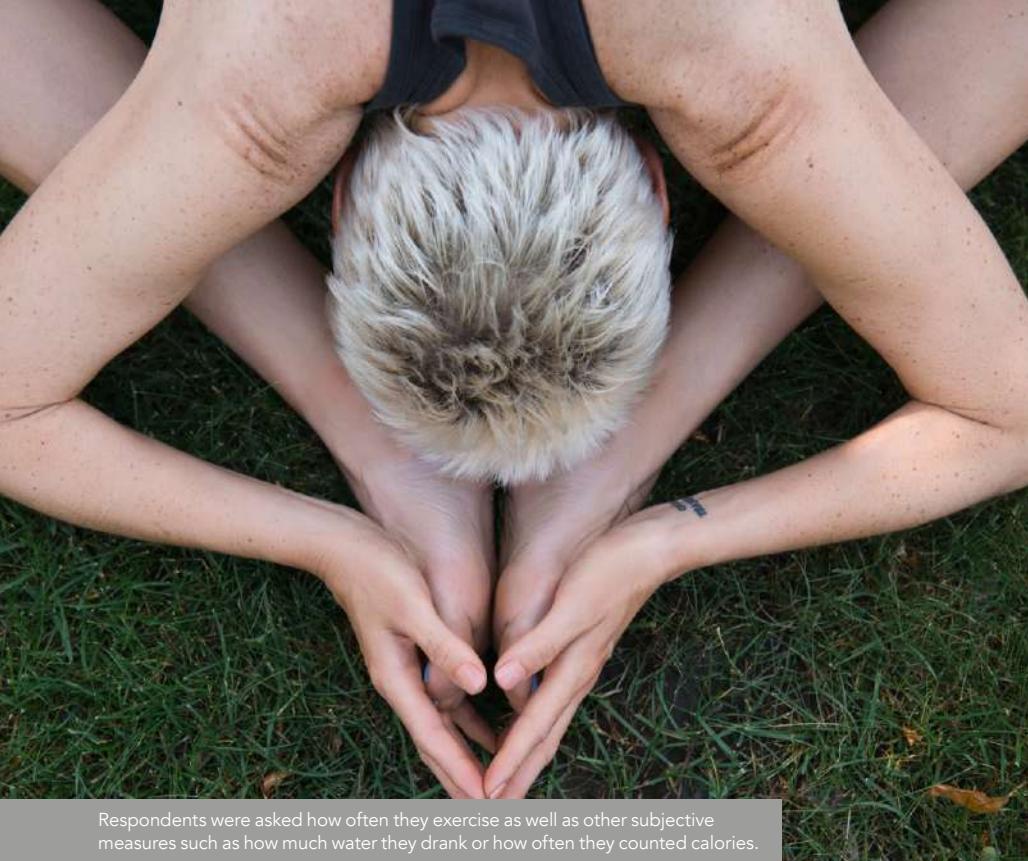
Incorporating technology in general has been shown to lead to reductions in weight, body mass index, and waist circumference. As this technology has advanced into wearable versions, newer research suggests that devices

like the Fitbit can positively impact a range of wellbeing factors, including increasing daily step counts, and fostering friendly competition and communication among co-workers. Indeed, this increased social engagement has been shown to increase the success of EWPs. Further research has also shown that wearables can help to lower the rate of accidents while boosting productivity and wellbeing among workers.

DOWNSIDES OF INTEGRATING TECHNOLOGY

While technology has made us more sedentary, it may also be important in helping us improve our health and wellbeing. Nevertheless, there are potential issues related to integrating technology into EWPs. Lack of data privacy is a key drawback, as data could be used for non-wellness purposes. Previous studies have highlighted this issue and noted the importance of making employees aware of how their data will be used, where it will be stored, and who will have access. The exclusion or stigmatization of employees choosing not to take part in a program could also be an issue, and from a health point of view, focusing solely on step counts may not present the full picture of an individual's condition.

DEVICES LIKE THE FITBIT CAN POSITIVELY IMPACT A RANGE OF WELLBEING FACTORS, INCLUDING INCREASING DAILY STEP COUNTS.



Respondents were asked how often they exercise as well as other subjective measures such as how much water they drank or how often they counted calories.

HOW THE RESEARCH WAS UNDERTAKEN

In carrying out their research, Torres and Zhang recruited participants with a range of job roles, from a range of hotel settings in Florida, including international chains, private hotels, holiday resorts, and budget hotels. Their objectives were to monitor the effect of EWPs which incorporated Fitbit use on health improvements of hotel workers, and to understand the effect of those programs on a range of metrics, including employee engagement, commitment to the organization, plans to leave their job, and job satisfaction.

were instructed to wear at all times except during charging. The device tracked their steps, distance, calories, floors climbed, active minutes, hourly activity, and sleep quantity and quality. They also received a QR code so that they could record their daily food consumption in a convenient mobile app. The researchers compared the data from the beginning to the data at the end to determine whether there were any changes.

Both objective measures, such as step count and sleep duration, and subjective measures, determined by survey questions such as,

LACK OF DATA PRIVACY IS A KEY DRAWBACK, AS DATA COULD BE USED FOR NON-WELLNESS PURPOSES.

After analysing previous research to determine an appropriate sample size and study duration, they observed 30 participants for 14 consecutive days. Most were female (63%), had hourly, entry-level jobs (47%), and were aged 25 to 34 (47%).

At the beginning and end of the intervention period, participants were surveyed as to their work attitudes and behaviors, and health. They were also given a Fitbit Charge 2, which they

'When you eat, how often do you calculate the calories of your meal?', 'How often do you drink water during the day?', and 'How often do you exercise, such as going to the gym, doing Zumba, doing yoga, etc.?', were used to measure health improvement.

THE RESULTS OF THE STUDY

Torres and Zhang found step count to be an important metric demonstrating participants' activity levels, with counts gradually

increasing each day during the two-week study period. Additionally, calories consumed gradually declined while consumption of 'healthy food' (defined, for the purposes of the study, as 'food that is high in fiber, natural vitamins, and other nutrient elements') gradually increased. Employee engagement also increased significantly, along with job satisfaction, and organizational citizenship behaviors, while employees' plans to quit were significantly reduced.

Sleep, however, remained unchanged by the intervention. Torres and Zhang suggest that this is because hospitality employees' sleep is affected by their shift patterns and working conditions. Furthermore, it is difficult for businesses to make significant changes in these areas when they already struggle to find staff and compete with other businesses.

IMPLICATIONS FOR FUTURE INTERVENTIONS

The authors suggest that wearable technology is one of several tools which can be used cooperatively to support employee wellness, improving employee engagement, reducing staff turnover, and increasing goodwill and staff retention. They note that EWPs should include improvements to the work environment (including work design, scheduling, and minimising workplace stressors).

Torres and Zhang's research adds to the body of literature demonstrating the positive effects of EWPs on the health behaviours of hospitality employees, and the knock-on benefits to businesses. These include reductions in absenteeism and health spending leading to a positive return on investment in the wellbeing of their employees. Specific benefits of programs involving wearable devices include encouraging physical activity, raising awareness, and encouraging social connection among workers.

Wellness programs succeed on the basis of employee engagement. Therefore, the authors suggest that employers may reduce barriers to participation by allowing time, offering incentives, and providing more than one location for taking part. They highlight the fact that the specific and varied needs of workers in the hospitality industry must be taken into account, such as working patterns and levels of activity.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Edwin Torres and Dr. Tingting Zhang investigate the use of wearable technology in employee wellness programs in the hotel industry.

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PERSONAL RESPONSE

What changes would you make to your intervention when designing future wellness interventions within the hospitality industry, and why?

Future interventions can target a wider array of wellness aspects. This particular intervention focused on how technology can impact physical wellness via technology. Hospitality employees can also benefit from interventions which tackle issues such as stress management and financial wellness. Furthermore, changes in job design can help target other areas including occupational/professional wellness. Future studies can also employ different technologies to track movement and reduce risk of injury.

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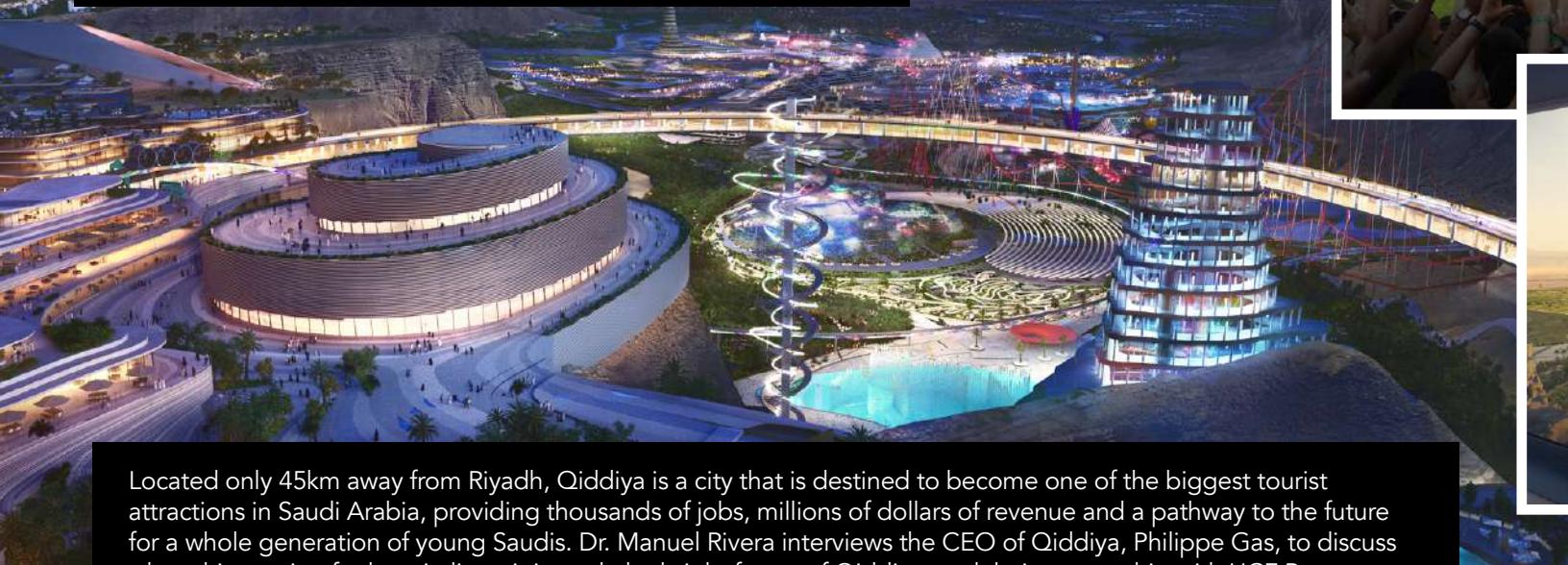
W: <https://hospitality.ucf.edu/person/tingting-zhang/>

Those taking part in the study increased their consumption of 'healthy' food.



QIDDIYA THE CAPITAL OF ENTERTAINMENT IN SAUDI ARABIA

An interview with Philippe Gas, CEO of Qiddiya by Manuel Rivera, Ph.D.



Located only 45km away from Riyadh, Qiddiya is a city that is destined to become one of the biggest tourist attractions in Saudi Arabia, providing thousands of jobs, millions of dollars of revenue and a pathway to the future for a whole generation of young Saudis. Dr. Manuel Rivera interviews the CEO of Qiddiya, Philippe Gas, to discuss where his passion for hospitality originated, the bright future of Qiddiya, and their partnership with UCF Rosen College of Hospitality Management.

Philippe Gas is at the helm of Qiddiya Investment Company as Chief Executive Officer. He possesses a deep understanding of entertainment and hospitality with 30 years of experience at The Walt Disney Company where he held several key roles.

His most recent position was President & Managing Director of Walt Disney Attractions Japan & Disneyland International, where he oversaw the development of the Tokyo Disney Resort.

During his time at Disney, Philippe held other key roles including Chief Executive Officer of Euro Disney SCA, he successfully led the launch of Shanghai Disney Resort—The Walt Disney Company's first theme park in mainland China and its largest international investment

to date—and was the worldwide EVP Human Resources for the organization.

Philippe is the recipient of the Magnolia Award issued by the Shanghai Municipal government and foreign affairs bureau to foreign nationals having demonstrated an outstanding contribution to Chinese economic development, along with the Chevalier de l'Ordre National du Mérite—a French order of merit awarded by the President of the French Republic to recognize distinguished military or civil achievements.

HOW DID YOU GET INVOLVED IN HOSPITALITY AND ENTERTAINMENT AND WHAT IS YOUR ROLE AS CEO OF THE QIDDIYA PROJECT?

I actually got into this industry because of a brand. As a child, I fell in love with it because

it intrigued me and made me dream. That brand is/was Disney. Watching all the cartoon characters and movies from a young age in France, just thinking about where Disney was geographically, seemed light-years away.

So when Disney announced plans for Euro Disney in Paris, I knew this was my destiny and calling and I grabbed the opportunity with both hands. I fully connected with the brand ethos and what it stood for, which was to bring happiness to anyone who came into contact with it. This happiness came to life by sharing moments with others that then translated to life-long memories.

A career in hospitality and entertainment followed and I spent 30 years with Disney working on some of the most amazing projects. For me it was more than just a job, it's actually a



Less than 40 minutes away from Riyadh, Qiddiya will become the capital of Entertainment, Sports and the Arts with a knock-on effect on Riyadh—hopefully doubling the population by 2030.



Qiddiya will be an integrated city, combining attractions with real estate opportunities and strong community services.



I fully connected with the brand ethos and what it stood for, which was to bring happiness to anyone who came into contact with it

human adventure. I enjoy bringing people into this adventure, developing and nurturing them while leveraging the excitement of the brand. One thing I found in common with all the projects I worked on was creating emotions. Disney did this effortlessly, and Qiddiya will too. So, never underestimate the brand!

In terms of my role as CEO of Qiddiya, in its most simplistic form, it is to see this unique project from its design and development stage right through to construction and build and, of course, eventually delivery.

My responsibility is to create a culture in an organization that focuses on the key areas of development of concepts, realization of these concepts and finally delivering these assets.

In parallel, sourcing talented individuals to join us and the development of this workforce to the level we expect in a city like Qiddiya. Brand, marketing and sales are all close to my heart. How to create that excitement behind the brand, how to create the demand and

that feeling of wanting to visit a destination that no one will ever want to pass on. My job is to deliver a city that people cannot find anywhere else in the world but before that, I need to create the feeling that they must go visit Qiddiya and cannot wait for the opening to happen.

HOW IS QIDDIYA DIFFERENT OR UNIQUE COMPARED TO OTHER TOURISM GIGA PROJECTS IN SAUDI ARABIA?

Qiddiya is destined to become the capital of Entertainment, Sports and the Arts—a disruptive destination that will offer the world experiences, integrated on a scale never seen before. This is what distinguishes Qiddiya from any other place in the world. The breadth and scope of its offerings makes it a destination unique from any other.

Add to this, Qiddiya is the only Giga-project in Riyadh, which adds a layer of exclusivity to it. It is 30–40 minutes from the center; whereas, all the other Giga-projects are outside Riyadh.

Qiddiya has strong integration and alignment with the development and growth of Riyadh City. We play an active role in doubling the city's population, from 7.5 to 15–20 million residents by 2030 while contributing to making Riyadh one of the top 10 largest city economies in the world—today it stands at number 40.

The broad offering is inspired by the five cornerstones, namely Parks & Attractions, Sports & Wellness, Arts & Culture, Motion & Mobility and Nature & Environment, in addition to real estate and community services, shaped as an entirely integrated City.

WHAT IS THE RELEVANCE OF THE QIDDIYA PROJECT FOR THE TRANSFORMATION OF SAUDI ARABIA AND ITS PEOPLE?

Qiddiya is fully aligned with Vision 2030, the Saudi leadership's transformation programme, which focuses on encouraging diversification away from oil and launching new economic sectors. This is expected to boost the economy, make it more sustainable

Thought Leader

and resilient, and enhance its image, welcoming the world to the Kingdom.

With approximately \$10 billion spent each year by Saudis abroad, mainly on tourism and entertainment, a city like Qiddiya is a great solution to help retain this outflow of spending and keep it circulating in the domestic economy. Qiddiya stands for a healthier population focused on leisure and tourism. We are a socio-economic project that will create new opportunities and professional pathways for aspiring Saudi youth and catalyze the development of up-and-coming sectors such as entertainment, tourism, hospitality and event management, creating innumerable jobs for Saudi nationals.

An abundance of opportunities to train and excel and ultimately become the Kingdom's future human resource powerhouse; and in the process, show the world the true potential people of Saudi Arabia have.

THE PERCEPTION FROM THE OUTSIDE WORLD IS THAT THE PEOPLE IN SAUDI ARABIA ARE FRIENDLY, HOSPITABLE, WELCOMING, AND VERY STEEPED IN THEIR CULTURE. HOW DO YOU SEE YOURSELF INFLUENCING MOVING FROM A COUNTRY SELF-IMAGE OF OIL-BASED ECONOMY TOWARDS A MORE SERVICE-ORIENTED INDUSTRY BASED ON ENTERTAINMENT AND LEISURE?

Hospitality, generosity and a warm welcome are innate qualities in Saudis, and Qiddiya will offer a chance to turn these qualities into specialized skills and welcome the world with them.

Through our various training and education programs, we aim to scout, train and develop the youth to become skilled



professionals in the fields of entertainment, tourism and hospitality.

We are also exploring the establishment of a dedicated training and education Academy, enabling our staff to develop and enhance the required skills, competencies, and attitudes to excel in this business using hands-on vocational methods.

The positive response our training and educational programs have received so far shows the ambition and drive Saudi youth have toward these exciting fields. The challenge now is to continue to highlight how promising these fields are to the older generation, that may have grown accustomed to more conventional jobs. It will be part of our role to show the

options and opportunities that exist in these new sectors and try and attract more Saudis to invest in an exciting career and gather skills and experience that they can use anywhere in the world.

WHAT ARE THE LEADERSHIP QUALITIES THAT WILL HELP YOU AND OTHERS ACHIEVE THE AMBITIOUS ASPIRATIONS OF QIDDIYA WHILE AT THE SAME TIME INSPIRING A NEW GENERATION?

I strongly believe in a lateral leadership style. Qiddiya is a place of inspiration, discovery and engagement, and we want these values to resonate with everyone from our future guests to our staff.

We constantly look for ways to inspire our staff to think outside the box, be creative, and explore unconventional ideas. We want them to become the best versions of themselves, specifically in a professional capacity, and subsequently, offer the best that they can to our guests.

At Qiddiya, we are determined to provide a work environment that is both comfortable and conducive as we constantly seek to promote a





Quiddiya stands for a healthier population focused on leisure and tourism.

culture of open communication, transparency and trust. We will ensure our employees always feel connected, heard and motivated. After all, a more engaged workforce will lead us to our inevitable success.

HOW DO YOU SEE THE ROLE OF HOSPITALITY AND ENTERTAINMENT EDUCATION IN TRANSFORMING A NEW GENERATION OF SAUDIS THAT WILL JOIN QIDDIYA? HOW WOULD YOU DESCRIBE YOUR COLLABORATION WITH THE ROSEN COLLEGE?

These sectors are still growing and developing, which means this is the perfect time for us to train and develop students; so once these sectors are established and operational, a fully equipped and skilled workforce will be ready to run the show.

We need a small army of young Saudis to take up promising roles in these new sectors and I am talking about tens of thousands of people, so it's not a challenge to be taken lightly. Having said this, Qiddiya is a national project and there is huge pride and expectation for the next generation to play their role in leading these new sectors in just a few years' time.

In the Kingdom, access to courses in these specific fields has been limited. Through our partnership with the Rosen College, we will ensure Saudi students have the best opportunity to learn extensively about these sectors and develop the necessary skills to become the country's future leaders.

We appreciate the Rosen College/UCF's support and strong commitment to our scholarship program and the level of individual attention that is given to each and every single student.

We are certain that the high-caliber educational programs at the university will enable our students to become experts in the exciting fields of hospitality, tourism and entertainment.

WHAT ROLE DOES RESEARCH PLAY AS A PILLAR OF INNOVATION IN THE DEVELOPMENT OF NEW TOURISM OPPORTUNITIES AND ENTERTAINMENT PROJECTS?

Qiddiya is a new and unique destination concept which means we don't have a reference point—we have to set a benchmark for ourselves.

There will be many unknown and unforeseen challenges that will need to be identified, assessed and addressed throughout our



Philippe Gas
Chief Executive Officer
Qiddiya Investment Company
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project's life cycle. Our wide array of assets and offerings have never been presented in the way they will be so we will have to pre-empt risks, be flexible and be innovative.

Effective and regular market research plays a key role in identifying what our future guests expect to see at Qiddiya. It will provide us with more clarity and a deep understanding of their needs and desires, and to ensure we meet them, we will have to innovate every step of the way.

Our in-house research and intelligence team is growing day by day at Qiddiya and the information they put forward is used throughout the organization.

We have the opportunity to be a laboratory for hospitality and tourism development in Saudi Arabia. Through our wide range of unparalleled offerings, Qiddiya will be an example for others to follow—a benchmark and reference point in these sectors, locally and regionally.



Interview conducted by
Dr. Manuel Rivera, Assistant
Dean; Associate Professor,
Rosen College of Hospitality
Management; Editor in
Chief *International Journal of
Hospitality Management*

ON THE FACE OF IT

The use of facial recognition check-in technology

Facial recognition technology and biometrics are fast growing areas of artificial intelligence. In this article we look at an innovative study by Rosen College Associate Professor, Dr. Tingting Zhang and her collaborators. Their research reveals how perceived security, privacy and trust, as well as previous experience, are key to encouraging hotel users to adopt the technology at the check-in desk.

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You might have come across facial recognition as a security feature on your phone or laptop, or even at passport control in an airport, but have you ever checked into a hotel via facial recognition on the front desk? The use of facial recognition check-in services in the hospitality industry is a relatively recent, and still uncommon, use of the technology, which until now has been more commonly utilized on personal devices. It has been suggested that such systems will enable hoteliers to speed up delivery of services and, therefore, strengthen their customer relationship in several ways. According to recent research, intelligent check-in can reduce check-in time by two-thirds, massively improving efficiency at hotel receptions. However, such technology does not come without its drawbacks, and in this case, without a large helping of public concern. The general public's trust of biometric technology in such contexts is still relatively untested, and although it has been argued that people's data

is safer and more secure in such a system, data security and privacy are issues that remain high on any list of customer concerns.

Dr. Tingting Zhang, Associate Professor at Rosen College, is currently carrying out research directed towards a better understanding of customer engagement in the hospitality and tourism industries, with a special focus on technology usage and adoption. She and her collaborators recently conducted a study investigating how the customer's perception of security, privacy and trust impacts the adoption of a facial recognition system at hotel check-in. By examining the positive and negative experiences (or lack of

experience) of over 300 real hotel guests with facial recognition systems, Zhang was able to empirically assess their perceptions of security, privacy and trust.

EARNING OUR TRUST

For this investigation, Zhang and her collaborators have defined security, privacy and trust as follows: security is the protection of data to prevent destruction or unauthorized access; privacy is the way in which a customer's private data is collected, stored and used; trust is the set of beliefs held by consumers about a service supplier. Both perceived security and perceived privacy have an influence on trust. Research has previously reported that

...PERCEIVED SECURITY, PRIVACY AND TRUST IN FACIAL RECOGNITION HOTEL CHECK-IN SYSTEMS SIGNIFICANTLY AFFECTED WILLINGNESS TO ADOPT THEM.



The use of facial recognition check-in services in the hospitality industry is still uncommon.



The higher the participants' perceived security, privacy and trust, the more willing they were to use the technology.

customers rank security features above privacy features, because without effective security, privacy is impossible. Additionally, the literature shows that customers also rank security as their priority (over privacy and convenience) when it comes to biometrics, but some travelers are happy to trade some level of privacy for easier check-in and security benefits.

This study is important for three key reasons; firstly, considering the low level of application of this technology in hotels, this research will add to our understanding of how users experience biometric technology in hospitality literature; secondly, although security, privacy and trust have been covered didactically in the literature already, there are few studies in this particular context (hotel services facial recognition); and thirdly, this study considers users' prior experiences of technology adoption, expanding the understanding of how prior adoption affects current decisions.

PRIVACY OVER SECURITY

In order to find out how a customer's perceived security, privacy and trust affects their willingness to adopt facial recognition technology at the hotel front desk, Zhang and collaborators designed a questionnaire. The first part of the survey focused on



Some travelers are happy to trade some level of privacy for easier check-in and security benefits.

the participant's prior experience of the technology, and their intentions regarding adopting it. The second part of the survey measured the perceived security, privacy and trust of the facial recognition system. The final part gathered demographic data about the participants, as well as details of their most recent travels. The study was conducted amongst a Chinese population in central and southern China between October and

November 2018, as the technology has already been adopted in some areas of the hospitality sector there.

The results from the questionnaire confirmed that perceived security, privacy and trust in a facial recognition hotel check-in system significantly affected willingness to adopt them. The higher the participants' perceived security, privacy and trust, the more willing they were



Facial recognition technology is more common in airports.

to use facial recognition technology during check-in. Interestingly, and contrary to prior investigations, when the customer perception of privacy was greater than the perceived security benefits, trust was overall enhanced, but when concerns relating to the privacy of the system were greater than the security benefits, trust in the technology was greatly decreased. Zhang suggests that this may be a result of an already well-established trust in Chinese security in this context, leading to the higher concern for people in this study being privacy (i.e. how the hotels and third parties will use their information, and how much of it was collected). She suggests that this demonstrates a need for service providers and governments to reassure users about the privacy of the information provided in order to gain their

trust. The survey responses also confirmed that those who have previously had a positive experience of a facial recognition check-in service had higher perceived security, privacy and trust in the system than those who had a negative experience or no experience at all.

FACING THE FUTURE

What do these findings mean for other academics in the fields of technology and hospitality management? Primarily, this study opens up a new area of research in the use of facial recognition technology in the hotel sector, providing empirical evidence of user experience. It also provides meaningful contributions to the theory of security, privacy and trust, which are the key factors affecting user adoption of such systems in hotels.

This paper is groundbreaking because of its combined investigation of the effects of inverse perceptions of security and privacy on trust; perhaps the most valuable takeaway from the paper is the revelation that when perceptions of privacy were greater than security, trust in the technology was increased, but when concerns related to privacy were greater than the security benefits, trust was lessened significantly.

Furthermore, this study contributes significantly to the field of literature on prior experience and technology adoption. Not only have Zhang and her collaborators revealed that a positive prior experience increases the chance of adoption, they have also extended the research by considering different types of prior experience (good and bad) and reporting on the effect this has, further enriching our theoretical understanding.

On a practical level, with the incidence of facial recognition check-in technology in hotels increasing, the findings of Zhang's study are invaluable. The findings highlight how important just one experience of biometrics can be; a bad experience will decrease the

...HOTELIERS MUST, THEREFORE, INVEST IN ROBUST PRIVACY PROTECTION AND SECURITY BENEFITS IF THEY WISH TO INSTALL FACIAL RECOGNITION CHECK-IN TECHNOLOGY.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Rosen College researcher, Dr. Tingting Zhang investigates the perceived downsides of using facial recognition technology at the hotel check-in desk.

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CO-AUTHORS

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PERSONAL RESPONSE

Can you tell us a bit more about why you think facial recognition technology could be so significant in the hotel trade?

Facial recognition as one of the cutting-edge technologies has been quickly adopted in the hotel sector to increase customization services and improve guest satisfaction. There are multiple potential areas where facial recognition can be applied in hotels: guest payment, customer loyalty programs, check-in/out, feedback soliciting, and so forth. Facial IDs enable a seamless experience for hotel guests to access rooms or specific hotel areas for VIPs. Facial recognition provides the opportunities for hotels to be smarter and safer and to reinvent their approach to hospitality.

likelihood that a customer will adopt the system again in the future. They also show how perceived security and privacy are critical to building consumer trust; hoteliers must, therefore, invest in robust privacy protection and security benefits if they wish to install facial recognition check-in technology. In fact, as privacy was the bigger concern for study participants, hospitality managers need to put most of their efforts into ensuring that their guests' private data is respected, and minimizing the amount of private data that is

collected in the first place. Zhang and her collaborators suggest that information on such protection and benefits should be made widely available to customers at the point of use, either as clear signage or via appointed staff. The key, she says, is to find the best methods to gain the trust of visitors. Ensuring the successful use of facial recognition check-in technology can then, in turn, lead to a more efficient, less costly way of running the hotel check-in desk.

Dr. Tingting Zhang



Dr. Zhang's primary research goals are directed toward understanding customer engagement in the hospitality and tourism industries with a special focus on technology usage and adoption (such as virtual reality, social media, mobile apps, and online communities, etc.). Dr. Zhang's research dissertation explores the service innovation strategies that engage Generation Y consumers, an emerging and powerful cohort in the market, to co-create through mobile technologies.

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REVENUE MANAGEMENT AS COMPETITIVE ADVANTAGE

Keep in-house or outsource?

The hotel industry faces multiple pressures and effective profit maximization can make or break a hotel. Revenue management (RM) is a key tool in a responsible hotel manager's arsenal. But not all hotels have the skills or resources to implement this process effectively in-house. Dr. Mehmet Altin of UCF Rosen College of Hospitality Management, applies a resource-based view (RBV) to understand how hotel decision makers approach RM: do they invest in internal development or outsource the RM function?

Profit maximization has become a key strategic challenge for the hotel sector over the past decade as short-term market pricing restricts returns in a very competitive market. Instead, hotels have adopted a strategic tool, revenue management, which was initially developed in the airline industry to dramatically improve performance. However, such is the significance of expert revenue management in the performance of a hotel that how the function is managed has become a strategic choice in itself. Dr. Mehmet Altin of the UCF Rosen College of Hospitality Management explores the decision-making process that determines whether a hotel chooses to manage the process 'in-house' or outsource to an external vendor.

REVENUE MANAGEMENT

Revenue management is related to yield



Even events such as golf tournaments need to be taken into account for revenue management.

management, inasmuch as they are both methods which aim to maximize profit for a business. Revenue management is, however, far more in-depth as it relies on advanced data analysis to predict the industry's supply and demand.

This management technique was originally pioneered by the airline industry and was based on the application of the economic concept of 'what a customer is prepared to pay', which can differ according to each market segment. For example, leisure travelers tend to be more price sensitive but will usually book their flight several weeks in advance.

By comparison, business travelers will tend to book only a week or so before travel but are more likely to purchase a full-price or even premium seat.

The hotel industry is not dissimilar from the airline industry: it also has 'perishable inventory' since you cannot sell a hotel room once the night has passed; there is ready availability of lower cost competition; and there are wide swings with regard to balancing supply and demand.

Once a hotel business has decided to utilize revenue management it must make a further

ONCE A COMPANY HAS A STRONG UNDERSTANDING OF THEIR RESOURCES, THEY ARE THEN ABLE TO ADAPT TO CHANGING EXTERNAL DEMANDS MORE EASILY AND THUS IMPROVE THEIR CHANCES OF BEING SUCCESSFUL.



Whether to keep certain processes in-house, or to outsource them is a key strategic decision.



Business travelers tend to have different booking patterns to leisure travelers.

decision: whether or not to keep the process in-house. Accurate and effective revenue management requires vast quantities of data, including items such as past and current bookings, weather forecasting and even events such as golf tournaments. This then needs expert analysis to create a predictive model that can inform decisions regarding pricing and supply strategies.

ACCESSING THE POWER OF REVENUE MANAGEMENT

For many businesses, 'make or buy'—the decision to keep certain processes in-house, or to outsource them—is a key strategic decision. It can apply both to operational needs, such as components and materials, and also to essential, but non-core activities, such as HR, IT, or accounting. Increasingly though, outsourcing is seen as a potential option even when the component or service in question is critical to the overall performance of core operations.

To choose outsourcing as a strategy involves accepting a certain level of risk: you can become dependent on a vendor's own strategic priorities for continuity of supply; highly sensitive data may have to be entrusted to the outsourcing partner; or you might simply lose the benefit of being close to all aspects of your supply chains, markets, and customers.

The cost of setting up an internal infrastructure for what has become a highly advanced, data-processing task, requiring expert analysis to yield the optimum benefit, must be weighed against those risks. The cost of developing internal resources for revenue management may be a good investment for a large hotel or chain of hotels but might be beyond the financial resources of smaller operations.

THE RESOURCE-BASED VIEW PERSPECTIVE

Dr. Altin's study considers an additional factor relevant to the sourcing decision: the resource-based view (RBV) perspective. In effect, RBV poses the question, 'why do some firms perform better than others?', and then answers this by focusing on the internal resources that a company has. These resources include both material and abstract assets such as human capital, equipment, and employee training or skills.

When a firm aims to implement strategies to achieve sustainable, competitive advantage, RBV approaches this as a problem that should first be tackled by identifying the unique resources of the firm, instead of evaluating the external circumstances and then trying to exploit an opportunity in the market. These internal resources are most valuable when they are not easily replicable by competitors, and require time to build up, e.g., employee

training. Once a company has a strong understanding of their resources, they are then able to adapt to changing external demands more easily and thus improve their chances of being successful. This can also reflect on the choices made by the company on whether to outsource certain processes or keep them in-house. RBV would indicate that a company that lacks the ability to provide their own process in-house should therefore choose to outsource in order to improve their capabilities without investing large amounts of time and capital.

Dr. Altin also drew on Barney's VRIN (Valuable, Rare, Inimitable, Non-substitutable) framework (1991). To achieve advantage, an organization's resources should be:

Valuable – they must be a source of greater value than similar resources in competing firms, in terms of relative costs and benefits. This is strongly related to the perception of the decision makers, and whether they feel that a resource has inherent value to the company.

Rare – the resource must be scarce in relation to demand for its use or what it produces. A valuable resource that is widely available to many other companies is merely another tool in a company's chest.

Inimitable – very difficult to effectively imitate. If a resource is easily duplicated, then it loses value in the eyes of the decision makers.

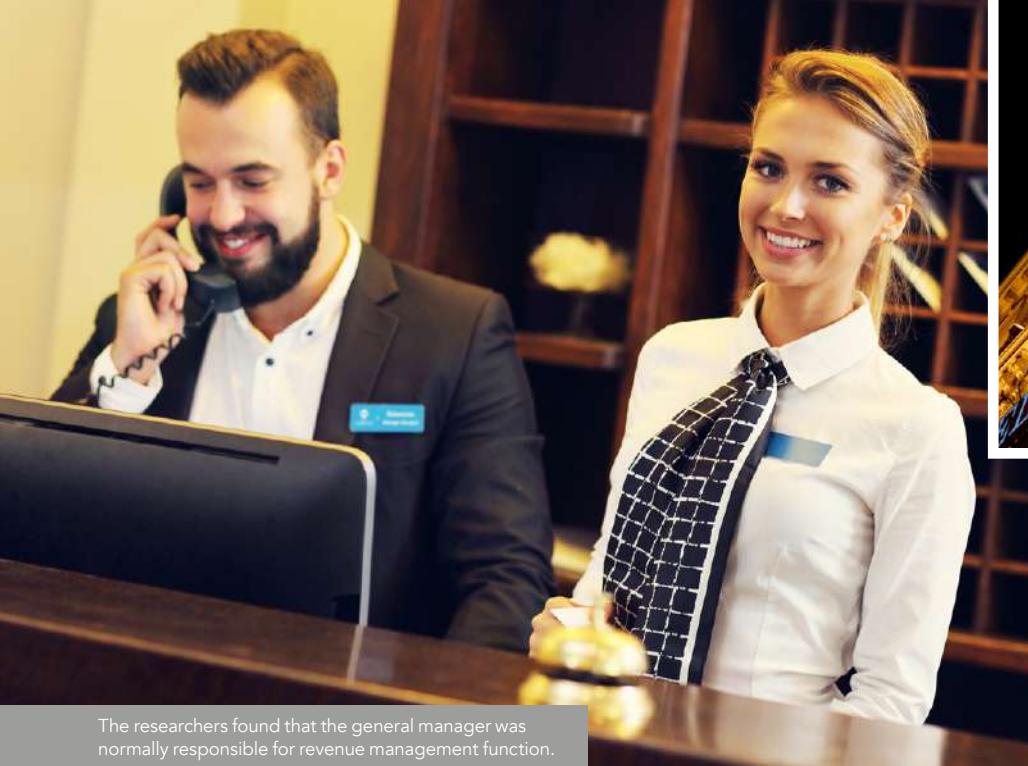
Non-substitutable – no obvious functional alternatives to the resource should exist. If an alternative exists, then competitors could simply use that.

Unless the resources have these characteristics, they are not going to provide the company with comparative operational and strategic benefits.

METHODOLOGY

Dr. Mehmet Altin's study aimed to understand the connection between RBV and the outsourcing of revenue management (RM). Prior to undertaking the research, Dr. Altin developed four different hypotheses:

- **H1: Valuable is negatively related to outsourcing intention of RM function.**
If hotel managers view RM as a valuable resource in terms of their success, then they are more likely to want to maintain control over this function.
- **H2: Rarity is positively related to outsourcing intention of RM function.**
Decision makers at the hotel might be more likely to outsource RM if they perceive RM as



The researchers found that the general manager was normally responsible for revenue management function.



All the responses were subject to a rigorous and academically robust analysis. The hypotheses were tested against the data, which was tested for robustness using three different multiple regression analyses. Once the data was fully analyzed, all the hypotheses were supported.

CONCLUSIONS

Dr. Altin concluded that a hotel decision maker's intention to manage the RM function in-house or to outsource was determined by how those managers perceive the function and their hotel's capability.

Some managers, he identifies, see RM as a valuable and essential part of the hotel management process, while others might view it as a 'cumbersome process' that detracts from the traditional competencies of a hotelier.

By considering Barney's (1992) VRIN model of resource-based competitive advantage, Dr. Altin believes that, if managers believe they do have the internal capability, and they believe that the RM function has the qualities of being 'valuable, rare, and inimitable', then their intention will be to build and operate the function internally.

However, Dr. Altin does recognize some limitations to the conclusions; for example, considering the wholly U.S. sample, these conclusions may not be more widely generalizable where cultural or other norms may influence the decisions differently. He also recognizes the issue of using 'perception' (in this case the perception of in-house capability) as a measure and that a more objective and standardized measure would be preferable.

This research sheds light on how hotel managers make key strategic decisions. It also highlights the growing importance of revenue management for the hotel industry.

a rare resource; for example, if RM suppliers' resources are rarer than hotels.

- **H3: Inimitability is negatively related to outsourcing intention of RM function.**

Uniqueness and rarity rely on the resource being difficult to copy, so as RM is a complex and involved process, a firm may prefer to keep this process in-house to protect their competitive advantage.

- **H4: Organizational capability is negatively related to outsourcing intention of RM function.**

If the organization believes that it has the capability to carry out the RM function in-house, it will be less likely to outsource.

After developing these hypotheses, Dr. Altin reviewed previous literature in order to collect previously validated scales to use as measurements for the current study. Study scales from previous works were adapted to reflect the RM context, and additional questions were written to collect information about the hotel's physical properties—e.g., room capacity, and ownership—and the nature of the respondents—e.g., job title, age and years in the hotel industry. The focus of Dr. Altin's novel research was hotel managers in the U.S., and so a randomly selected list of potential candidates was obtained from Smith Travel Research who had a 2015 census with over 50,000 hotel properties on it. After eliminating all the candidates who had incomplete or non-email-based contact details, 3166 emails were sent out.

During October 2014, the data was collected through an online survey system called 'Qualtrics.com':

347 (11%) useable replies were received. It wasn't possible to analyze the nonresponse bias regarding the managers who didn't respond as the properties' details were kept masked due to privacy concerns.

Each questionnaire was made up of five constructs: outsourcing intention; and then three from the VRIN framework, valuable, rare, and inimitable; the final construct was organizational capability. Against each construct respondents were asked to indicate their understanding and belief in response to a number of questions.

RESULTS AND ANALYSIS

The majority of the respondents to the questionnaire were general hotel managers, and over half were aged between 35 and 54. Approximately half of the respondents were educated to bachelor's degree level or higher. Interestingly, nearly 62% of the participants had been in the hotel industry for over a decade, although 58% of the participants had been with their current company for less than five years.

Regarding the hotels, 86% were independently owned and 91% were associated with a brand. Normally the general manager was responsible for RM function, barring the properties which had a dedicated revenue manager.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Mehmet Altin analyzes the factors that influence hotel managers with regards their decision to outsource revenue management.

REFERENCES

KEY PAPER: Altin, M., 2019. Does resource-based view explain outsourcing intention: Revenue management perspective. *Tourism Economics*, 27(2), 292-306. <https://doi.org/10.1177/1354816619891318>

BACKGROUND INFO: Barney J (1991) Firm resources and sustained competitive advantage. *Journal of Management*, 17(1): 99-120.

PERSONAL RESPONSE

In the case of smaller independent hotels in particular, how could they objectively assess their existing approach to revenue management and whether they are currently optimizing their performance?

■ Budget and time constraints make revenue management (RM) challenging for smaller independent hotels. RM can be as simple as forecasting based on historical booking records. However, the RM function's cost increases when complex factors such as booking curves, demand functions, dynamic pricing, optimizing many channels, etc. are included. In addition, the second challenge pertains to both large and small hotels, which requires a thorough assessment process, which is not easy to achieve unless we do before and after tests for specific RM actions and policies. ■

Dr. Mehmet Altin



Dr. Mehmet Altin is an Associate Professor in the Department of Hospitality Services in the Rosen College at the University of Central Florida. His scholarly research focuses on strategic management, revenue management, performance analytics, competitive intelligence, and entrepreneurship with a goal of helping practitioners with guidance and usable results while advancing theory in the hospitality and tourism sector that integrates recent insights from finance, management, economics and 'big data' analytics.

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DR. ALTIN CONCLUDED THAT A HOTEL DECISION MAKER'S INTENTION TO MANAGE THE RM FUNCTION IN-HOUSE OR TO OUTSOURCE WAS DETERMINED BY HOW THOSE MANAGERS PERCEIVE THE FUNCTION AND THEIR HOTEL'S CAPABILITY.



TROPICAL CYCLONES NEGATIVELY IMPACT THE TOURISM ECONOMY IN COASTAL REGIONS

Tropical cyclones can have a devastating effect on communities, causing loss of property, businesses, and life. In areas that rely on tourism, these effects can be long-lasting.

In their recent work, Dr. Sergio Alvarez and Dr. Arthur Huang from UCF Rosen College of Hospitality Management have examined the impact that tropical cyclones have on the tourism economy in Florida. The results suggest that these cyclones negatively impact the economy, especially in coastal regions, and that policy changes are needed to help the tourism sector recover.

A tropical cyclone is a low-pressure system that can leave a trail of devastation in its path. These storms develop over tropical or sub-tropical waters and are characterized by high wind speeds and heavy rain. As they move inland they can cause flooding, extreme winds, tornados, and lightning. As a result, tropical cyclones pose a big threat to life and property, especially in the coastal regions where they make landfall.

Tropical cyclones also cause lasting damage to the economy. This is most noticeable in coastal areas that rely heavily on the tourist industry. For example, tropical cyclones can cause long-lasting damage to property and infrastructure which can force local and regional businesses



to close for weeks or sometimes even months. In the United States alone, 2.4 million people are employed by tourist industries found in coastal regions. The closure of these businesses as the result of a tropical storm can have a devastating impact on people's livelihoods. In addition, fuel and food supply chains are often disrupted and areas may have to cope without electricity for days or weeks at a time. Due to the disruption, tourists are also often evacuated, creating a negative view of the destination and reducing the number of tourist arrivals in the months that follow.

FLORIDA AS A MATURE DESTINATION

The state of Florida in the United States is a popular and well-established tourist

destination that enjoys a consistent stream of visitors year in, year out. This mature, or established, destination caters to everyone, offering a diverse tourism ecosystem ranging from golden beaches, theme parks, and nightlife, to the less well-known side where nature enthusiasts enjoy freshwater springs and the Everglades.

Florida is also particularly vulnerable to tropical cyclones and the threat of a cyclone making landfall in Florida is an annual concern. For example, approximately 40% of hurricanes that have made landfall in the U.S. have struck Florida, due to its location between the Gulf of Mexico and the Atlantic Ocean. This can have distressing impacts on the tourist industry, with businesses such as hotels regularly observing a decrease in bookings after a hurricane has passed through. Yet research to date has focused primarily on the physical damage that

COASTAL REGIONS TAKE LONGER TO BOUNCE BACK THAN INLAND AREAS.



THE RESULTS FROM THIS STUDY DEMONSTRATE THAT CYCLONES NEGATIVELY IMPACT THE ECONOMY, WITH LOSSES IN REVENUE DUE TO TROPICAL STORMS OCCURRING ACROSS THE ENTIRE STATE OF FLORIDA.

Florida is a popular and well-established tourist destination that caters to everyone.



these storms cause, and not on the long-term effects that they can have on businesses.

Recent work by Dr. Sergio Alvarez and Dr. Arthur Huang from Rosen College of Hospitality Management, along with their collaborators, aims to highlight the effect that these storms have on the economy. This research investigates the impact that tropical cyclones have on the tourism industry in a

mature destination, using Florida as a case study. Their study uses an interdisciplinary approach to estimate the long- and short-term impacts that these storms have on the tourism sector.

MODELING TROPICAL CYCLONE IMPACTS

To understand the impacts that tropical cyclones have on the tourist industry in Florida,

the researchers looked at the occurrence of tropical storms over ten years (2008–2018), and mapped this to data published by the Florida Department of Revenue that looked at gross sales on a month-by-month basis. This data covered six key tourist industries: food and beverage stores; restaurants, lunchrooms, and catering services; other types of eating and drinking places; drinking places such as bars where alcoholic beverages are served; accommodation including hotels, motels, rooming houses, camps and lodges; and personal rental properties.

Historical tropical cyclone data collected from the National Oceanic and Atmospheric Administration (NOAA) identified 18 tropical cyclones in Florida over these ten years, ranging in strength from tropical storms to Category 5 hurricanes. A Geographic Information System was used to construct the indicators to identify which of Florida's 67 counties were affected by tropical-storm-force winds from these storms. Using this information, the researchers were able to



Mandatory evacuations are more likely to occur in coastal regions.



Florida offers a variety of experiences, from theme parks to beaches to the Everglades National Park.



construct models that examined how tropical cyclones impact the tourist sector across Florida and how the impacts differ between coastal communities and those found inland.

CYCLONES CAUSE SUBSTANTIAL LOSSES

The results from this study demonstrate that cyclones negatively impact the economy, with losses in revenue due to tropical storms occurring across the entire state of Florida. However, it was also evident that coastal regions are more greatly impacted than communities found inland. Coastal communities are more likely to suffer greater losses than inland communities in the short

not only do coastal communities experience a loss during the month of the storm due to physical effects such as business closures and clean-up, but they also experience a loss that can persist for the three months following the storm due to a negative reputation or

that followed. Inland communities recovered much more quickly, with a positive recovery effect being observed four and five months after the storm had passed.

POLICY AND MANAGEMENT IMPLICATIONS

The findings from this study suggest that policy and management need to focus on tourism operators to help the economy recover from a tropical cyclone. Tourism plays such an important part in Florida's economy, yet the relief needed by tourism operators and workforce is not in place, causing negative impacts on businesses and the destination's economy that can last months after a storm has passed. Mature destinations like Florida may also benefit from aggressive and creative marketing following a tropical storm to help restore the destination's image and shorten the recovery period. In addition, attention needs to turn to coastal communities that face recurring impacts from tropical cyclones to help minimize tourism losses.

TOURISM PLAYS SUCH AN IMPORTANT PART IN FLORIDA'S ECONOMY, YET THE RELIEF NEEDED BY TOURISM OPERATORS AND WORKFORCE IS NOT IN PLACE.

term and are also more likely to see these losses last for a greater period. This is in part due to the fact that mandatory evacuations are more likely to occur in coastal regions.

Coastal regions also take longer to bounce back than inland areas, possibly because coastal communities are more likely to have a negative image than their inland counterparts following a tropical cyclone. This means that

destination image effect. This loss in tourism revenue is often similar in magnitude to the loss caused by the short-term physical impacts of the cyclone. To put this into perspective, during the month of a storm, coastal counties had estimated losses of \$12.5 million which continued for the two months following a storm, whereas inland communities had an estimated loss of \$7.5 million but this was not seen in the months

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Sergio Alvarez and Dr. Arthur Huang investigate the impact of extreme weather events, such as tropical cyclones, on the tourism industry in Florida.

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Brown, C. E., Alvarez, S., Eluru, N., & Huang, A. (2021). The economic impacts of tropical cyclones on a mature destination, Florida, USA. *Journal of Destination Marketing & Management*, 20, 100562. <https://doi.org/10.1016/j.jdmm.2021.100562>

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PERSONAL RESPONSE

As climate change is expected to increase the frequency of tropical storms, do you think there will come a point where mature destinations like Florida are unable to recover?

From a benefit-cost perspective, as the seas continue rising, and the storms become more frequent and intense (and costly/dangerous), I believe there will be a point when abandoning assets in what we know as the "coastline" (i.e., the area where storm surge flooding can occur) will be the cheapest, most sensible option. In other words, as sea level rises, it becomes more costly to "protect" these assets with human-made infrastructure such as levees or seawalls (and risk management tools like government-backed insurance). At some point these costs will exceed the benefits society receives from keeping these assets in place.

A destination like Florida is in a position to adapt and transform, and perhaps could turn the "abandonment" of certain assets into green infrastructure (turning abandoned districts into living shoreline barriers) to fuel a dark version of eco-tourism. But the role that tourism and travel will play in that transformation is yet to be determined.

Dr. Sergio Alvarez



Dr. Sergio Alvarez is an Assistant Professor at the Rosen College of Hospitality Management and the Sustainable Coastal Systems Cluster at the University of Central Florida. He is an economist researching how natural resources and the environment contribute to human wellbeing through the provision of ecosystem services such as food, recreation, and protection from natural and man-made hazards.

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In case you missed it...

ROSEN RESEARCH REVIEW

With the fifth issue of the *Rosen Research Review*, we'd like to remind you that we shared relevant, insightful research in four previous issues.



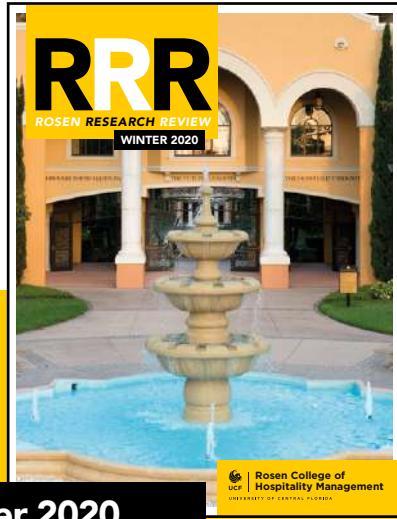
Issue 1: Spring 2019

A highlight of the inaugural issue of the *Rosen Research Review* is the interview with the CEO of Accor, Sebastian Bazin. He shared his vision for the future of one of the largest hotel groups in the world.



Issue 2: Fall 2019

In the second issue, Executive VP & General Manager of The Breakers Palm Beach, Tricia Taylor, talks about still loving her role after a 24-year career at the resort.



Issue 3: Winter 2020

Abraham Pizam, Ph.D., the founding Dean of the #1 hospitality college in the United States, talks about changes in the industry over 50 years and education's role in the transitions.



Issue 4: Summer 2021

With climate change a hot topic, Chairman of Legacy Vacation Resorts, a certified B Corporation, Jared Meyers, talks sustainability, inclusive, equitable and regenerative economic systems.



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Rosen and research, of course. The Dick Pope Sr. Institute for Tourism Studies at the UCF Rosen College of Hospitality Management is an innovative choice for private and public hospitality research, both domestically and abroad. For more than 40 years, the institute has fostered research that creates a positive impact on the industry and our society as a whole, including environmental, sociological and quality-of-life studies. Learn more at hospitality.ucf.edu.





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