

# RRR

**ROSEN RESEARCH REVIEW**

**SUMMER 2022**



UCF

**Rosen College of  
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UNIVERSITY OF CENTRAL FLORIDA

# LEADERS IN RESEARCH

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# What a roller-coaster ride it's been these past two years!

**A**nd as a foremost educator in the hospitality industry, we know theme parks and attractions, so I speak from experience.

The weather is warm and thoughts are turning to travel and leisure as we enter the endemic phase of Covid-19 where we are living with the virus and its impact on the hospitality industry. This sixth issue of the **Rosen Research Review** magazine finds us looking at research that was conducted in the pandemic and as we moved to the new normal.

We invite you to read the Spring/Summer issue of the **Rosen Research Review**, online and in hardcopy. Its 10 articles share groundbreaking research on a variety of topics that impact tourism, destination management, restaurants, and more. From research conducted during the pandemic by Bendegul Okumus Ph.D., there is an article on cleaning restaurants and indoor air quality, an all-important topic for an airborne virus like COVID-19. We also share an article that looks inside the online academic model adopted to teach classes during the pandemic and how it affected culinary and beverage courses which are typically hands-on, in-person classes for students. Cynthia Mejia, Ph.D., Robin Back, Ph.D., Jason Fridrich Ph.D. and Melissa Orlowski Ph.D., pivoted quickly to make teaching the courses meaningful and impactful. You will find an article on rural tourism from Wei Wei Ph.D., as well as a look at medical tourism from an American perspective in an article by Suja Chaulagain Ph.D., Abraham Pizam Ph.D. and myself, Youcheng Wang, Ph.D.

This issue's thought leader article focuses on Gregory Elias, an entertainment management titan. Elias is the president and founder of Top Stop Music and helped establish the UCF Rosen College of Hospitality Management's Entertainment Management degree program. He is also a co-producer of Curaçao's



North Sea Jazz Festival. Elias produced *Havana Moon* with the Rolling Stones in 2016 and he produced his first movie *Double Play* in 2017, a film directed by Ernest Dickerson.

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 the past three years. We launched before the world turned upside down and we continue to be a contributor to the knowledge base of the hospitality industry by providing information that can be used by managers, owners and entrepreneurs, as well as destination marketing firms, to help them do better business with the guests they serve. 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.

Open up your laptop, your tablet or your hardcopy of the **Rosen Research Review**. The magazine will provide insights and thought-provoking ideas for you to ponder and put into practice for the second half of 2022 and beyond.



**Youcheng Wang, Ph.D.**  
**Dean and William C. Peeper Preeminent Professor in Destination Marketing**

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
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Rosen Research Focus | Tingting Zhang

# DEVELOPING A SCALE TO MEASURE DESTINATION GENDER

*Whether they depict the rugged landscape of the American West or the seductive charm of a South Asian beach, photographs and their accompanying text are powerful drivers of tourism demand. But what lies behind our response to such tourism tropes? Rosen College researchers have produced a new study which reappraises destination marketing through a gender-based lens. Led by Dr. Tingting Zhang, the study has developed and validated a cross-cultural scale to determine 'destination gender', or whether a location should be thought of as having masculine or feminine gender traits and appeal.*

**D**estination marketing is back in business, as countries, regions and cities around the world compete to attract the tourists who stayed away as a result of the COVID-19 pandemic.

Promoting the experiences and benefits associated with a specific location, destination marketing uses emotional cues to whet visitors' appetites and inspire them to visit. Whether it advertises outdoor adventure, cultural stimulation, sensory indulgence, or spiritual awakening, how a destination brands itself is vitally important. To study the nuances of such branding requires a consideration of the explicit and subliminal messages conveyed in destination marketing materials.

While the broader term 'destination personality' has a longer history in tourism marketing literature, destination gender is more specific and is only just beginning to attract attention. Led by Dr. Tingting Zhang, Assistant Professor at UCF Rosen College of Hospitality Management, new research

into the subject has been published in the prestigious journal *Tourism Management*.

Gender identity is not only important for how people think about themselves, it also affects how they relate to other people, places and objects, which includes their purchasing decisions. As Zhang explains, gender is 'one of the most important self-defined labels individuals use to consider their self-concept and process the world around them.' Zhang and her co-authors argue that tourist destinations can tap into this psychology by offering opportunities for people to satisfy their 'emotional and identity needs'.

Their new study defines destination gender as a concept in tourism and hospitality, and both establishes and validates a 'Destination Gender Scale' (DGS) to measure it.

## DESTINATION GENDER AND MARKETING

According to gender role theory, gender is socially and culturally constructed. As the study explains: 'Typical masculine traits include being dominant, adventurous, ambitious and





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Destinations such as Las Vegas can be considered 'masculine' due to their associations with freedom.

forceful, while feminine traits mainly revolve around being sensitive, loving and kind.' The study notes that various types of masculinity and femininity can co-exist, and an individual's gender identity reflects their sense of being male or female, rather than their biologically assigned sex.

Zhang and her collaborators define destination gender as 'a set of human masculine and feminine traits through which consumers envisage a destination as a man or woman.' According to the literature review which informed the research, Las Vegas, for example, could be thought of as an essentially masculine destination identified with 'freedom and lack of inhibition.' On the other hand, Paris, known for its 'elegance and romance', could be thought of as feminine.

Gendered consumption and brand masculinity/femininity is well-known in academic literature. For example, marketers may discuss whether logos are round and feminine in shape, or angular and masculine. However, the Rosen study is one of the first to both consider tourists' perceptions of destinations' gender traits and identify a scale

to measure them. Such gender traits can help destination marketers demonstrate a location's 'symbolic and hedonic value'—the pleasure and delight that consumers associate with it, and how it can satisfy a consumer's needs.

## RESEARCH METHOD

The Destination Gender Scale (DGS) was developed in six stages. To ensure that it operates cross-culturally, the work was begun in China and then validated in the United States.

A set of gender-related terms, or 'items', was first gathered from the extant literature and from interviews the research team conducted. In the primary interviews, participants were asked to talk about their concept of gender with regards to photographs of tourist destinations. The resultant set included items such as 'daring', 'rough', 'sturdy' and 'adventurous' associated with masculinity, and 'sensitive', 'sentimental', 'passionate', and 'loving' associated with femininity.

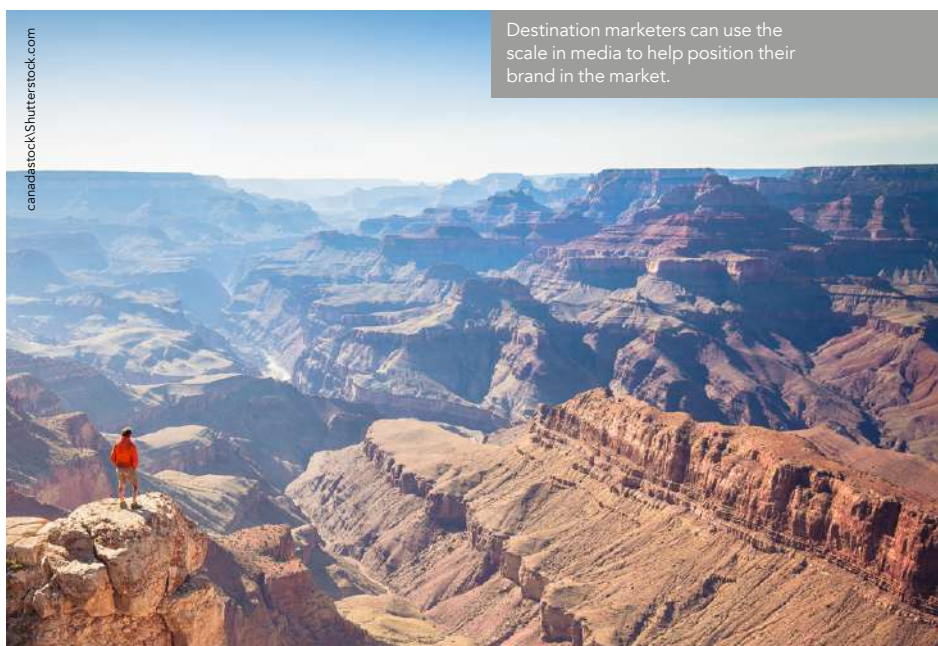
The set of items was pretested with the help of an expert panel. The resultant items were finessed further using Exploratory Factor Analysis, and then tested for reliability, validity and latent structure using Confirmatory Factor Analysis. Structural Equation Modelling was used to assess the scale's nomological validity (the relationships between variables) before being validated in a Western cultural context in the United States.

## RESEARCH RESULTS

The study's rigorous research and testing identified a set of 25 cross-culturally valid items (second-order constructs) to describe destinations in terms of male or female gender attributes (first-order constructs). These attributes are detailed below.

Twelve masculine attributes were sub-divided under four subscales of 'dominance', 'vigor', 'courage' and 'competence'. For example, 'dominance' comprised 'dominant', 'charismatic', 'decisive' and 'grand'; contrastingly, 'courage' comprised 'daring', 'adventurous' and 'fierce'.

Thirteen feminine attributes were sub-divided under four subscales of 'grace', 'softness', 'gorgeousness' and 'kind-heartedness'. For example, 'grace' comprised 'relaxing', 'idyllic' and 'tender', and 'gorgeousness' comprised 'luscious', 'charming' and 'romantic'. In addition, the results confirmed that



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Destination marketers can use the scale in media to help position their brand in the market.

**FEMININE TRAITS APPEAR TO INFLUENCE TRAVELERS' ACTUAL / IDEAL GENDER IDENTITY MORE STRONGLY THAN MASCULINE TRAITS.**



A destination's perceived femininity comes from both internal and external qualities.

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## THERE IS GROWING EVIDENCE THAT GENDER CUES ARE SIGNIFICANT IN NUDGING TRAVEL DECISIONS.

destination gender is significantly related to an individual's perceived and actual gender identity, which also affects their inclination to revisit destinations. As the research team explains, 'The greater the degree to which individuals connect the self (or an ideal self) to a destination's gender attributes, the more likely they are to visit that destination'—regardless of individuals' biological sex.

### OUTCOMES

Zhang's research consolidates destination gender into a single measurement, the Destination Gender Scale (DGS), comprising the sub-dimensions of femininity and masculinity that tourists associate with vacation locations.

Multiple, distinct items were included in the sub-dimensions, enabling the scale to measure far more than a destination's gender. As Zhang explains: 'According to the results, the four dimensions of destination femininity either refer to outward aesthetics such as 'grace' and 'gorgeousness', or inner qualities often associated with women, including 'softness' and 'kind-heartedness.' Thus, a sense of external and internal constitutes the essence of destinations' femininity.'

The scale's level of sophistication distinguishes it from other constructs used to measure brand gender and personality. For example, the Rosen study takes cultural issues into account and corroborates gender as a 'socially constructed concept', finding that 'even destination gender can be conditioned by society's views on gender images ascribed to humans'.

The scale also provides evidence that destination gender 'can positively affect individuals' actual / ideal gender identity congruity and revisit intentions'. As Zhang explains, 'The greater the degree to which individuals connect the self (or an ideal self) to a destination's gender attributes, the more likely they are to visit that destination.'

Interestingly, the research shows that individuals perceive greater degrees of actual and ideal gender identity congruity for destinations with more dominant feminine traits than those with more dominant masculine traits. According to the report: 'This finding suggests that consistent with how women are more likely to self-assess their actual appearance than men, consumers are more likely to evaluate a destination's outward feminine (vs masculine) attractiveness and cues.'

### IMPLICATIONS

The Destination Gender Scale (DGS) is a valuable tool to help destinations use masculine and feminine traits to define their gender image. However, as Zhang and her collaborators point out, the gender dimensions are not mutually exclusive and 'both DGS subscales can be applied, allowing for fluidity in projecting a destination's gender image across gender-associated traits.'

Destination marketers can also use the scale's gender trait items in text, photographs or other imagery to help position their destination's brand. For example, if a marketer wants to promote a destination as having a masculine identity, the scale's items of 'dominance', 'vigor', 'courage' and 'competence' could help them plan their branding campaign.

In addition, the study suggests that, because of the link between destinations' and individuals' own gender identities, destination marketers should make use of advanced technologies to profile customers and develop branding and communication strategies that align with their 'self-concepts.' With this in mind, it is interesting to note that feminine traits appear to influence travelers' actual / ideal gender identity more strongly than masculine traits.

The study acknowledges that more research is needed, not least because of the complexity of gender issues. For example, it suggests: 'Research could evaluate complicated destination gender types (ie transgender or third gender) and develop essential elements to portray a destination's gender image through more nuanced categories.'

### IMPORTANCE OF GENDER CUES

While destination gender is just one aspect of destination brand personality, there is growing evidence that gender cues are significant in nudging travel decisions.

As the report concludes: 'This study not only offers a new angle of understanding the multi-dimensional structure of destination gender and its cross-cultural differences, but also a customised marketing tool for destination managers to evaluate the perceived destination gender image, and hence, shed new light on destination branding strategies via satisfying consumers' gender identity.'



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Tingting Zhang and collaborators study the concept of 'destination gender' and the impact this could have on destination marketing.

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## PERSONAL RESPONSE

### ***What did you find most interesting in the differences between Chinese and American audiences in thinking about destination gender?***

Unlike Chinese consumers, while Americans concur that destinations can be described as dominant, charismatic, and decisive, they do not consider such destinations to be exclusively masculine. This discrepancy may be due to China's deep-seated hierarchical social structure following from the country's long history of feudal governance; in particular, only men could assume leadership roles in the family, department, and country. Given America's social evolution and feminist movements advocating for sex equality, the traditional masculine stereotype of dominance has been shared and embodied by men and women over time.

## Dr. Tingting Zhang



Dr. Tingting Zhang, Assistant Professor at UCF Rosen College of Hospitality Management. Her research focuses on technologies and marketing strategies in the tourism and hospitality sectors. She received a M.S. degree and Ph.D. degree in Consumer Sciences Specialization in Hospitality Management from the Ohio State University, Ohio, USA.

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# REACHING OUT TO OCCUPATIONAL THERAPISTS

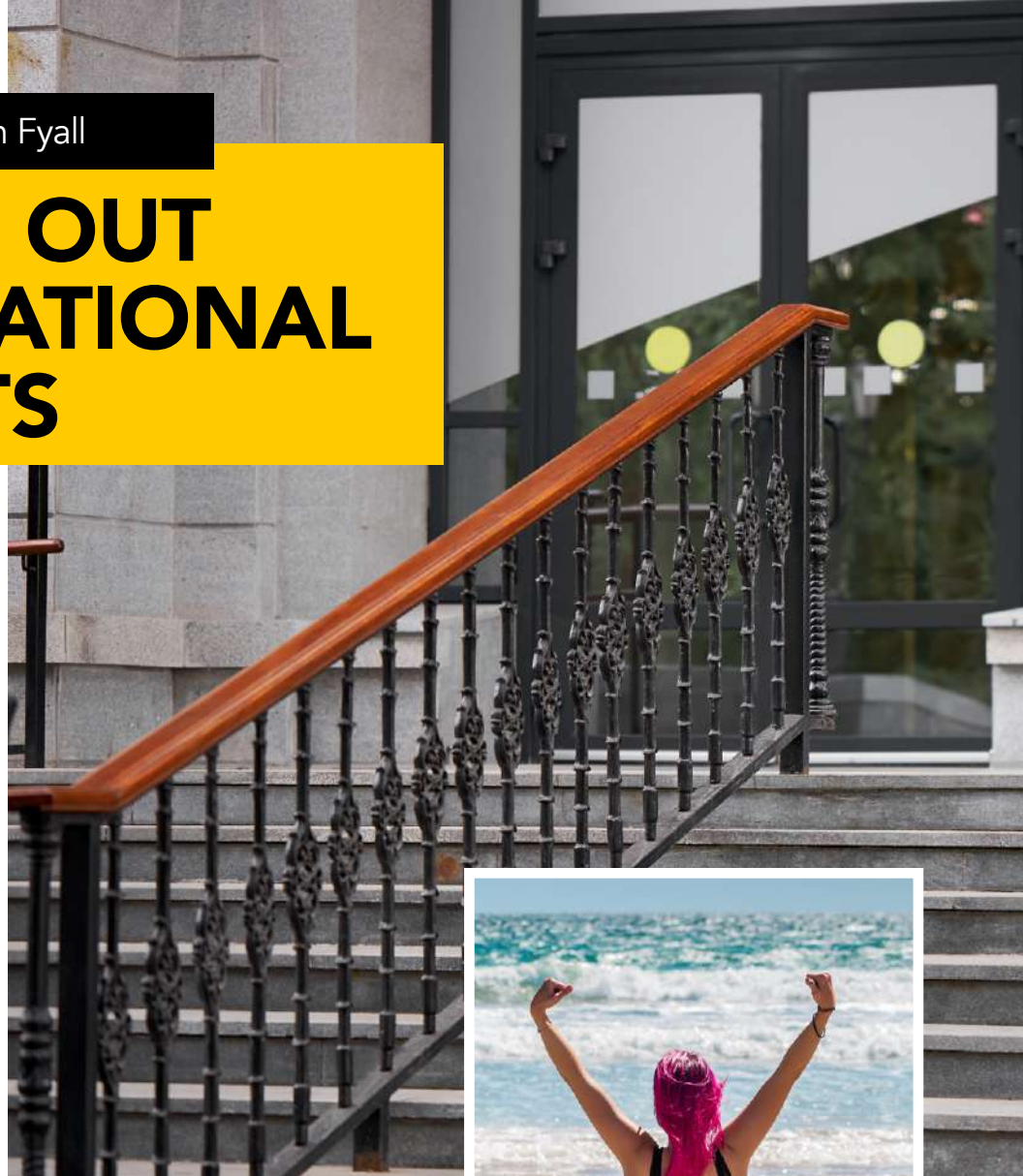
*Accessible tourism is a growing area of tourism research. The belief that all tourism facilities, products, and services should be accessible to those with disabilities drives research in tourism ethics and sustainability. However, a key voice is being ignored. Occupational therapists play a critical role in enabling people with disabilities to participate in the activities of daily life, including leisure. Dr. Alan Fyall believes it is time for interdisciplinary research with occupational therapists to properly understand accessible tourism.*

**S**hould people with disabilities go on holiday? That's a rhetorical question, and quite ridiculous. So, let's rephrase it: how easy is it for people with disabilities to go on holiday? It's still rhetorical, but this time should prompt some urgent reflection, with the uneasy knowledge that much still needs to be done to extend all the benefits of tourism to persons with disabilities. The term 'accessible tourism' has become an area of increased focus among tourism scholars. Their research is helping to underpin the regulatory, structural, infrastructural, and societal changes that are helping the sector transform to become more inclusive and accessible. However, that transformation is proving glacial. Dr. Alan Fyall, UCF Rosen College of Hospitality Management's Associate Dean of Academic Affairs and Chair of Tourism Marketing, is a member of an interdisciplinary team of researchers who are calling for more interdisciplinary research on the topic to provide the energy and impact that accessible tourism needs, with the team reaching out to researchers in a

discipline with shared values and specialised insight: occupational therapy.

Interdisciplinary research has benefits when addressing multifaceted, complex societal issues because it encourages diversity of opinion and expertise, and promotes innovation and creative thinking. Therefore, interdisciplinary research is ideally suited for grappling with the complexities of accessible tourism. It's facile to believe tourism will become more accessible through simply tweaking current tourism models. It requires a

**'ENABLING' PEOPLE WITH DISABILITIES INVOLVES MORE THAN BUILDING WHEELCHAIR RAMPS AT ENTRANCES TO HOTELS AND TOURISM SITES.**



Occupational therapists work to improve participation in all aspects of life.



## WHERE WOULD TOURISM BE WITHOUT TOURISTS' WILLINGNESS TO PARTICIPATE?

'disabilities' aren't boxes to be ticked. 'Disability' is a broad spectrum and extends beyond the purely physical. It includes those with mobility, hearing, sight, cognitive, or intellectual and psychosocial disabilities, older persons, and those with temporary disabilities. Furthermore, the effects of those disabilities are complex. Occupational therapists understand this, which is why their approach to therapy is holistic—it addresses all the needs of people with disabilities, including physical, psychological, social, and environmental. These are issues tourism researchers and stakeholders need to consider before espousing any claims of accessibility.

### REASSESSING ACCESSIBLE TOURISM

For Fyall and his collaborators, the value of including occupational therapists in interdisciplinary research into accessible tourism extends beyond their expertise. They see tourism and occupational therapy as kindred disciplines. The team further points out that 'daily living' for occupational therapists includes leisure activities, and that occupational therapy and tourism research both recognise that barriers to participation also lead to a decreased motivation to participate. And where would tourism be without tourists' willingness to participate? Furthermore, occupational justice—a cornerstone of occupational therapy research—is a derivative of social justice and therefore has an inclusive agenda, which sits at the very heart of accessible tourism research. The researchers go further, pointing out that both research areas engage with deprivation, social exclusion and how to increase the quality of life through leisure activities. If this is the case, then where is the voice of occupational therapy in accessible tourism research?

In no way do the researchers place the blame at the door of occupational therapy research. Instead, they search inwards and see interdisciplinary research between the two



Navigating physical spaces is an issue that needs to accommodate the full range of disabilities, not just stereotypical notions.

thorough understanding of what people with disabilities experience; as such, it makes little sense that occupational therapy has been largely denied a voice in tourism research.

Occupational therapists play a critical role in enabling people with disabilities to participate in the activities of daily life. As such, they embrace the social model of disability whereby it is the environment that is considered disabling, instead of it being the 'fault' of the individual in not being able to interact with an inaccessible, and occasionally alienating, environment. Occupational therapists work to improve motivation and participation in activities of daily living. But 'daily living' does not mean the purely operational 'day-to-day' negotiation of the physical world. It includes embracing all aspects of life, including the enjoyments offered by time away with friends

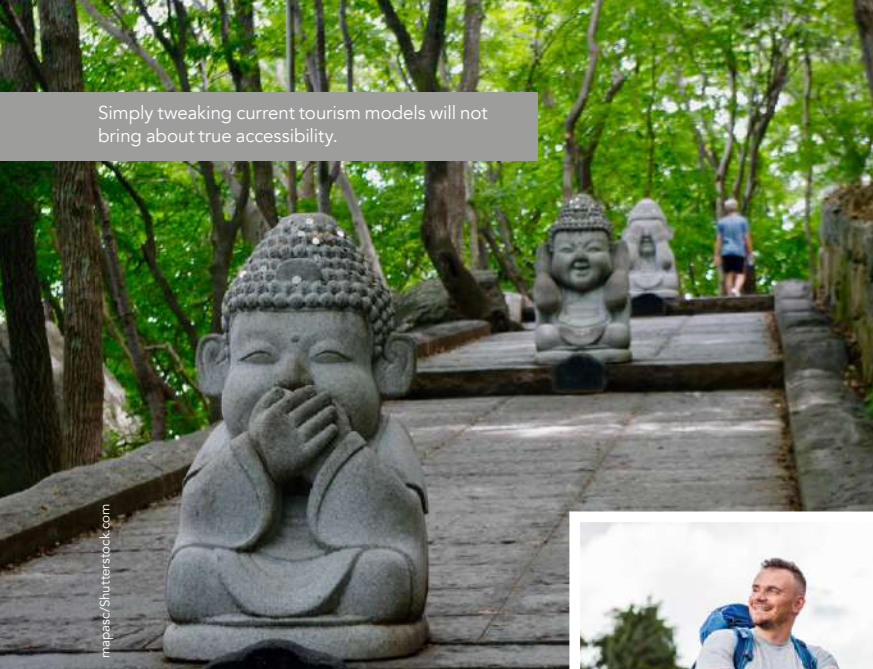
and family. And that's where the tourism sector must play its part.

### AN ERRONEOUS VIEW OF DISABILITY

According to the research team, failure by tourism stakeholders to provide accessible services to people with disabilities is usually not by intent but through an apparent lack of education and awareness. Such failures are not limited to tourism. Indeed, just among those sectors concerned with the physical space people must negotiate—architects, designers, and planners—there is a tendency to reduce disability to medical and stereotypical notions. 'Solutions', therefore, emerge framed by an incomplete or erroneous view of 'disability', and disregard its diversity and complexity.

'Enabling' people with disabilities involves more than building wheelchair ramps at entrances to hotels and tourism sites because

Simply tweaking current tourism models will not bring about true accessibility.



Interdisciplinary research is not without its challenges, but these can be overcome.

fields as logical and overdue. In a way, they are extending an invitation to occupational therapists. Fyall and his team say that a starting point to address how knowledge from occupational therapy could inform accessible tourism and accessible tourism research would be a systematic review of the two areas of study to set a research agenda for the domain. They also suggest, somewhat provocatively, that perhaps we should reassess what constitutes 'accessible tourism'.

### ACCESSIBILITY AND SUSTAINABILITY

The issue of accessible tourism extends beyond just the tourism sector. In fact, within the United Nations is a specialised agency—the United Nations World Tourism Organization—that is entrusted with promoting responsible, sustainable, and universally accessible tourism. The UNWTO is quite clear on the ethical framework for its mandate: 'Accessibility for all to tourism facilities, products, and services



Applying knowledge from occupational therapists can inform accessible tourism.

sector the right thing to do, but it is also the smart thing to do.

The business case for improving accessibility in tourism is not lost on certain authorities. The European Union sees it as key to boosting the competitiveness of tourism in Europe and is embarking on a spirited push to clarify

**NOT ONLY IS ENSURING ACCESSIBILITY  
WITHIN THE TOURISM SECTOR  
THE RIGHT THING TO DO, BUT IT IS ALSO  
THE SMART THING TO DO.**

should be a central part of any responsible and sustainable tourism policy.' The term 'sustainable' is essential. According to the UNWTO, accessibility is not only about human rights; it is a business opportunity for destinations and companies to embrace all visitors and enhance their revenues. So, not only is ensuring accessibility within the tourism

regulations around accessible tourism in its member states. Furthermore, it co-funds projects related to the design, implementation, and marketing of accessible tourism itineraries, from the web design of tourism authorities and operators to facilities and activities, customer support, and feedback. In a way, accessible tourism simply extends the scope

of 'daily living' for people with disabilities. This underlines the importance of the input into the necessary research of those whose passion, focus and insight are directed towards empowering those with disabilities to live daily living to the fullest.

### UNLOCKING THE WORLD

Fyall and his collaborators are firm in their view on the benefits of interdisciplinary research into accessible tourism. The team says, 'the role of occupational therapy in the successful delivery of accessible tourism experiences clearly warrants further investigation, with occupational therapists bringing a novel skillset and expertise currently missing.' However, they are aware that although tourism and occupational therapy may share a kindred spirit and a joint interest in the welfare of those with disabilities, interdisciplinary research is not without its challenges. The team points to the academic technicalities of overcoming attachment to primary discipline, a possible unfamiliarity with methodologies, and a lack of shared vocabulary, which could lead to miscommunication.

However, such challenges fade into insignificance when considering those which people with disabilities must deal with in their daily living. Researchers can overcome any interdisciplinary hurdles through commitment and a common purpose. The world is an exciting and wondrous place, and the tourism sector, in many ways, holds the keys to unlocking it. With the insight and experience of occupational therapists, tourism can make it all more accessible.



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Alan Fyall, along with a team of researchers, highlights the need for interdisciplinary research in the field of accessible tourism, drawing upon the expertise of occupational therapists.

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## PERSONAL RESPONSE

### **Where do you think occupational therapists have the most critical insights into understanding accessible tourism?**

// Occupational therapists have a professional mindset focused on enabling individuals to lead a full and active life irrespective of their disability. They understand the broad spectrum of disabilities that exist and the challenges that people with disabilities face. This is especially valuable to those managing tourism and the visitor economy as there is a tendency to focus on purely physical disabilities and policy and infrastructural solutions, rather than the more inclusive agenda of designing tourist experiences that also take into account psychosocial, social and environmental disabilities. Occupational therapists bring a more holistic dimension to the design and delivery of tourist experiences which destinations are well advised to address in the future. //

## Dr. Alan Fyall



Dr. Alan Fyall is Associate Dean Academic Affairs and Visit Orlando Endowed Chair of Tourism Marketing at the UCF Rosen College of Hospitality Management and is a member of UCF's National Center for Integrated Coastal Research. Dr. Fyall also co-edits Elsevier's *Journal of Destination Marketing & Management* (IF – 6.952).

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# AN INTEGRATED BEHAVIORAL MODEL FOR INTERNATIONAL MEDICAL TOURISM



*From dental procedures to cardiac surgery, an international market is developing for medical tourism, thanks not least to globalisation and the high standard of medical treatment now available around the world. But what drives individuals to travel abroad for healthcare? In an important new study, Rosen College Assistant Professor Suja Chaulagain, Founding Dean Abraham Pizam, and Dean Youcheng Wang take a social psychological perspective of health-related behavior and the concepts that influence it.*

**M**edical tourism is one of the fastest growing and most profitable market segments for tourism in the world.

An estimated 16 million individuals travel to another country every year to access non-emergency healthcare, spending around \$3,800 to \$6,000 per visit on treatment and related transport and accommodation. The figure includes 1.4 million Americans who seek treatment abroad because of

such things as the rising cost of healthcare at home, an increase in health issues faced by an aging population, and the number of people who lack health insurance.

The growth in medical tourism has been enabled by globalization and the expansion in advanced health technologies and skills in both developed and developing countries, as well as the rapid development of communication and transport technologies. People travel to access treatment that is

unavailable or of a higher quality than is on offer in their own country or, alternatively, because another country can provide medical care at a lower cost and with shorter waiting times. The opportunity to have a vacation following treatment is an added attraction.

In a new study published in the *Journal of Travel Research*, researchers from UCF Rosen College of Hospitality Management have developed and tested an integrated behavioral model which looks at factors affecting individuals' decisions to engage in medical tourism. While other research has considered medical tourism from the point of view of its development, conceptualization, and impact on host communities, Drs. Suja Chaulagain, Abraham Pizam and Youcheng Wang are the first to take a social psychological health behavior perspective.



The TPB holds that individuals' behavior is influenced by the benefits and barriers they associate with it, plus three additional factors: their attitude (personal feelings or convictions) towards the behavior, their subjective norms (their concern of how others may perceive them for engaging in that behavior), and their degree of perceived control (any perceived difficulties) over that behavior.

Chaulagain, Pizam and Wang's research integrates the HBM and the TPB to investigate what prompts Americans to engage in medical tourism. Specifically, it investigates hypotheses covering the positive and negative impacts of perceived benefits and barriers to individuals' engagement in medical tourism, and the impact of perceived barriers on individuals' perceived behavioral control. In addition it considers the role of attitude, subjective norms and behavioral

treatment abroad is a good idea, and an enjoyable and pleasant experience. Factors considered for subjective norms included the influence of other people's opinions and personal experience of medical tourism. Perceived behavioral control looked at the difficulty an individual would have in travelling abroad for medical care, for example their physical ability and whether they have the knowledge and resources to do so.

The final construct tested in the study was behavioral intention, that is whether individuals predict that they will travel abroad for medical treatment and if so, when.

### STRUCTURE OF THE STUDY

The study's target population was American adults with a health condition requiring medical care, who know about, and are interested in, the possibility of travelling

## MEDICAL TOURISM IS ONE OF THE FASTEST GROWING AND MOST PROFITABLE TOURISM MARKET SEGMENTS IN THE WORLD.

The growth in medical tourism has been enabled by globalization.

The study provides important contributions to behavioral theory. It also contains valuable insights for tourism destination marketers and decisionmakers, as well as for healthcare facilities and medical-tourism travel agencies.

### THEORETICAL BACKGROUND AND HYPOTHESES

Chaulagain, Pizam and Wang's study is underpinned by two social psychological theories: Rosenstock's health belief model (HBM) and Ajzen's theory of planned behavior (TPB).

According to the HBM, engagement in health behaviors can be explained by people's beliefs. As the study makes clear, behavior is specifically explained by individuals' 'psychological state of readiness to take specific action' and the 'extent to which a proposed behavior is believed to be beneficial.'

control in individuals' decisionmaking, as well as the potentially moderating role played by the severity of individuals' health conditions.

Perceived benefits investigated by the study include medical factors such as access to better quality care and services, and shorter waiting times than at home. Non-medical considerations include cost savings and the opportunity to combine treatment with a vacation.

Perceived barriers were broken down into three areas for testing. Interpersonal barriers included individuals having no travel companions, or family and friends not approving of their intentions. Structural barriers included not having the necessary resources such as time or knowledge, or being hampered by work or family commitments. Intrapersonal barriers included anxiety about security, risk to health, or fear of the unknown.

Of the three additional elements of the TPB, regarding attitude, the study probed whether individuals felt that seeking medical

abroad for treatment. Participants were recruited by an online panel survey company to take part in a self-administered web-based questionnaire.

After screening, 246 responses were studied. Of these participants, 52% were male, and 36% were aged between 35 and 54. Around one-third had a bachelor's degree and around one-quarter had an income of between \$25,001 and \$50,000. Some 46% of participants were married, and 57% declared their ethnicity as white. Around 30% had health insurance through employment, 23% had Medicare, and 8% of respondents were uninsured.

Initial data analysis included exploratory factor analysis (EFA) to find out more about the dimensions of the perceived barriers and perceived benefits. Confirmatory factor analysis (CFA) was performed to evaluate the overall measurement model. Structural equation modeling (SEM)—a rigorous statistical analysis technique used to investigate the structural cause and effect



Combining treatment with a vacation is an attractive benefit to some.

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## AN ESTIMATED 16 MILLION INDIVIDUALS TRAVEL TO ANOTHER COUNTRY EVERY YEAR TO ACCESS NON-EMERGENCY HEALTHCARE.

relationships between measured and latent variables—was then performed to test the study hypotheses.

### RESULTS OF THE STUDY

SEM analysis confirmed the study hypotheses. The results indicate that perceived benefit of engaging in medical tourism is positively associated with individuals' attitude to medical tourism, and perceived barriers have a negative impact on attitude. In addition, perceived barriers of engaging in medical tourism have a negative impact on perceived behavioral control, and behavioral intention positively influences attitude, subjective norms, and behavioral control.

The results also support the hypothesis that perceived severity of an individual's health condition moderates the relationships

between perceived benefits and attitude, perceived barriers and attitude, and attitude and behavioral intention.

The study revealed that the construct of perceived benefits has more impact on individuals' attitudes to medical tourism than that of perceived barriers. In addition, the negative effect of barriers on behavioral control suggests that 'individuals with high barriers tend to believe that traveling to a foreign country to receive medical treatment is not entirely within their control.'

The results confirm that 'attitude is a positive predictor of intention,' and that what friends and family think about individuals' behavioral intention is an important factor in decisionmaking. Of the three additional factors that shape intention according to the TPB, the results show that behavioral control

is the most important, followed by attitude and then subjective norms.

### IMPLICATIONS OF THE RESULTS

Chaulagain, Pizam and Wang's study presents important theoretical insights into medical tourism. It also provides an innovative predictive model that incorporates both the HBM and the TPB, and shows how individuals form their intentions towards medical tourism.

The study's focus on attitude and behavioral intention is particularly important, together with the finding that perceived barriers are a significant factor in determining attitude. The study is also one of the first to consider the perceived severity of an individual's health condition and how this moderates and interacts with other factors to affect individuals' intentions.

In addition, the research provides practical insights to inform the marketing strategies of tourism destination managers, as well as the managers of healthcare facilities and medical-tourism travel agencies. The most significant is the need for improved communication to help individuals, together with friends and family, to understand more about the benefits of medical tourism. This includes the high quality of medical care and treatment that destinations provide, as well as information about availability, lower costs and shorter waiting times, and the kind of vacation individuals can enjoy afterwards.

The findings suggest that greater attention should be paid in promotional and marketing activities to addressing, and helping individuals to negotiate, the perceived barriers to medical tourism. This includes not only safety and security concerns, but also anxieties about post-treatment follow-up in individuals' home countries. The study suggests that employers and insurance companies should be encouraged to develop policies to support medical tourism, including paid leave.

Chaulagain, Pizam and Wang's research provides new understanding of the factors that influence the fast-growing sector of medical tourism. As the authors conclude: 'Equipped with this information, medical service providers and destination decisionmakers will be able to create effective marketing strategies to attract more customers through product differentiation, thereby creating a continual, competitive advantage.'



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

The team of Rosen researchers aim to understand what drives individuals' decisions to engage in medical tourism

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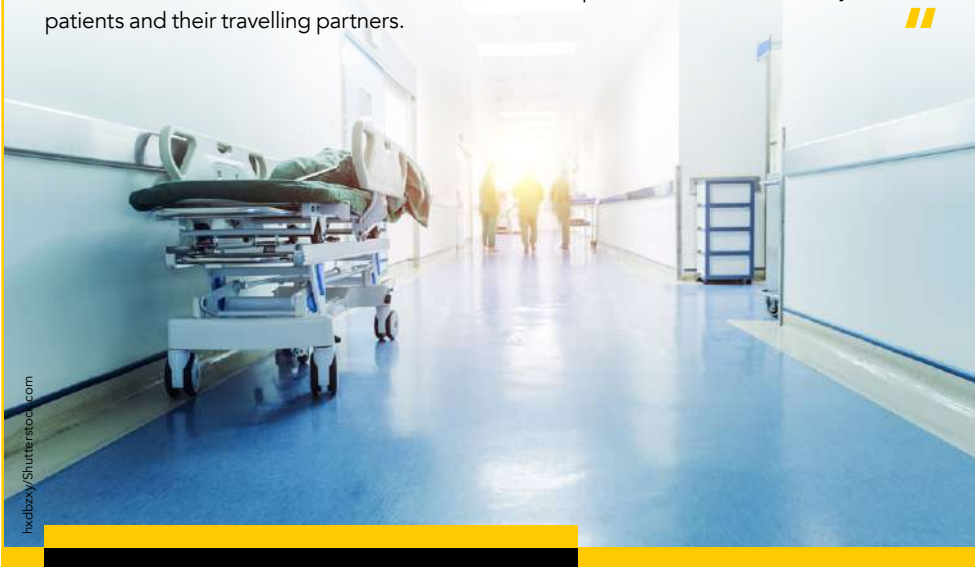
## PERSONAL RESPONSE

**The survey that forms the basis of your research was conducted in 2018, before the arrival of the COVID-19 pandemic. What impact do you think the pandemic will have on medical tourism?**

/// The COVID-19 pandemic has drastically affected the tourism and hospitality industries including medical tourism. The pandemic-related border closures, travel restrictions, and strict quarantine requirements have made it difficult for patients to travel abroad for medical tourism resulting in postponements of elective surgeries and non-emergency treatments.

Another pandemic-related concern for medical tourists is the availability of treatments and ICU beds in medical facilities located in host countries, where the resources are being redirected for the treatment of COVID-19 patients.

All these situations and the ongoing uncertainty of the pandemic are making it difficult for individuals to plan their trips for medical tourism. However, individuals will soon begin to travel abroad for medical treatments again, once COVID-19 vaccines become widely available in host countries and medical-tourism service providers can ensure safety for patients and their travelling partners.



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# Where do we go from here? Festivals, films and the future of entertainment

An interview with Gregory Elias, an entertainment entrepreneur and visionary by Dr. Ray Eddy



Gregory Elias has been involved in the entertainment industry for years, producing films and putting on festivals that delight millions. Dr. Ray Eddy interviews him about his views on the industry, and where in the world it will take us next.

**YOU ARE A PRODUCER OF MANY MUSIC FESTIVALS, FILMMAKER, AND OWNER OF ONE OF THE LARGEST INDEPENDENT LATINO LABELS WITH SEVERAL GRAMMY AWARDS. WHAT IS YOUR MOTIVATION TO EMBRACE ENTERTAINMENT?**

For me, it's not simply a case of embracing entertainment. Art—especially music and film—is the oxygen that keeps me going. Art allows me to put the day-to-day issues that I encounter in my life and work environments into a broader, and more positive, perspective.

On a less personal level, festivals, films, and art build public spirit and reunite communities. They do this by finding unused spaces and talents to make something new and unique which builds pride and trust in the community, and as such is an investment in both individual and society identity.

**WHAT IS ENTERTAINMENT FOR YOU?**

Entertainment is a way of creating a more humane world. Through the diverse options that it offers, it reaches audiences worldwide to make people smile, make

them happy, to enrich their world view and hopefully create a better world through an increased understanding of other cultures and societies.

**WHAT IS ITS ROLE IN SOCIETY?**

A society without any form of entertainment is one that does not have a soul. Entertainment connects and reconnects people to each other and their communities. That is why, for us to continue functioning as a society, entertainment is practically a requirement during these trying and stressful





A scene from *Double Play*, produced by Gregory Elias.

times. It helps to unlock opportunities, and helps humanity cope with the emotional stresses of the pandemic and the current state of affairs in geopolitics. Entertainment is one of the cornerstones that has underpinned our society in all its beauty over the past 100 years.

**YOU RECENTLY PRODUCED A MOVIE CALLED DOUBLE PLAY. THE MOVIE HOSTED SOME VERY HIGH-PROFILE CHARACTERS SUCH AS LOUIS GOSSETT JR., AND WAS DIRECTED BY**

**ERNEST DICKERSON, THE DIRECTOR OF THE WALKING DEAD. HOW DID YOU COME UP WITH THIS CAST, WHAT WAS THE PROCESS AND YOUR EXPERIENCE?**

Working on *Double Play* was a novel experience for me, and incredibly educational. I was able to see, in a much more in depth manner, all the layers of movie-making. For *Double Play*, the cast was assembled by the casting director, the producers, and of course, nothing would have happened without the approval of the director. The late Timothy DeBaets, my entertainment lawyer, introduced me to the professionals that I worked with on this project. Even though I had already co-produced and co-financed an American movie, *Happy Tears*, with a well-known director and actors, I was far more involved in the *Double Play* project.

**THE MOVIE IS BASED ON A VERY POPULAR BOOK IN THE DUTCH LANGUAGE. WHY THIS BOOK? THERE ARE SO MANY ELEMENTS TO THE MOVIE, SO MANY WAYS TO REACT. HOW WOULD YOU DESCRIBE THE MOVIE AND WHAT IS THE MOST EXCITING PART?**

Frank Arion's book, *Dubbelspel*, is a brilliant portrayal of Curaçaoan society in the 50s, 60s and 70s, and explores a number of very sensitive social issues that were plaguing

**A society without any form of entertainment is one that does not have a soul.**

Curaçao at the time. We knew that we had to be respectful in our approach to making the movie as it would have to deal with issues of racism, discrimination and all the intricacies inherent in the relationship between the individual and their community: issues that still haunt us today. It was a complex venture, but I believe that we did the story justice.

**DO YOU THINK THE AUTHOR WOULD APPROVE?**

Yes, I'd definitely say so. We invited his family to be involved in the making of the movie, and they were very excited with the final

product. On many occasions they expressed their gratitude for the way that the director, the cast, and all who were involved in the movie, translated Arion's story from the page to the screen.

**HOW DO YOU THINK THAT TECHNOLOGY WILL CHANGE ENTERTAINMENT?**

It would be impossible to overstate technology's impact on entertainment—it has already changed the music and film industry in an unprecedented manner. All you need to do to see this in action is look at the visual effects that movie makers use these days. Some of them are mind boggling in their complexity, and would have been inconceivable even 30 years ago.

As for music making, technology has levelled the playing field. Today, anyone can make a record from home if they want to—there's no need to rent an expensive studio anymore. Access to technology has opened up routes to creativity that were non-existent 10 years ago.

It's truly exhilarating to see the number of creative souls that are evolving the film and music industries, and we have technology to thank for the fact that it allows everyone to fan their creative spark to life. I look forward to seeing what the next generation will create, aided by ever-evolving technology.

**DO YOU THINK THAT STREAMING IS A THREAT TO MOVIES AND THEATERS, OR IS THE FORESEEABLE FUTURE GOING TO BE STREAMING?**

No, I don't believe that streaming platforms are a threat to movies and theaters. It has become a part of our everyday lives, but it cannot replace the 'experience' of visiting a theater. Going to see a movie will stay popular for as long as moviegoers enjoy it, and are tempted to keep returning.

Of course, we cannot discount streaming as a phenomenon, but we can instead view it as an opportunity. Streaming opens new



This photo and below: The Rolling Stones perform at the Havana Moon concert in Cuba, 2016.



distribution frontiers for artists and creators in general—we only have to learn how best to take advantage of it.

**YOU ALSO PRODUCED HAVANA MOON WITH THE ROLLING STONES IN 2016. THE ROLLING STONES WAS THE FIRST INTERNATIONAL ROCK BAND TO PLAY IN CUBA, DRAWING HUNDREDS OF THOUSANDS OF CONCERT GOERS.**

**HOW DID YOU COME UP WITH THE IDEA, AND WHY THIS CONCERT? WHAT WAS THE MOST EXCITING PART OF THE CONCERT?**

The idea was born out of the desire to pay tribute to Cuba, an island with an immensely rich cultural heritage, and an expansive musical legacy. It was also meant to be somewhat of a 'present'—a free concert—for the Cuban people who lack so many things

we 'Westerners' take for granted. Similar to the old explorers who would set their sails to discover new lands, the aim was to embark on an exploration through music. I also wanted to relive the British invasion of the 60s, when bands like The Beatles, The Rolling Stones, and The Kinks—to name but a few—conquered the American music scene.

The most exciting part of the concert was to watch the expression of joy and freedom on the faces of the 1.2 million visitors who attended the event. That was very rewarding.

**MOST PEOPLE ARE NOT AWARE OF THE MARKET CONSTRAINTS OF OPERATING HIGH-QUALITY LARGE-SCALE ENTERTAINMENT EVENTS. HOW DID YOU MANAGE BIG IDEAS AND CREATIVITY WITH ENTERTAINMENT EVENTS IN A SMALL ISLAND SETTING?**

Small islands often lack the capacity and infrastructure required to organize a festival of the magnitude and quality that I envisaged. The solution was quite simple in the end—collaborate with the world's best indoor and outdoor organizer of internationally acclaimed music festivals, Mojo Concerts from Holland, who have been in this business since 1967. Since 2006, Mojo Concerts have been a wholly owned subsidiary of Live Nation LLC.

Working with Mojo allowed me to make my vision a reality—Mojo are experts in large-scale entertainment events, and I was able to rely on their advice and judgement without reservation. They attended to every detail with so much care and attention, that there was no other possibility than for the festival to be a success.

**WHAT ARE THE CHALLENGES IN EMERGING TRENDS, AND HOW DO YOU THINK THAT ENTERTAINMENT WILL MANIFEST ITSELF IN THE FORESEEABLE FUTURE? WHAT WOULD BE THE OPPORTUNITIES THAT WE SHOULD LOOK FOR?**

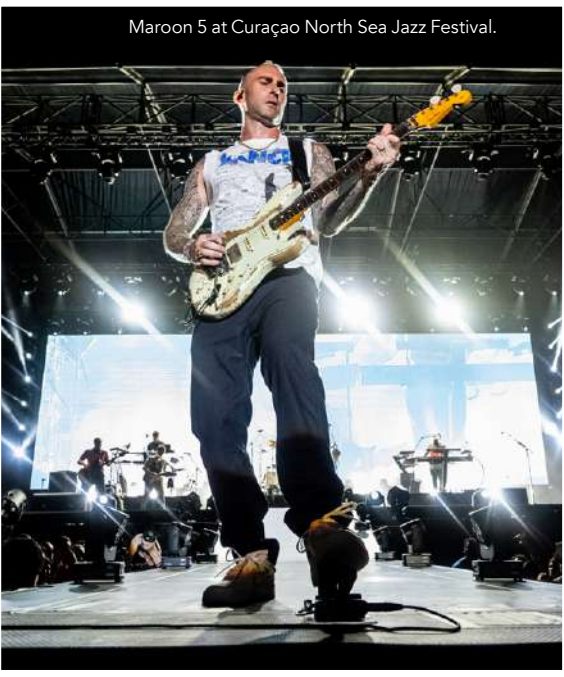
Everyone employed in or associated with the entertainment industry knows that they have to adjust to an ever-changing consumer marketplace and adopt the latest trends. It's a challenging industry to work in, as you never have a stable footing from one week to the next, but it's incredibly rewarding to be able to position yourself front and centre of the next new movement.



Right now is the time to be creative—come up with new products, ideas, movements, or any combination of these. The sector must be constantly looking ahead, creating opportunities for growth. Or at the very least, acknowledge these opportunities when they come knocking.

**OVER THE YEARS YOU BUILT A STRONG COLLABORATION WITH UCF ROSEN COLLEGE. YOU FUNDED THE VERY SUCCESSFUL ENTERTAINMENT MANAGEMENT PROGRAM, FIRST IN THE UNITED STATES. WHY THIS**

Maroon 5 at Curaçao North Sea Jazz Festival.



**COLLABORATION AND WHAT HAS BEEN YOUR EXPERIENCE? DO YOU ALSO COLLABORATE WITH THE ROSEN COLLEGE ON RESEARCH PROJECTS? AND WHY?**

UCF Rosen College has provided me with both an opportunity and a platform to engage with the next generation of creative minds who want to be involved in the entertainment industry. By working with UCF Rosen College, we have created something longlasting and sustainable, that will adapt to the new ideas that are sweeping the sector.

My experience so far has been incredibly encouraging. You never know how an idea will turn out, even when you have all the tools at hand to implement it. However, the collaboration with UCF Rosen College came at exactly the right time, in the right place, and with an absolutely superb team of educators. I am very grateful for all the support UCF has given to the program.

**Entertainment has become so important that it can only thrive if it accepts the value of academic knowledge and knowhow.**



**Dr Gregory Elias**

**Managing Director and  
Chairman of the United Group**  
W: [twitter.com/gregoryelias](https://twitter.com/gregoryelias)

In fact, I have another program in the pipeline that was presented to me by Prof. Dr. Robertico Croes, which starts in 2024.

**HOW DO YOU FEEL ABOUT COLLABORATION BETWEEN THE ENTERTAINMENT INDUSTRY AND ACADEMIA?**

It is a no-brainer, in my mind. The entertainment industry and academia complement each other in all aspects. Entertainment has become so important that it can only thrive if it accepts the value of academic knowledge and knowhow, without losing sight of the human driving force behind it. By that I mean the creative minds who can make dreams come true.



Interview conducted by  
**Dr. Ray Eddy**, entertain-  
ment industry connoisseur  
and ex-stuntman, and  
lecturer in the Enter-  
tainment Management  
program at Rosen College  
of Hospitality.



Curaçao North Sea Jazz Festival.



# A MODEL FOR CREATING MEMORABILITY IN A RURAL TOURISM DESTINATION

*Tourism research is encouraging a shift in marketing towards promoting experiences, but for those experiences to translate into returning visits and word of mouth sharing, they need to be memorable. But what makes an experience memorable? To answer this, Dr. Wei Wei, from UCF Rosen College of Hospitality has, together with collaborators, created and tested a model for experiential memorability in domestic and outbound tourists with one of the world's biggest tourism markets.*



**C**reating memorable experiences is the purpose of the tourism and hospitality industries. It makes strong business sense: if someone has a memorable experience, they are more likely to return and tell others. As such, much research exists on the role of memory in tourist behavior and has measured experiential elements in tourism designed to elicit memories. However, within tourism research, there is little in the way of an integrated model to clarify how to create memorability, especially with the focus on encouraging returning to a destination or telling others about it. Dr. Wei Wei, from UCF Rosen College of Hospitality, and collaborators, have gone one significant step further—creating and testing such a model with one of the world's biggest tourism markets.

The link between experience and memorability is increasingly important for the tourism industry, especially one struggling to encourage people to travel after a global pandemic. Marketing research is shifting focus from quality and satisfaction towards an experiential marketing paradigm. In the face of a worldwide economic slump, people will

not invest considerable money on a holiday if, in the end, it proves merely satisfactory. The experience should be such that they continually revisit it in their memories and are eager to share it with family, friends, and colleagues, face-to-face and on social media. The question is: what makes an experience memorable?

## MAKING MEMORIES

A memorable experience is not one that's hard to forget—that's the sleepless night that follows a strange meal at a dodgy seaside restaurant. A truly memorable experience is one worth remembering because it's exceptional or unusual. But there's no simple formula for ensuring a visitor has a memorable experience, and this has challenged tourism academia and industry alike. Much depends on what visitors are searching for, and generally, this is steered by how far they are willing to travel.

Tourists traveling to short-haul, culturally similar destinations generally search for familiar experiences focusing on rest and relaxation. Those traveling further afield and to culturally exotic places do so because they want to be surprised and are looking for new and exciting experiences. As such, how tourists 'measure'

the memorability of their experiences differs. Some may find a plate of their favorite food, served in an upmarket hotel in an idyllic countryside setting, particularly memorable. Others a bungee jump into a deep mountain gorge in a distant, foreign but friendly country.

For academics shaping the decisions of the tourism industry, trying to understand the disparities of what constitutes memorability is an ongoing challenge. Consequently, little empirical evidence exists on the matter. However, there seems to be general agreement that a tourism experience is essentially a combination of familiar and unfamiliar—or 'ordinary' and 'extraordinary'—experiences. This formed the basis of Dr. Wei and her team's research and model for a memorable experience.

## A RURAL EXPERIENCE

China is one of the world's biggest tourism markets—the Chinese are increasingly enthusiastic tourists, both domestic and outbound, and destinations within China and around the world are lobbying for their attention. Given China's aggressive rate of urbanization, it is understandable that domestic



Almost three-quarters of Chinese tourists to New Zealand visit the country's farms and orchards.



Rural tourism offers a welcome relief from the stress of urban daily life.

tourists searching for a welcome relief from the stress of urban daily life are attracted to the country's myriad rural destinations.

Such 'rural tourism'—the great getaway offering rural experiences, cultures, landscapes, and artifacts—is found worldwide. It may differ from country to country according to lifestyle, culture, and history, and as such, there's no universal rural tourism model. There is, however, a significant enough degree of similarity to make it a relevant focus for Dr. Wei and her collaborators. It also just so happens that rural tourism is a major offering in one of the most popular outbound destinations for Chinese tourists: New Zealand. In fact, China is New Zealand's second-largest tourism market after Australia, and almost three-quarters of Chinese tourists to New Zealand

visit the country's farms and orchards. This association of Chinese tourists looking for rural destinations both at home and abroad provided the research team with an ideal test scenario for a model for tourists from a single country seeking a memorable experience. It also allowed them to compare the experiences between domestic and outbound tourists. Their challenge was then how to channel the disparate measures of memorability into a single model.

For the researchers, part of the answer lies in the current research and the knowledge that psychologists define memorability as the feelings, judgments, and predictions people have about how memorable an event will be. As such, for an experience to be memorable, it must, to a degree, measure up to expectations.

So, Dr. Wei and her collaborators started with the point of agreement amongst tourism scholars on the value of different, but complementary, ordinary (familiar) and extraordinary (exotic) experiences. Research suggests that tourists measure an 'ordinary' experience against expectations of product or service quality and their satisfaction therewith. On the other hand, tourists evaluate an 'extraordinary' experience based on the extent of novelty and the sense of delight associated with it. Dr. Wei and the team now had their framework for the model.

#### **A MODEL FOR MEMORABILITY**

Based on the relationship between quality and satisfaction, and novelty and delight, the researchers arrived at a sequence of interrelated hypotheses:

1. Experience quality positively affects memorability.
2. Satisfaction can partly mediate the relationship between experience quality and memorability.
3. Perceived novelty can positively affect memorability.
4. Tourist delight can partly mediate the effect of novelty on memorability.

*THE RESULTS ALSO REVEALED AN UNCOMFORTABLE TRUTH: CHINESE TOURISTS FAVORED RURAL DESTINATIONS IN NEW ZEALAND OVER DOMESTIC RURAL DESTINATIONS.*





For outbound tourists, extraordinary experiences alone determined perceived memorability.

5. Tourist satisfaction significantly affects tourist delight.
6. Tourist delight positively affects intentions to spread positive word of mouth.
7. Tourist satisfaction positively affects intentions to spread positive word of mouth.
8. Memorability positively affects intentions to spread positive word-of-mouth.

Using current research as a foundation, Dr. Wei and her team adapted evaluative phrases to design a survey questionnaire that measured tourists' constructs of quality, satisfaction, novelty and delight, and whether or not they considered their rural destination memorable and would tell others about it. They first conducted a survey in April and May 2016 with Chinese domestic tourists in Changxing, Anji, and

#### AN UNCOMFORTABLE TRUTH

Data from the tourists visiting domestic rural locations fully supported the hypothesized model, but those from outbound tourists who had visited rural destinations and attractions in New Zealand only partially supported the model. Domestic tourists derived memorability from ordinary experiences—shaped by quality and satisfaction—as well as extraordinary experiences, defined in the study as novelty and delight, but memorability only played a minor role in shaping the spread of positive word-of-mouth especially when compared with the impact that satisfaction had on shaping word-of-mouth. On the other hand, for outbound tourists, extraordinary experiences solely determined perceived memorability and played a far more important role in shaping word-of-mouth.

robustly-tested model that details the 'formation and consequences of memorability' that validates the memory-based approach in tourism marketing. Secondly, by connecting memorability as a concept with the more conventional marketing constructs of satisfaction and quality, it reconciles the emerging behavior model—focusing on memory-oriented tourist behavior—with the current satisfaction-based framework. Finally, as the team tested and compared the proposed model with data gathered from both domestic and outbound tourists, the study shows that memorability is context-dependent in terms of its formation and effect.

The research also has implications for the tourism industry, especially those in rural destinations directed at the Chinese tourism market. For domestic destinations, because satisfaction is instrumental in shaping word-of-mouth, destination management organizations and tourism operators should focus on improving the quality of their offerings to create memorable experiences and improve tourist loyalty.

## A TRULY MEMORABLE EXPERIENCE IS ONE WORTH REMEMBERING BECAUSE IT'S EXCEPTIONAL OR UNUSUAL.

Deqing—three regions in the central Yangtze River Delta that are among the top rural destinations in China. In December of the same year, they conducted the same survey with Chinese outbound tourists in three of the most popular regions of New Zealand—Auckland, Otago, and the Bay of Plenty. In total, both surveys produced 1373 valid responses. What emerged was both encouraging and surprising.

The results also revealed an uncomfortable truth: Chinese tourists favored rural destinations in New Zealand over domestic rural destinations. This suggests that Chinese rural destinations have room to 'improve their guest experiences in terms of novelty, delight, quality, and memorability.'

This research presents significant contributions to tourism research. Firstly, it provides a

For foreign rural destinations such as those in New Zealand, tourism operators should consider their offering as a stage 'devoted to presenting the local culture, customs and lifestyle that are authentic and unique to the destination' in a way that creates novel and extraordinary experiences to evoke a strong sense of delight, pleasure, sociability and happiness.



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Wei Wei and her team created a model to show the role of memorability in experiential tourism in rural destinations

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## PERSONAL RESPONSE

### Where would you like to see your study repeated, and why?

// In this research, we noted the room for Chinese rural destinations to improve guest experiences in terms of novelty, delight, quality, and memorability. With the COVID-induced travel restrictions as well as the enforced quarantine policies in China, it has become more challenging and effortful for many Chinese tourists to travel abroad in the short run. As such, a feasible direction for follow-up studies would be tourist experience of the Chinese domestic tourism market, which will be the main source of tourism-related activities in China for a while. In addition, as Chinese policy makers plan further shifts toward policies that explicitly encourage childbirth, family size may increase gradually in the coming years. This offers vast potential for both academia and industry to revisit and/or invest in domestic rural destinations that promote activities for family/inter-generational interactions, child development and education, as well as natural scenery appreciation. //

## Dr. Wei Wei



Dr. Wei Wei is an Associate Professor at the Rosen College of Hospitality Management. Her research interests include consumer behavior, experience, and psychology in various service settings. Her academic papers have been published by premium peer-reviewed journals, such as *Tourism Management*, *Annals of Tourism Research*, *Journal of Travel Research* and many others. Dr. Wei serves as an Associate Editor for the *Journal of Hospitality and Tourism Research*. She also sits on the Editorial Boards of *Journal of Destination Marketing and Management*, *Cornell Hospitality Quarterly*, *Journal of Hospitality and Tourism Insights*, and the *International Journal of Hospitality and Event Management*.

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# MICRO-CLUSTERING:

Bringing innovation to agritourism



Micro-clusters bring together a wide variety of business that can appeal to the whole family.

*What's better than simply drinking wine in a vineyard? Maybe a beautiful destination where the whole family can enjoy a day together, tasting wine, enjoying a variety of activities, and watching the kids play. Dr. Robin Back at the UCF Rosen College of Hospitality Management and his collaborators have examined a case example that presents a new business model for wine tourism—micro-clustering with diverse forms of ownership on two adjacent wine farms. The team reveals how a single South African agribusiness achieved success, and raises the possibility of other similar businesses doing the same.*

**A**gritourism is a form of slow-paced, authentic, and eco-friendly travel. It's a concept rooted in savoring experiences and becoming educated about the origins of quality food and drink. One of the best examples of this is wine tourism. Even among those who aren't big consumers of wine, a visit to a vineyard can be a satisfying and enjoyable experience. Dr. Back of UCF Rosen College of Hospitality Management and his research team have undertaken the first study of this industry from a micro-clustering approach, using the example of a South African agribusiness to show how using a novel model of diversified ownership can generate business growth and increased profits.

## THE EVOLVING WINERY MODEL

The earliest definitions of wine tourism date from 1996, when wineries were seen as a niche market for wine enthusiasts. These businesses were successful based on their individual characteristics, such as accessibility, wine profile, and facilities. At this time, wine tourism was narrowly defined as visits to wineries and wine festivals where the primary motivation for tourists was to sample the wine.

By the early 2000s, however, this definition had begun to expand. Subsequent studies found that the motivations of wine tourists covered a wide range of experiences beyond the tasting of the wine itself. Nowadays, wine tourism should be seen as visiting a destination or event that has some kind of connection





Diversified ownership in micro-clusters can lead to business growth and increased profits.



The winery model evolved as a tourism concept to include more than just wine tasting.



Visitors to agritourism destinations often enjoy conversations with the producers.

acquire from geographically concentrating companies that work simultaneously to provide a variety of experiences. As these companies compete they stimulate innovation, leading to the creation of new businesses and the growth of the cluster.

Since the inception of the concept, new cluster models have developed. These include: horizontal clustering, in which companies in a particular field compete within a geographical area; vertical clustering, in which businesses are part of the same supply chain; and diagonal clustering, in which firms are complementary, sharing value between each other. There are also three ways to organize a cluster: cluster hub, with one company taking the lead; shared leadership; and holding company, where one business leads several cluster initiatives.

The structure of the cluster and how firms interact will determine how successful the cluster is. The researchers were particularly interested in micro-clusters. These are clusters that occur in smaller communities and work together to provide a unique regional identity. They provide the infrastructure for small businesses to come in and provide their specialist expertise. This is a model that can be readily adopted by wineries.

#### CASE STUDY: THE FAIRVIEW TRUST

To explore the way in which micro-clusters can help wineries innovate and become more successful, Dr. Back and his collaborators explore the example of the Fairview and De Leeuwenjagt farms, situated on the slopes of Paarl Mountain near Cape Town, South Africa. Founded in 1693, the farms are now run by the Fairview Trust (FT). With the two wine farms covering around 630 hectares, the company has chosen to focus on wine and cheese production, which is at the center of its tourism drive.

There's no doubt that FT has founded a successful agritourism business. The farms receive around 400,000 visitors annually, which, to put this number in context, is around 13.5% of the number of people visiting California's Napa Valley. As visitor numbers rose, the farms evolved to keep up. FT chose not just to expand its wine- and cheese-tasting rooms, but also to add many other experiential attractions. This includes everything from a pizzeria to glass blowing and a pilates studio.

to wine. In this sense, it can be more broadly related to agritourism.

Visitors to wineries often appreciate the chance to experience the beautiful landscapes, conversations with producers, and a slower pace of travel. These tourists also value ethical and environmentally sustainable processes, which are fundamental features of agritourism. Ultimately, wine tourism is viewed as being

experiential, whether this is for entertainment, the aesthetics of the destination, educational reasons, or escapism.

#### CLUSTER THEORY AND MICRO-CLUSTERING

To explore this evolving winery business model further, Dr. Back and the research team used a cluster-theory framework. This idea highlights the benefits that a particular industry could

*THE FAIRVIEW TRUST IS THE ONLY KNOWN EXAMPLE OF A MICRO-CLUSTER WITH DIVERSE FORMS OF OWNERSHIP IN A WINE TOURISM CONTEXT.*





Many tourists appreciate a slower pace of travel.

FT has adopted a novel business model, and only has full ownership of some of these facilities. Among others, it owns the tasting rooms, the gift shop, and the children's playground. Meanwhile, it has partnered with a Swedish brewing company and rents out space to independent businesses such as a deli and a chocolate factory. Each business is able to focus on an area about which it is knowledgeable and passionate. FT is able to

FT is successful because it knows that it can't be an expert in every aspect of the cluster. It focuses on its core features of providing the best local cheese and wine, both of which are produced on the farms. Meanwhile, partnerships are formed and space is rented out to other companies who have their own areas of expertise. They build up experiential attractions that complement the overall vibe of FT's core businesses, while

### THE FUTURE OF AGRITOURISM?

This case study, as the authors note, is limited in scope. It was the first paper to assess the value of micro-clustering using a novel business model of diverse forms of ownership for the wine tourism industry, but it doesn't tell the whole story. What it does reveal is the possibility for a rural agribusiness to create an innovative business model and grow into a major tourist attraction. It highlights the importance of clustering businesses together that complement each other and work synergistically towards a holistic goal within a single location.

In this system, each individual company benefits from being part of the cluster. Tourists then benefit from experiences that are curated by passionate experts. This diversification of products also generates greater profits. The author notes that this is the only known example of a diversified ownership micro-cluster in a wine tourism context, but this study could lead to the emergence of more. Future research needs to test the profitability of this business model and whether it could be applied to other agritourism farms.

Clustering has been a theory of interest in the hospitality industry for many years. However, this is the only study looking into micro-clustering when applied to wine tourism. This is an area of travel that has grown in recent years and not because of any surge in the popularity of wine. Visiting a vineyard is a chance to explore a destination at a slower pace, being connected to the agricultural process, which meets the goals of tourists seeking authenticity and sustainability. This novel case study from a Rosen College researcher and his team is an eye-opening look at this business model and could encourage other agritourism destinations to take a similar approach.

## MICRO-CLUSTERS... OCCUR IN SMALLER COMMUNITIES AND WORK TOGETHER TO PROVIDE A UNIQUE REGIONAL IDENTITY.

cluster these additional experiences together without significant overhead costs or additional expertise. Tourists come for the destination, to spend an entire day there and feel like they've had an authentic visit.

### A NOVEL BUSINESS MODEL FOR WINERIES

The example of FT represents a step forward for winery businesses. The researchers highlight this as a new and innovative way of running a wine tourism business. In particular, these small, rurally-located businesses rely on the passion and expertise of those who run them. This helps the company stick to its ethos of sustainability and authenticity that is so attractive to the people who visit it.

FT takes responsibility for marketing the entire destination.

FT uses something similar to a diagonal-clustering approach, which is the closest to a micro-clustering framework. This is also a cluster hub or cluster holding organization system because it involves one company, FT, leading a number of other initiatives within the farm complex. This has led to a project with a cohesive overarching aesthetic that blends together the individual companies working within. The businesses were carefully selected for this reason, creating a tourist attraction that spans all realms of experience. Like all micro-clusters, FT benefits from passionate and innovative leadership.

An ethos of sustainability and authenticity is attractive in small, rurally-located businesses.





# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

This research investigates how a single agribusiness was able to create a successful micro-cluster of complementary businesses using a novel business model of diverse ownership.

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## PERSONAL RESPONSE

**Why do you think there aren't many other, if any, examples of a winery with the diversity of experiences and ownership as seen in the example of the Fairview Trust?**

There always has to be an innovator that comes up with a novel approach, and I think that the Fairview Trust is such an innovator. While there are an increasing number of wine farms offering diverse experiences, I'm unaware of any using FT's model of diverse forms of ownership and varying financial arrangements. However, I do expect to see others following suit, especially given FT's unprecedented success.

Robin M Back  
Ph.D. F.I.H.



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 beverage-related courses at both graduate and undergraduate levels, and is an elected fellow of the Institute of Hospitality.

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Fairview Trust prides itself in producing fantastic cheese and wine, and rents out space to specialty businesses.



By clustering together complementary businesses, a single location can work towards a holistic goal.

# THE IMPACT OF TOURISM SPECIALIZATION ON TRANSITION ECONOMIES

*What is the relationship between tourism specialization, economic growth, and human development in transition economies? That's the question behind a new study led by Rosen Professor Robertico Croes and Assistant Professor Jorge Ridderstaat. Using Poland as a case study, the research looks at the role of tourism in economic and human development since communism fell in the 1990s and the country transitioned from a centrally-driven to a market-led economy.*

Eastern European countries are adopting economic strategies more similar to those in the West.

The fall in 1989 of the Berlin Wall—the symbol of the ideological and economic split between communism and capitalism—began a process of transition that has since seen Eastern European countries align their economies more closely to the West. The process has moved faster in some countries than others, but the direction is convergence and, for some, accession to the European Union.

Like their economies, the borders of former Eastern bloc transition economies have also opened up, enabling international tourism to become a significant development strategy and accelerate convergence.

In a new study published in the journal *Tourism Management*, Professor Robertico Croes and Assistant Professor Jorge Ridderstaat of UCF Rosen College of Hospitality Management examine the relationship between tourism specialization, economic growth, and human development in transition economies, using Poland as a case study.

## THEORETICAL BACKGROUND

Croes and Ridderstaat conceptualize tourism specialization (TS) as an economic model that 'includes tourists engaging in consumption activities according to attractive physical capital (hotels, restaurants, heritage, etc.), natural (beaches, mountains, etc.), and human capital.'

The focus on consumption derives from comparative advantage theory. As proposed by the 19th-century economist David Ricardo, comparative advantage refers to an economy's ability to maximise output and consumption and produce goods or services at a lower cost than other providers.

The study also follows the human development (HD) theory developed by the 20th century philosopher and economist Amartya Sen, who argues that HD goes beyond improvement in an individual's economic position and includes the 'expansion of free choices and opportunities as well as valuable life options and conditions.'

Croes and Ridderstaat argue, however, that comparative advantage theory does not adequately address the nature of TS, or the issues faced by transition economies. Taking a more dynamic view, they conceive of TS as 'a process of integrating resources and assets.' As they explain: 'The process involves the organization and coordination of several agents in creating and managing a

unique experience, and understanding what determines the demand for that experience.'

In this way, the process of TS is directly linked to economic growth through the increase in demand for services such as accommodation, transportation, hospitality, and leisure activities. This translates into profits for businesses, wages for households, and taxes for the government. Indirect economic benefits can also be achieved through 'productivity spill-over', for example, international businesses may be attracted to a tourist destination bringing new skills and ideas, influencing local providers.

The links that Croes and Ridderstaat identify between TS and HD are similarly direct and indirect. TS can have a direct impact on HD because it can provide the economic resources on which HD depends. Indirectly, having a healthier and more educated workforce as a result of HD can lead to increased productivity.

## POLAND CASE STUDY

Croes and Ridderstaat use Poland as a case study to examine this theoretical background.

...COMPARATIVE ADVANTAGE THEORY DOES NOT ADEQUATELY ADDRESS THE NATURE OF TS, OR THE ISSUES FACED BY TRANSITION ECONOMIES.





Poland was one of the first of Eastern Europe's transition economies, moving from a centrally planned economy to a market economy. Tourism has been an important source of foreign exchange since Poland became a democracy in 1989. Within ten years, the country had become the eighth most visited in Europe, leading the World Tourism Association (WTO) to refer to it as Eastern Europe's 'tourist tiger.'

By 2018 the World Travel and Tourism Council (WTTC) estimated that tourism represented 737,000 jobs, or 4.5% of Poland's workforce, and US\$26.3 billion or 4.5% of its total economy. Tourism growth has been uneven over time: initially significant, diminishing in the 1990s, and then growing by around 4.2% a year from 1995. Most international visitors come from Germany and the Baltic States.

Before the collapse of communism, tourism in Poland was mostly domestic. The development of international tourism was spearheaded by small private sector providers such as family-run accommodation facilities. International tourists were attracted by the country's rich cultural heritage and folklore traditions, as well as the natural beauty of its countryside.

### METHODOLOGY

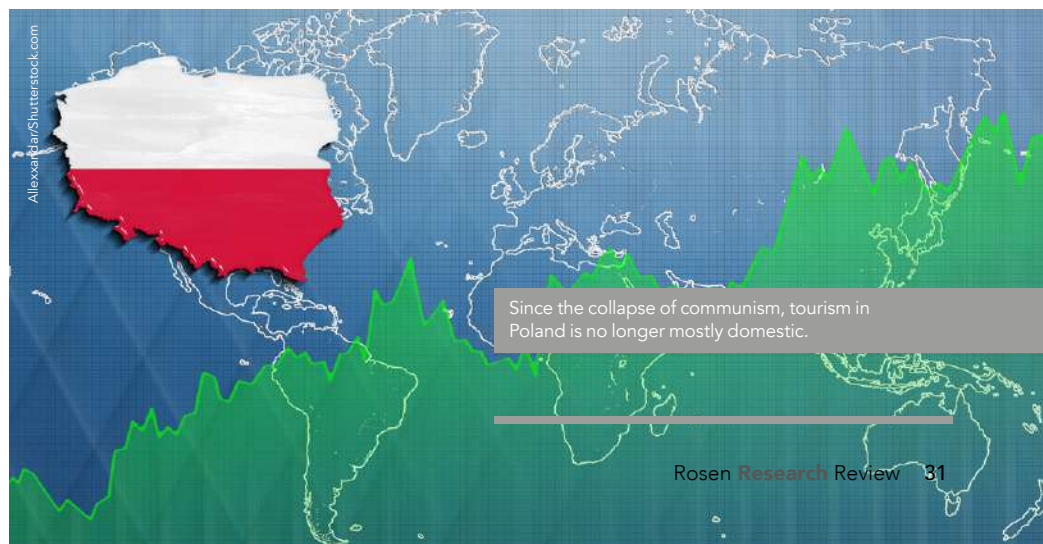
Croes and Ridderstaat formulated four hypotheses to investigate the relationship between TS, economic and human development. These were:



Tourism specialization is linked to economic growth through the increased demand for services, including leisure activities.



International tourists are attracted to cultural heritage and traditions, as well as natural beauty.



Since the collapse of communism, tourism in Poland is no longer mostly domestic.





Tourism specialization (TS) is an economic model that 'includes tourists engaging in consumption activities.'



International businesses are attracted to tourist destinations, influencing local providers with new skills or ideas.

1. TS has a non-linear effect on economic development;
2. TS has a non-linear effect on human development;
3. Economic development has a positive effect on human development;
4. Human development has a nonlinear effect on economic development.

The links between TS and economic growth were determined using a translog production function to analyse the relationships between tourism inputs and outputs. The translog production function is used in econometrics as a way of expressing the relationship between

Bank, International Monetary Fund, World Travel, and Tourism Council, and the United Nations Development Program. Croes and Ridderstaat used data from the United Nation's Human Development Index as a proxy to measure HD.

#### FINDINGS AND IMPLICATIONS

Croes and Ridderstaat's research has four essential conclusions.

They found that the link between tourism specialization (TS) and economic growth is not self-evident, and TS has only a short-term effect on economic growth. In addition,



Although the study is based on Poland, the implications apply to other transition economies.

Croes and Ridderstaat argue that the study's findings have theoretical implications and practical implications for developmental policy.

Two testable theoretical propositions are that 'capability expansion (HD) occurs directly through TS,' or that 'capability expansion only happens indirectly through TS by way of economic growth.'

In addition, Croes and Ridderstaat identify two options to extend capabilities in Poland: a 'strong policy emphasis on tourism development'; and improved hospitality education. Refreshing tourism development policy should lead to an increase in international tourism and tourist spend, which in turn should lead to a positive impact on the economy and HD. Renewed emphasis on hospitality education should address the 'skills mismatches' the industry has experienced as young and highly educated Polish workers left to work abroad, creating labor market gaps at home.

Croes and Ridderstaat explain that the second option would entail identifying 'the proper balance' between TS as a source of jobs and personal incomes and as a trigger for the increase in public spending on public services such as health and education. This option is in line with the study's theoretical background regarding human development as being about much more than a growth in household income.

While Croes and Ridderstaat's study is based on Poland, they argue that its implications are relevant to other transition economies such as Hungary, Bulgaria, and Romania. Its testable propositions could also be applied to other categories of countries, such as small islands and developing and developed countries.

## REFRESHING TOURISM DEVELOPMENT POLICY SHOULD LEAD TO AN INCREASE IN INTERNATIONAL TOURISM AND TOURIST SPEND.

two or more inputs, for example, physical capital or human labor, and the output that can be produced. Croes and Ridderstaat adapted the equation from Holzner's model to include a nonlinear approach, thus allowing for scenarios that could explain how economic development shapes HD.

Four proxies were used to measure TS: tourism receipts to GDP ratio, the total contribution of travel and tourism to GDP, tourism receipts as export percentages, and tourism arrivals as a percentage of the total population. Data sources were the World

human capital and investments and their interaction with TS has a negative effect on economic growth.

The third finding is that human capital's relationship with economic growth is U-shaped—an upturn follows a decline in economic growth, and the same pattern is reflected in the relationship between human capital and HD. Finally, there is only an indirect link between TS and HD, with economic growth appearing to be responsible for the expansion of HD with significant short- and long-term positive effects.



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Robertico Croes and Dr. Jorge Ridderstaat investigate transition economies and how tourism specialization, economic growth, and human development are interlinked.

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## PERSONAL RESPONSE

**Your research was conducted before the war in Ukraine. Is there anything that Poland and other transition economies in Eastern Europe can do to mitigate its effects on tourism?**

While the message should be that Poland is a safe destination to visit and to enjoy your vacation, unfortunately geopolitics seems to be a danger at this moment for tourism promotion. The geopolitical risk most probably will affect tourism consumption and the economic performance of the destination. Destination managers should design aggressive recovery marketing strategies to stress the safety and attractiveness of the destination. Crisis management plans are essential during these trying times.

## Dr. Robertico Croes



Dr. Robertico Croes is a Professor of Tourism Economics and Management at the UCF Rosen College of Hospitality Management. He is the editor of the *Rosen Research Review*. His research interests are in Tourism Economics, Human Development, Poverty, and Tourism Management with a special interest in small and developing economies.

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## Dr. Jorge Ridderstaat



Dr. Jorge Ridderstaat is currently an Assistant Professor at the UCF Rosen College of Hospitality Management. Previously, he worked as an economist for some 20 years at the Central Bank of Aruba (CBA). His primary research interest focuses on investigating novel factors that impact tourists' demand for goods and services.

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HD goes beyond economic position, and includes the expansion of valuable life options.

# TECHNOLOGY AND HOSPITALITY EDUCATION—PERFECT PARTNERS

By Susan Vernon-Devlin, Manager, Communications and Marketing, UCF Rosen College of Hospitality Management and Fred Okumu, Director of Information Technology, UCF Rosen College of Hospitality Management

*Light Board recording, Microsoft HoloLens, Teams, and Zuddl are just a few of the technology advancements on the campus of the #1 college in the nation for hospitality education and research. It's not just hardcover textbooks, library study sessions and classroom lectures when it comes to educating the future leaders of the hospitality industry, as they prepare for global careers. The tools for teaching have gone high tech.*

If you're expecting traditional ivy-covered walls, lecture halls designed to seat hundreds, textbooks that weigh a ton, and stodgy professors, that's not what you'll find on the campus of UCF Rosen College of Hospitality Management. Built in the heart of hospitality: Orlando, Florida, the college—one of the 12 at the University of Central Florida—looks more like a resort than an institute for higher education. Yes, the college uses traditional teaching methods like lectures to educate the more than 3,000 undergraduate and graduate students who attend Rosen College, but there is so much more to discover here. The education offerings have evolved to meet the demands of a changing industry, the expectations of its students who were born and raised in the era of mobile devices, and the technological advances that proliferate all sectors of the professional job market.

In the past 12 months, UCF Rosen College has added a plethora of technology to its roster of tools to enhance the education experience. Among them are:

- **Lightboard Recording Studio Package** is a dedicated studio for producing instructional video micro-lectures. A Lightboard is a

sheet of tempered 'StarPhire' glass, custom produced for the highest level of clarity possible, edge-lit with LEDs, and mounted on a sturdy frame. When the glass is written on using a fluorescent marker, the ink will glow and become plainly visible. A camera on the other side of the glass records the video while reversing the frames to make the text readable. As a result, from the teacher's point of view, he or she is writing on a surface analogous to a chalkboard while facing a camera. From the student's point of view, the teacher makes eye contact while writing in midair.

- **Microsoft Teams Calling Telephony** is an effective cloud-based Voice Over Internet Protocol, or VOIP, as its commonly known, and is a calling and messaging solution that enables faculty and staff to work from anywhere, from any device, desktop, laptop or mobile device.
- **Theatre Lighting** – Through industry partnerships with Entertainment Technology Partners (ETP) and its parent company LMG, the college has been able to add modern theatre-style lighting in the Darden Auditorium to enhance the classroom



experience for the Entertainment and Event Management degree programs. This has also allowed us to offer customized stage and room lighting to our guests, thereby enhancing their event experience. With the new lighting, the classes that utilize the auditorium have enjoyed an alumni festival musician in a performance atmosphere and an entertainment management producer who was able to demonstrate some of the techniques he uses on the road.

- **Zuddl App** – In June of 2021, we hosted our first hybrid experience, the alumni event Hospitality Knight, on Zuddl. Zuddl is an interactive cloud-based event platform that allows for avatars to stand in for invited



Monthly Rosen College Research Colloquiums look at global issues affecting the hospitality industry.



guests in virtual reality spaces so lifelike, they look like the real thing. We also hosted a virtual career fair in spring 2022 using Zuddl. This robust event platform enabled us to build a custom branded event that provided opportunities for more than 50 employers and hundreds of students to meet, interview, and host workshops. The Zuddl based career fair was in addition to our traditional onsite event.

- **Microsoft Surface Hub** is a sleek interactive live whiteboard with video conferencing capabilities. The Hub is a great mobile solution for small group video conferencing sessions, and because it integrates into the Microsoft Teams platform, it allows for file sharing internally. The Hub is basically a virtual office on wheels. It brings together whiteboarding, video conferencing and projection, and integrates seamlessly with Windows 10, Microsoft Teams, Office, OneNote and Universal Windows.
- **Microsoft HoloLens** – In collaboration with other UCF colleges, Rosen College acquired these devices for faculty involved in research activities related to A-I and simulations. The HoloLens is a pair of mixed reality smart glasses developed and manufactured by Microsoft. HoloLens was the first head-

mounted display running the Windows Mixed Reality platform under the Windows 10 computer operating system.

The college has also invested heavily in instructional technology to ensure our faculty and students continue to have the best teaching and learning experiences:

- Webcams have been installed in all lecture spaces and conference rooms to accommodate various teaching modalities and pedagogies.
- Video conferencing software such as Panopto and Zoom are also being used for remote instruction and learning, which allows for classes to be conducted at flexible times, day or night. This helps accommodate the schedules of students who work, and faculty who conduct research in their chosen fields of study in addition to teaching.
- Software upgrades with an emphasis on productivity and research software have been made both in the student computer labs and the graduate studies suite computers which are used heavily by our Ph.D. students.
- Our new Cooking Demonstration Lab is also in heavy use. It comes equipped with custom

cooking ranges, plus flexible multimedia technologies such as PTZ cameras, which allow the operator to pan, tilt and zoom the robotic video cameras to show various angles and image formats during a learning experience. New microphones, Creston system integration and wall displays have also been added to the lab. Since the installations, we've partnered with faculty from other colleges and professional associations for creative and innovative cooking demonstrations and courses, such as culinary medicine. The lab will also be used this summer during the [Health Meets Food](#) conference, June 9-12.

All the great tech was not relegated simply to classroom settings. We have upgraded our faculty and staff computers to high performance PCs with the most current Microsoft operating system. Software upgrades have included administrative, productivity, and research software. Many faculty and staff members also received mobile computing devices, laptops and tablets: essential tools for remote learning and administrative tasks.

While adding all this technology to the college, the Information Technology team continues its green initiative when it comes to the products used in our printers. The team continues to pursue environmental sustainability efforts using soy-based printer toner cartridges and server infrastructure virtualization. You can learn more about the university's sustainability programs on the [website](#).

The classroom of the future exists at UCF Rosen College. The investment made in the technology upgrades demonstrates why the college is #1 in the nation and #2 in the world when it comes to hospitality education and research.



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Rosen Research Focus | Arthur Huang

# GREAT EXPECTATIONS

Are there career transition prospects for hospitality and tourism workers?

*Dr. Arthur Huang and Mr. Mark Baker of the UCF Rosen College of Hospitality Management explored skill and workforce development for the services industry, specifically examining the hospitality and tourism sector. Their study uncovered that hospitality and tourism workers possess the soft skills required across various industries. However, while soft skills can support career transitions, the hospitality industry and its workers should invest in developing more technology-focused skills to achieve greater career flexibility, advancement, and resilience.*

**T**he COVID-19 pandemic and its aftermath have significantly impacted the tourism and hospitality sector. Before the pandemic, hospitality and tourism supplied nearly 330 million jobs worldwide, but that number has diminished substantially since the pandemic. After the industry reopened and began to recover, many hospitality and tourism workers considered alternative career opportunities. Career transitions have become more commonplace as individuals continue to reevaluate their strengths, interests, and career

trajectories. Historically, hospitality and tourism workers have faced fundamental challenges in an increasingly digitally automated economy. For example, research has found that only 26% of hospitality and tourism workers have attained undergraduate degrees or higher-level education. On-the-job training is also limited, with 17% of workers receiving no training and 49% receiving only short-term training. Given the lower level of education across the industry, hospitality and tourism workers should focus on enhancing their practical skills and abilities to augment their career mobility and resilience.

## THE RESEARCH

Dr. Arthur Huang and Mr. Mark Baker from UCF's Rosen College of Hospitality Management explored O\*NET, a comprehensive skill taxonomy database, to better understand the career transition prospects for entry-level hospitality and tourism workers, based on skill and ability overlaps across occupations and industries. The study's primary objective was twofold. First, the authors explored research themes regarding skill training and career development from the previous decade. Second, an exploratory analysis was conducted to create the SWAT (Skills, Work activities, Abilities, and Technology skills) profiles for representative positions from different industries.

Using a set of Boolean strings to design search phrases, including terms such as 'career' or 'training,' Dr. Huang and Mr. Baker narrowed down the results to peer-reviewed studies published during the previous decade to focus



INDIVIDUALS ARE  
NOW SEEKING  
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David Tadevosian/Shutterstock.com



Hospitality and tourism workers face challenges in the increasingly digitally automated economy.

on the most recent and relevant discussions. From there, they categorized the results into three broad themes. They found several themes related to skill/competency training, career change/barriers in tourism and hospitality, and education programs. Ultimately, the researchers uncovered a paucity of literature on career development, enhancement, and transition in the hospitality and tourism literature. Given their results, the authors recommended that further research explore career development paths and skill enhancement for hospitality and tourism workers.

### THE SWAT PROFILES

The researchers further leveraged the O\*NET database to identify which skills were

associated with entry-level hospitality jobs and in-demand occupations such as business intelligence analysts, nursing assistants, and advertising sales agents. Desk clerks and waiting staff were chosen as the hospitality and tourism industry representatives, given that these are entry-level roles. The SWAT profiles for these positions were then compared against entry-level roles from other industries.

The authors discovered a significant overlap of skills between jobs in and out of the tourism and hospitality industry, such as basic spoken and written language skills, deductive reasoning ability, and speech recognition. There was also considerable overlap between the SWAT profiles of the

jobs based on interpersonal skills, such as communicating with supervisors, peers, or subordinates, and establishing or maintaining interpersonal relationships.

When looking at specific hospitality and tourism roles, the researchers found that desk clerks had many overlapping 'abilities' (e.g., *speaking and writing skills*) with other roles but fewer overlapping 'work activities' (e.g., *coordinating the work and activities of others*). The role with the greatest SWAT overlap with desk clerks was real estate agents, with a staggering 54 out of 56 overlapping SWAT profile characteristics.

Waiting staff have greatest overlap with nursing assistants, with skills such as 'social perceptiveness'.



Dmitry Kalinovsky/Shutterstock.com

The researchers found that waiters/waitresses had the greatest SWAT overlaps with nursing assistants. The most significant overlap between these roles came from the 'skills' section of the SWAT profile, which includes *social perceptiveness and coordination*. Waiters/waitresses demonstrated the least overlap with other jobs in the 'technology skills' area, including *spreadsheet, presentation, and word processing software*.

Based on the prototype from this research, the authors developed a user-friendly visualization tool named 'Skill Gateway' that can visualize the occupational relationships based on specific skill relationships. Figure 1 illustrates the significant overlap of skills between frontline hospitality jobs and health services management based on the importance of skills and skill levels, visualizing the potential for career advancements.

## THE SOFT SKILLS OF HOSPITALITY WORKERS CAN GENERALIZE TO OTHER INDUSTRIES; HOWEVER, INDIVIDUALS SHOULD INCREASE THEIR TECHNOLOGY-RELATED SKILLS TO ENHANCE THEIR PROSPECTS.

### IMPLICATIONS OF THE RESEARCH

This research highlights the need for research investigating cross-industry, skill-based career development in the hospitality and tourism industry. In addition, the authors emphasize the need for more research and discussion about career transitions, skill training, and education programs in tourism and hospitality.

Furthermore, this study contributes to the existing career development research, emphasizing the importance of technical skill development for hospitality and tourism workers. Research suggests that the global workforce is becoming more technologically orientated; therefore, workers would benefit from gaining more technical skill training.



tamara bogucheva/Shutterstock.com

Workers need support in developing their technical skills, so as to enable career progression.

Mapping the career development and transition potential for different tourism and hospitality roles can significantly benefit individuals seeking professional development inside and outside the hospitality and tourism industry. In the wake of the COVID-19 pandemic, more individuals are looking for work and considering career transitions, making it an opportune time for further research.

The findings also demonstrate the critical skill overlap between hospitality and tourism roles and jobs in other industries. The authors' results prove that research into hospitality and tourism workers' specific workplace skills and abilities can be informative and used to develop practical career transition models.

Dr. Huang and Mr. Baker indicate that research regarding technology-oriented skills and abilities for skill-based career transitions in tourism and hospitality must continue and accelerate.

The authors recommend that managers identify particular avenues to assist workers in developing their technical skills to broaden their employment opportunities; this may include coding bootcamps or massive open online courses (MOOCs). Such options may enable workers to advance their careers both inside and outside their current industry. Given that, on average, hospitality and tourism workers are at a relative wage disadvantage compared to other sectors, employers must offer valuable educational and career development opportunities for their workers.

The researchers also recommend that future vocational development models explore how hospitality and tourism workers can overcome career boundaries. In addition, future work must also consider career development issues that certain populations, such as women, face in the hospitality and tourism industry.

Overall, the study highlights gaps in the current literature surrounding career development and transition in the hospitality and tourism industry, and the need for further research in the area. Additionally, the authors demonstrate how to leverage publicly available skill taxonomy data and data visualization methods to gain insight into this crucial issue with broad societal impacts.



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

The authors examined academic literature and the O\*Net database to identify how the skills and abilities of hospitality and tourism workers overlap with the skills and abilities of workers from other industries.

## REFERENCES

Huang, A, Baker, M, (2021). Exploring skill-based career transitions for entry-level tourism and hospitality workers. *Journal of Tourism and Hospitality Management*, 48, 368-373.

## CO-AUTHORS

Mr. Mark Baker is a research assistant at UCF's Rosen College of Hospitality Management. His research interests include human capital analysis, organizational management, and applications of emergent technologies in the hospitality and tourism industry.

## PERSONAL RESPONSE

### **Can research establish data-supported and human-facilitated skill-based career transition models for each entry-level hospitality and tourism role?**

/// The answer is yes. This research examines career transition opportunities by examining overlapping skills across occupations. The findings can uncover the data-driven insight about each entry-level hospitality and tourism roles' potential career development prospects.

## Dr. Arthur Huang



Dr. Arthur Huang has an interdisciplinary background in engineering and tourism research. He is affiliated with UCF's Rosen College of Hospitality Management and College of Engineering and Computer Science, focusing on smart cities and smart tourism. His research interests include artificial intelligence and its applications in the tourism industry, the future of work, and workforce development. He has led multiple research grants funded by federal and state agencies.

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## ONET - Skill Visualization

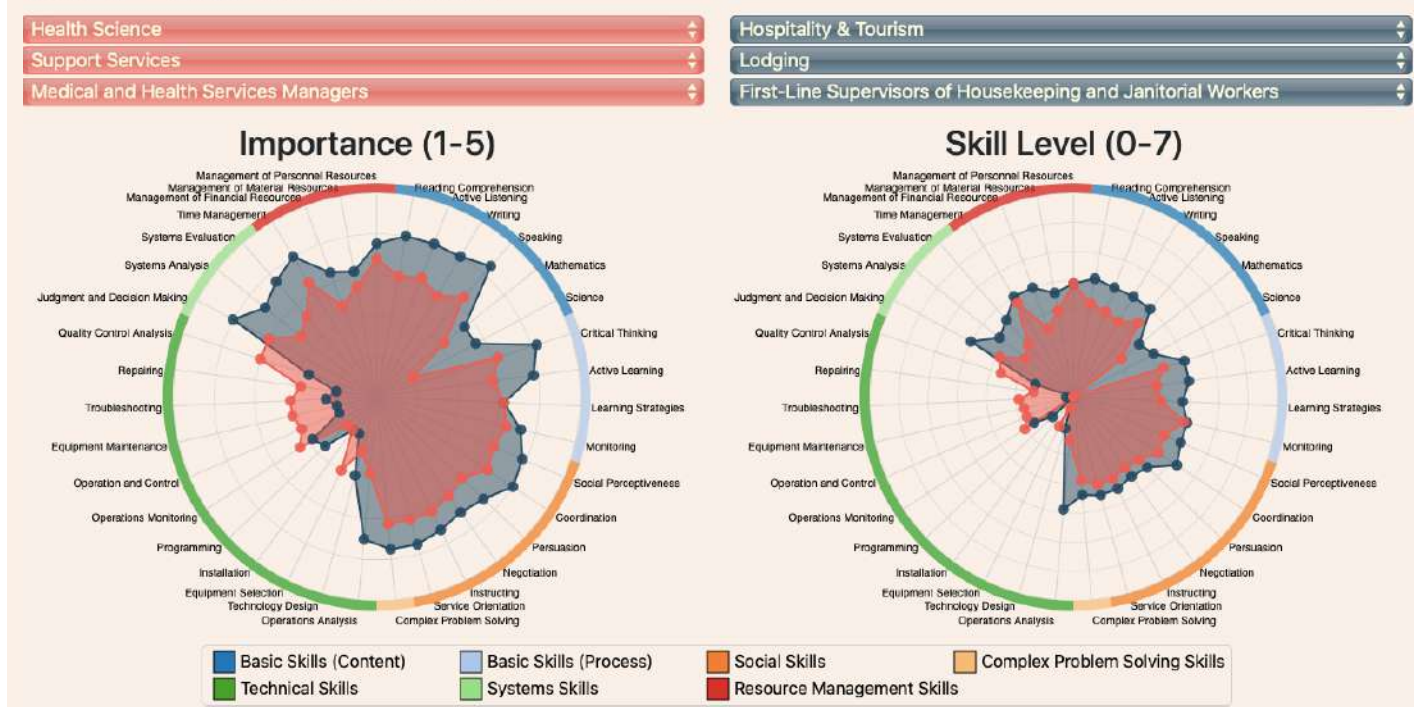


Figure 1: A snapshot of the SkillGateway tool developed by Dr. Huang's research team.

# STUDENT ENGAGEMENT AND SATISFACTION WITH ONLINE LABS

*Hospitality and tourism is a 'people business.' So what happened when the need for social isolation as a result of COVID-19 forced hospitality educators to rethink their pedagogical strategies and move previously face-to-face courses online? In one of the first studies of its kind, Marissa Orlowski, Cynthia Mejia, Robin Back and Jason Fridrich from UCF Rosen College of Hospitality Management researched student engagement and satisfaction in online culinary and beverage labs.*

**T**he COVID-19 pandemic forced educators around the world to rethink their teaching strategies as the need for social distancing meant that courses had to move online. Hospitality and tourism education was no exception, and important lessons have been learned, both positive and negative, to inform how courses in the discipline are taught, now and in the future.

New research from UCF Rosen College of Hospitality Management focuses on the specific experience of culinary and beverage laboratories (labs). Going online posed a particular challenge for such courses which, before the pandemic, were mostly based on experiential, 'hands-on', classroom-based learning in food preparation and wine and spirits tastings.

Published in the *Journal of Hospitality & Tourism Education*, this important new study focuses on the role that 'social presence' plays in predicting students' levels of engagement and satisfaction with online culinary and beverage labs.



During the pandemic, many practical courses moved online.

The research is grounded in the Community of Inquiry (Col) and social constructivist approach to learning developed by early 20<sup>th</sup> century philosophers and psychologists. According to this theoretical framework, learning is socially situated and involves the meaningful interaction of a community of learners.

More recently, Canadian educational psychologist Randy Garrison has developed the Col model, arguing that three 'presences' come together to create the educational experience. These are: social presence (students' ability to establish relationships); cognitive presence (students' ability to acquire knowledge through reflection and purposeful discourse); and teaching presence (the facilitation of social and cognitive presence to create the right environment for students to achieve their learning expectations and capabilities).

Based on this theoretical background, the team had two research questions: is there a relationship between a student's social presence and their satisfaction with the online culinary or beverage lab, and does engagement serve as the underlying mechanism linking students' social presence and their satisfaction with it?

## STUDY SAMPLE AND METHOD

Participants in the study were recruited from three undergraduate culinary and beverage lab courses conducted in summer 2020 by a university in the south-eastern U.S. The courses had multiple sections taught by different instructors, and all had changed from face-to-face to online instruction as a result of the pandemic.

The six-week culinary management course consisted of a daily virtual lecture and virtual





The research was conducted by means of a three-section survey: quantitative questions to assess social presence, course engagement and course satisfaction; qualitative questions to explore student interaction; and questions to probe demography. Exploratory factor analysis (EFA) was used to analyse quantitative data and Maxqda software was used to analyse the qualitative data.

## RESULTS

The use of both quantitative and qualitative research methods helped to reveal the complexity of the relationship between students' social presence, emotional and cognitive engagement, and their satisfaction with their online courses.

Quantitative analysis revealed that social presence had a positive effect on both emotional and cognitive engagement. Emotional and cognitive engagement similarly was positively related to course satisfaction. Social presence was also indirectly related to course satisfaction through emotional and cognitive engagement.

Analysis of the results of the qualitative questions showed that overall, students enjoyed their online courses' design and content, and the way in which their instructors presented the lessons. One student commented: 'The course resources were easily accessible and the professor made the course very easy to navigate.'

However, unsurprisingly, students also felt that they had had little student-to-student interaction and few opportunities for social engagement. As one student said: 'It was more difficult to communicate or interact



lab component, with related PowerPoint lectures with voice-overs, pre-recorded cooking demonstrations, videos, online quizzes, and discussions led by a Chef-Instructor.

Two beverage courses of the same length (a wine course and a spirits course) included pre-recorded lectures and virtual tastings delivered via PowerPoint lectures with voice-overs along with related readings, videos, online games, quizzes, and discussions. There were also optional online 'meet and greet' sessions using Zoom to facilitate student engagement with each other and with their instructor.

## SOCIAL PRESENCE WAS INDIRECTLY RELATED TO COURSE SATISFACTION THROUGH EMOTIONAL AND COGNITIVE ENGAGEMENT.

A total of 211 undergraduates enrolled in the courses. All were sent an email inviting them to take part in the mixed-methods follow-up research, and of the responses received, 156 were analysed. The majority of respondents were females aged between 22 and 25, consistent with the population under investigation.

online than in person.' This was backed up by another who said: 'Since we only had one course discussion, I wasn't able to get to know other students.'

For the most part, the students in the culinary lab course and beverage lab courses reported similar experiences, but there were

Study participants were recruited from three undergraduate culinary and beverage lab courses.

Dr Robin Back delivering a beverage class.



differences regarding instructor interaction, with beverage students reporting higher levels of satisfaction than culinary students.

While the data generally revealed that students were satisfied with their courses, many agreed that both the culinary and beverage courses would have been better in a hands-on setting. In addition, they would have liked more opportunities to engage with their course and with each other, and/or with their instructor.

#### IMPLICATIONS

Although the world is opening up and trying to find a 'new normal' which allows us to live alongside COVID-19, it is unlikely that many institutions of higher education will return

satisfaction with online food and beverage labs, but it was indirectly related through emotional engagement and, to a lesser extent, cognitive engagement. In addition, the connections and interactions that primarily manifested social presence were not peer-to-peer, but between students and their instructors.

The research shows that, as courses progressed, Zoom meetings and pre-recorded lectures enhanced the role of instructors who became proxies for social presence. To quote the study: 'Student interactions were directly connected to instructor quality / frequency interactions, revealing the symbiotic relationship in well-designed courses, demonstrated in prior Col framework research.'

## ZOOM MEETINGS AND PRE-RECORDED LECTURES ENHANCED THE ROLE OF INSTRUCTORS WHO BECAME PROXIES FOR SOCIAL PRESENCE.

to fully face-to-face instruction for some time. This study has important theoretical and practical implications for long-term best practices in teaching online labs. In particular, it reveals the importance of emotional and cognitive engagement as the mechanisms by which social presence is linked to student satisfaction.

The quantitative analysis revealed that social presence was not directly related to student

In addition, the qualitative analysis revealed that, while students thought hands-on learning would have been better, they had constructive ideas about how online learning could be improved. Among those suggested by culinary students were the inclusion of Zoom / synchronous virtual meetings as students cooked at home, and the use of discussion platforms for students to discuss family recipes. Suggestions from beverage students included students selecting a wine

and delivering a live virtual presentation to the class, and instructors providing online discussions after virtual tastings.

The research also showed that students enjoyed the online labs' design and delivery, and appreciated the flexibility of online learning. Not only did their re-fashioned courses allow for asynchronous learning, they also enabled students to watch the online content as many times as they needed to consolidate their understanding.

However, by not undertaking experiential learning in face-to-face lab settings, students missed tactile interaction with the food or beverages, as well as the kind of peer support that helps to address potential anxieties when faced with something new.

Orlowski, Mejia, Back, and Fridrich suggest that instructors could make use of the Col framework to evaluate their own online course delivery, for example by means of online student surveys. The researchers comment: 'As with the current study, instructors may wish to focus solely on social presence, however, for a more detailed evaluation, teaching presence and/or cognitive presence could also be included.'

The researchers acknowledged that their sample was relatively small and data were collected in a summer semester when fewer students were enrolled. Future research could attempt to replicate their findings with a larger sample.

#### GOING FORWARD

COVID-19 has forced a paradigm shift in pedagogy, as in so many other areas of people's lives, including, and not limited to, their working, learning, training, and development. The crisis has accelerated the evolution of different pedagogical strategies and the move to online learning has led to a transformation in our understanding of what it means to enroll in an educational course.

The Rosen College researchers' study is therefore important and timely. As its authors conclude: 'The results offer a path forward regarding course design opportunities to enhance social presence and engagement as a means of stimulating online course satisfaction in formerly interactive settings.'



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Cynthia Mejia and the team researched student satisfaction and engagement with online courses during COVID-19.

## REFERENCES

Orlowski, M, Mejia, C, Back, R, and Fridrich, J. (2021) Transition to online culinary and beverage labs: determining student engagement and satisfaction. *Journal of Hospitality & Tourism Education* Volume 33, issue 3 [doi.org/10.1080/10963758.2021.1907193](https://doi.org/10.1080/10963758.2021.1907193)

## PERSONAL RESPONSE

### ***How did instructors and students respond to the pandemic changes?***

// As professional educators, hospitality instructors worked hard in the pandemic, transitioning courses into the online modality, while ensuring that digital learning environments continued to provide the high quality instruction that students expect. Given the experiential and hands-on focus of traditional lab courses, the data showed that with careful course design, the students were satisfied with the transition to the online modality. //

### Dr. Cynthia Mejia



Dr. Mejia has over 20 years of industry experience in F&B and hotel operations management, primarily working for luxury hotel brands both in the U.S. and in Singapore. Her areas of research include hospitality human resource management, cross-cultural organizational management, technology acceptance, empathy across the services industries, and hospitality education.

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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 levels.

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### Dr. Jason Fridrich



Dr. Jason Fridrich is a 35-year veteran of the food service and restaurant industry. He has extensive front and back of house experience, with stops in New York city, Charleston South Carolina, Miami, Boca Raton, and Tampa Florida. He is an Associate Lecturer at The Rosen College of Hospitality Management.

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### Dr. Marissa Orlowski



Dr. Orlowski has 14 years of hospitality management in food & beverage operations. Her areas of expertise include food and beverage consumption, packaging, and presentation; responsible alcohol service; employee compensation; and quantitative research methods. She is a Senior Associate Editor for the *International Journal of Contemporary Hospitality Management*.

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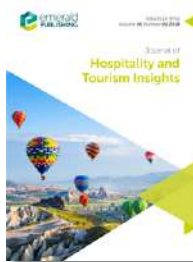
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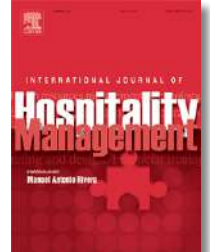
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# DICK POPE SR. INSTITUTE FOR TOURISM STUDIES



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.

# RISK PERCEPTIONS AND MOTIVATIONS AROUND RESTAURANT DINING DURING THE COVID-19 PANDEMIC

*The COVID-19 pandemic has caused devastating financial decline within the restaurant industry. Dr. Elizabeth Yost from UCF Rosen College of Hospitality Management and her collaborator have undertaken research to understand what motivates customers in this uncharted landscape. They have developed a new theoretical model which focuses on the impact of customer risk perceptions and optimistic bias. Other influencers are personality traits and factors such as customer loyalty and trust, which Dr. Yost argues can be maintained through transparency of information.*

**A**t the close of 2020, The National Restaurant Association reported that the restaurant industry was \$240 billion below pre-pandemic sales estimate. Loss of business due to the COVID-19 pandemic has led to unprecedented restaurant closures, with many businesses struggling to rebuild their customer base.

Researchers have noticed these devastating effects and are keen to find ways to help the restaurant industry recover. A major area of focus is on the 'post COVID-19 customer'. The outbreak of COVID-19 has led to consumers exhibiting extreme caution when considering dining out. Safety has now become a crucial factor in dictating dining habits, as there has been a dramatic shift in consumer behavior. In response to these changes, Dr. Elizabeth Yost and her collaborator from UCF Rosen College of Hospitality Management have undertaken research that aims to understand motivations of these 'new customers' in a post-pandemic landscape.

## CUSTOMER RISK PERCEPTIONS AND MOTIVATIONS

Previous research has been conducted into diners' risk perceptions, but very little has taken place during the time of a global pandemic. Risk is an important construct to research within this context because it underpins why customers have changed their dining

habits. Prior to the pandemic, safety was not considered a top concern when eating in a restaurant; factors such as the ambiance, cost, convenience, food options, and cleanliness were far more important. The heightened sense of risk felt during the pandemic was intensified in restaurant settings by the concern that the virus could spread through food preparation and handling. As a result, customers have become equally as concerned about what goes on behind the closed doors in addition to front of house safety measures.

Where somebody gets their information from will also affect their risk perception, as some news outlets provide polarizing views on the validity and danger of the COVID-19 pandemic. If a person believes that the risk is genuine and could be spread through food consumption/production, they may well choose to avoid restaurant settings.

## STUDY AIMS AND DESIGN

An important feature of the research was to place the customer at the center of the study;



Restaurants have had to undertake many safety measures to reassure customers.

to understand their motivations to eat in a restaurant—or not—after the pandemic. The researcher's goal was to develop a conceptual framework which could help businesses to understand which factors are influencing customer decision making. This research is intended to help guide restaurants through the process of maintaining and rebuilding their customer base, ensuring their continued financial viability in this difficult climate.

Dr. Yost and her collaborator undertook a literature review to understand more about the constructs that shape customer motivations. They investigated these motivating factors in relation to well-established concepts such as the Affective Decision Making model, Meta-theoretic Model of Motivation and Optimism Bias Theory.

*IT IS EMPHASIZED BY DR. YOST THAT TO SURVIVE AND REBUILD BUSINESS, RESTAURANTS MUST DEVELOP AND MAINTAIN A RELATIONSHIP OF TRUST WITH THEIR CUSTOMERS.*





During the pandemic, customers' affective motivations may drive their desire to dine in a restaurant, whilst their need for accuracy around control of the virus and restaurant sanitation processes encouraged them to stay at home. Dr. Yost and her collaborator believe ADM helps to explain why customers are seeking greater accuracy in the information provided by restaurants around their food safety procedures.



Customers' individual personality traits influence their behavior and decision making.

## META-THEORETIC MODEL OF MOTIVATION

The meta-theoretic model of motivation provides another perspective on customer behaviors. This model was developed to take into account individual differences, with the ethos that not everyone will fit the mold of an 'average customer.' The meta-theoretic model accounts for how our disposition and personality traits influence our behavior within a specific environment. Previous research suggests that we all have multiple personality traits which combine in differing levels to influence our behavior and decision making; these are 'openness to experience, conscientiousness, extraversion, agreeableness, neuroticism/stability, material needs, arousal needs, and physical needs'. Therefore, it is important to identify the individual traits of customers to understand how these may influence their behavior. It has been noted that people who display a higher level of agreeableness are more likely to comply with enforced COVID-19 restrictions such as social distancing. If a person has a higher level of

## AFFECTIVE DECISION MAKING MODEL

Various factors shape a person's individual perception of risk, including their social and cultural backgrounds. Previous research suggests that we are more likely to overestimate a positive outcome in a given situation—we don't like to imagine the worst will happen to us! This theory forms the basis of the Affective Decision Making Model (ADM), which the Rosen research team defines as a 'behavioral theory of choice that explains how individuals select activities under risk.' The researchers believe that ADM can help to explain how individual behavior will be affected in a post-pandemic landscape.

ADM is governed by two types of processing: rational and emotional. Our rational processing influences the actions that we take, whereas emotional processing helps to shape and formulate our beliefs. During the pandemic, customers used rational processing to determine their risk tolerance for in-restaurant dining, weighing up positive restaurant experiences, such as excitement and satisfaction, against negative perceptions relating to the



Safety has now become a crucial factor in dictating dining habits.

risk of infection. Additionally, emotional processing is also fundamental to customer decision making. This type of processing involves two opposing impulses: affective motivation (individuals' tendency to minimise personal risk perception) and desire for accuracy (especially in terms of knowing the restaurant's safety measures, for example).



Customer trust is fostered through transparency around food safety and handling processes.

conscientiousness or neuroticism, the meta-theoretic model would indicate that they are also less likely to dine out during the pandemic.

The research team also suggests that this model highlights how being extroverted or introverted may impact upon motivations to dine out during the pandemic. Extroverts find it hard not to have social contact, which would be a strong motivator to visit a restaurant, whereas introverts find isolation less of an issue, reinforcing their motivation to stay at home. The study argues that, by understanding the varying personality traits of customers, marketers can be more effective in targeting audiences, sending communications which encourage people back into restaurants.

#### **OPTIMISTIC BIAS THEORY**

Customer risk perceptions may also be influenced by optimism bias, when people believe that their own risk is much lower than other people's. Dr. Yost and her collaborator note that this sensation of feeling at a lower risk than others is related to trust and loyalty to specific restaurants. Regular customers may feel less likely to be at risk of catching the virus in a favored eatery that they have visited many times.

Previous research around foodborne diseases in Brazil discovered that customers were more

likely to feel positively about food safety standards in a restaurant that they were loyal to and trusted. It was also found that food providers exhibited optimism bias about their own safety standards, regarding their restaurant as less risky for customers than

their competitors' establishments. In relation to the COVID-19 pandemic, optimism bias can be a useful tool for enticing customers back. However, the study emphasizes that, to maintain customer loyalty and trust with post-pandemic consumers, restaurants must be transparent and provide information around safety procedures.

#### **THEORETICAL MODEL OF CUSTOMER MOTIVATION**

The literature review conducted by the research team revealed that customer decision making is both rational and

emotional, with influence from factors such as personality traits which can affect feelings of loyalty towards specific restaurants. Based on this information, the team has developed a new theoretical model to assist restaurant businesses in understanding the motivations of customers in this post-pandemic environment. Within the model, risk perceptions and optimism bias are key components in shaping customers' decision-making processes. Other influences include individual personality traits which dictate a person's propensity towards dining out at this time of risk. This is balanced against customers' pre-pandemic trust and loyalty towards a brand or restaurant.

It is emphasized by Dr. Yost and her collaborator that to survive and rebuild business, restaurants must develop and maintain a relationship of trust with their customers. In this new post-pandemic age, trust is fostered through transparency around food safety and handling processes. There are three key areas where transparency would make the largest impact on a customer's decision-making process: supply chain disruption, transparency, and information. For example, if fresh food is no longer viable, and a switch to frozen food is required to keep up with the demand, it is important to

*DR. YOST EMPHASIZES THAT TO MAINTAIN CUSTOMER LOYALTY AND TRUST RESTAURANTS MUST BE TRANSPARENT AND PROVIDE INFORMATION AROUND SAFETY PROCEDURES WHICH MANY POST-PANDEMIC CUSTOMERS REQUIRE.*

let customers know in advance. Clarity on cooking and food preparation processes is also vital, with some restaurants opting for an open kitchen to show their working practices in action. Finally, it was considered that customers should feel comfortable and safe within the restaurant, with information being supplied about policies such as social distancing, and all diners being encouraged to follow the rules. If restaurants continue to maintain trust and loyalty through acts of transparency, there is hope for businesses within the restaurant industry to recover from this unprecedented crisis.



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Elizabeth Yost and her collaborator investigate customer motivations around in-restaurant dining after the COVID-19 pandemic.

## REFERENCES

Yost, E, Cheng, Y, (2021) Customers' risk perception and dine-out motivation during a pandemic: Insight for the restaurant industry. *International Journal of Hospitality Management*, 95. [doi.org/10.1016/j.ijhm.2021.102889](https://doi.org/10.1016/j.ijhm.2021.102889)

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## PERSONAL RESPONSE

### **How has your research helped to support post-pandemic recovery in the restaurant industry?**

“ We hope that our research inspires restaurants to look to the underlying factors that are important to their customer base, especially in the aftermath of a pandemic. By recognizing cognitive decision making on the part of potential customers, restaurant operators might place a premium on this theoretical model that emphasizes the importance of risk management and perception. We see much evidence of new in-store practices that support this framework, such as transparent and deliberate dining room activities, open kitchen options, and new safety protocols. ”

## Dr. Elizabeth Yost



Dr. Yost has vast experience in the areas of audit, ethics and compliance, and accounting and finance for the hospitality industry. She holds a PhD in Hospitality and degrees in Accounting and Finance from the Universities of Florida and Central Florida. Dr. Yost is a Certified Hospitality Accountant Executive.

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Clear communication is key to establish and maintain trust.

# CLEANING INVISIBLE MATTER IN OPEN-KITCHEN RESTAURANTS TO REDUCE THE IMPACT OF COVID-19

*Commercial cooking in indoor settings is known to produce particulate matter, a mixture of solid particles and liquid droplets which can cause acute or chronic respiratory problems. Recent studies suggest that these invisible particles also make people more susceptible to adverse health effects of the COVID-19 virus. Dr. Bendegul Okumus was joined by a team and conducted an experimental scientific study in an open-kitchen chain restaurant to determine whether the levels of particulate matter (PM) pollution were potentially harmful for both kitchen staff and customers dining at the restaurant.*

**P**roperly cleaning and disinfecting restaurants has always been important, yet it has become even more crucial after the outbreak of COVID-19. In September 2020, diners and restaurants in many states across the US were allowed to start operating at full-capacity again, but only if they followed specific rules and new hygiene-related practices.

Restaurants now need to be cleaned, sanitized, disinfected, and ventilated every day, to limit the spread of COVID-19. Additionally, customers have become increasingly conscious of the hygienic conditions of public spaces they visit, particularly restaurants, hotels, and other indoor environments, where the virus can be easily contracted.

Recent studies suggest that open-kitchen restaurants—diners where customers

can directly observe what is happening in the kitchen and how their food is being prepared—have become particularly popular after the outbreak of COVID-19. These restaurants allow people to see who is cooking their food and under what conditions, and then intervene or refuse to eat what they ordered if they are unhappy with the hygienic conditions in the kitchen.

## **PARTICULATE MATTER IN OPEN-KITCHEN RESTAURANTS**

Despite their greater transparency and perceived hygiene-related advantages, open-kitchen diners also put customers in

closer contact with the cooks and the kitchen environment. This means that customers are not only able to observe how the chefs are working and smell the appetizing aromas of the food that they are preparing, but it also means breathing in most of the fumes produced in the kitchen.

Past studies have found that commercial cooking can produce fumes that have adverse health effects on humans, as they contain what is known as particulate matter (PM) pollution. PM is a combination of micron-sized solid particles and/or liquid droplets that propagate in the air.

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Despite open-kitchens' rise in popularity, they do put customers in close contact with potential health risks.

When regularly inhaled, this invisible matter has been found to cause acute or chronic respiratory diseases, including heart and lung cancer.

The International Agency for Research on Cancer (IARC) has classed PM as carcinogenic to humans and as a significant component of harmful air pollution. Moreover, past research suggests that, due to their prolonged exposure to PM, many chefs and other restaurant staff are at higher risk of getting lung cancer and other respiratory diseases than other professionals.

During the COVID-19 pandemic, PM has become even more dangerous, as it was found to be associated with the spread of the virus and with the manifestation of its most severe respiratory symptoms. For instance, when researchers analyzed data from almost 4,000 counties in the US they found a correlation between exposure to PM pollution and COVID-19 mortality. Another study suggested that even a short-term exposure to PM increases people's likelihood of contracting COVID-19 and other viral infections.

To limit the spread of the virus and reduce its most severe manifestations, restaurant owners and managers should therefore ensure that the air in the dining area is clean and contains limited amounts of invisible particulate matter.

#### A COMPREHENSIVE FIELD STUDY

As many epidemiologists confirm that air pollution, and specifically PM, could play a role in the spread of severe manifestations of COVID-19, examining the air quality in indoor public spaces, including restaurants, is of crucial importance. Nonetheless, very few studies have tried to determine how much PM is circulating in restaurants, and none of these have focused on open-kitchen restaurants.

To fill this gap in the literature, a team of researchers from three universities in USA and Korea (FIU, UCF and KHU) carried out a study assessing the concentrations of PM in open-kitchen restaurants. Their hope was to establish a baseline assessment of indoor PM pollution in open-kitchen dining rooms, which could inform the work of both public health professionals and restaurant managers.



Installing air-filtration units in kitchens would lead to a reduction in particulate matter.

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PM levels inside the restaurant were concerningly high.

To do this, Dr. Okumus and the rest of the team conducted a series of field tests assessing the concentrations of  $PM_{10}$  and  $PM_{2.5}$ , two types of invisible matter known to cause severe respiratory diseases, inside the dining room of a chain-operated, open-kitchen restaurant. Concurrently, the team also measured the levels of PM immediately outside the restaurant, so that they could later compare the data recorded with that taken inside the dining room.

To measure the concentration of  $PM_{10}$  and  $PM_{2.5}$  both inside and outside the restaurant, Dr. Okumus and her colleagues used two portable real-time particle counters that have

higher than the Environmental Protection Agency acceptable standard. In fact, this concentration is of a level that would be concerning outdoors in any city, even the most polluted ones. The concentrations of  $PM_{2.5}$ , on the other hand, ranged between  $166.5 \mu\text{g}/\text{m}^3$  and  $631.6 \mu\text{g}/\text{m}^3$ . This is concerning, as even a 5-minute exposure to over  $500 \mu\text{g}/\text{m}^3$  of  $PM_{2.5}$  can pose serious short-term and long-term health risks.

Unsurprisingly, the research team found that the concentrations of PM appeared to fluctuate, peaking between 7 and 9 pm when the dining room was most populated, and

While there were a few moments during the day in which the concentrations inside the dining room were acceptable, throughout most of service they were alarmingly high.

### MOVING TOWARDS THE REDUCTION OF PM IN RESTAURANTS

The recent study carried out the research team provides the first empirical evidence of the extremely high PM concentrations to be found in the dining areas of open-kitchen restaurants. As exposure to PM pollution has been linked with a greater susceptibility to COVID-19, their work suggests that many open-kitchen restaurants might be unsafe, irrespective of their hygienic practices.

Interestingly, the PM concentrations recorded by the researchers were far higher than those reported by previous public health research assessing air-quality in restaurants. As none of these previous works specifically focused on open-kitchen restaurants, their findings suggest that restaurants where the dining room and the kitchen are separate could be safer for customers.

In the future, the findings gathered by Dr. Okumus and her colleagues could inform the development of effective strategies to improve the quality of air in dining rooms across the U.S., such as the installation of air-filtration and aeration systems. In addition, they could encourage public health professionals and governments to introduce new health and safety protocols specifically aimed at reducing PM pollution in restaurants.

## THE RECENT STUDY CARRIED OUT BY THE RESEARCH TEAM PROVIDES THE FIRST EMPIRICAL EVIDENCE OF THE EXTREMELY HIGH PM CONCENTRATIONS IN OPEN-KITCHEN RESTAURANTS.

also been used in previous studies focusing on PM pollution. Their air-monitoring tests were carried out in January 2019 over the course of a week, during the restaurant's 6-hour service.

### CONCERNINGLY HIGH LEVELS OF PM

The data analyses yielded shocking results, as they found that the concentrations of PM inside the restaurant's dining room were extremely high.

$PM_{10}$  concentrations ranged between  $634.8 \mu\text{g}/\text{m}^3$  and  $5,172.1 \mu\text{g}/\text{m}^3$ , which is far

therefore the cooks were preparing a greater number of meals. Before 7pm, thus during happy hour, they observed gentler spikes in the concentrations, which might indicate that fewer people were ordering food and thus less cooking took place.

When they compared these concentrations of PM to those taken outside the restaurant, the researchers found that the latter were significantly lower, meaning that the quality of the air was much better outside the dining room than it was inside it, as anticipated.



# RESEARCHERS IN FOCUS

## RESEARCH OBJECTIVES

Dr. Bendegul Okumus and her colleagues looked for invisible particulate matter that can increase susceptibility to COVID-19 in an open-kitchen restaurant environment.

## REFERENCES

Chang, H., Capuozzo, B., Okumus B., Cho, M., (2021). Why cleaning the invisible in restaurants is important during COVID-19: A case study of indoor air quality of an open-kitchen restaurant. *International Journal of Hospitality Management*, 94. [doi.org/10.1016/j.ijhm.2020.102854](https://doi.org/10.1016/j.ijhm.2020.102854)

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## PERSONAL RESPONSE

**Based on your findings and observations, what could restaurant owners and managers do to reduce their clients' exposure to harmful levels of particulate matter?**

Upon our PM pollution discovery, one of the staff said, 'I had spent hundreds of hours for months working in this polluted environment unknowingly. The worst part is that this restaurant (and many others like it) is not aware of the risk to which it is exposing their guests and employees each day. Restaurant management and diners should be made aware of hazardous PM levels and the possible effects. My deepest sympathies go out to the chefs who are likely the most exposed.' Obviously, neither full-time employees nor frequent customers of the sample restaurant are aware of this so they are advised to protect themselves from exposure by wearing a mask. Restaurant management should check the kitchen hood ventilation system to determine whether it is functioning properly. Hood ventilation is key to keeping the kitchen clean and preventing harmful PM from traveling to the dining room. The restaurants should also consider implementing new mechanical dining room ventilation systems similar to kitchen hood ventilation. The final suggestion is that open-kitchen brands consider air quality surveillance systems with smart technology that integrate HVAC with the newly enhanced ventilation systems.

## Dr. Bendegul Okumus



Dr. Bendegul Okumus has been at UCF Rosen College of Hospitality Management since 2016. Her primary teaching areas include Nutrition Concepts and Issues in Food Services and Wellness Management in Hospitality and Tourism. Her research focuses on food safety, eating behavior and habits, food and culinary tourism, food waste and health & wellness in hospitality and tourism.

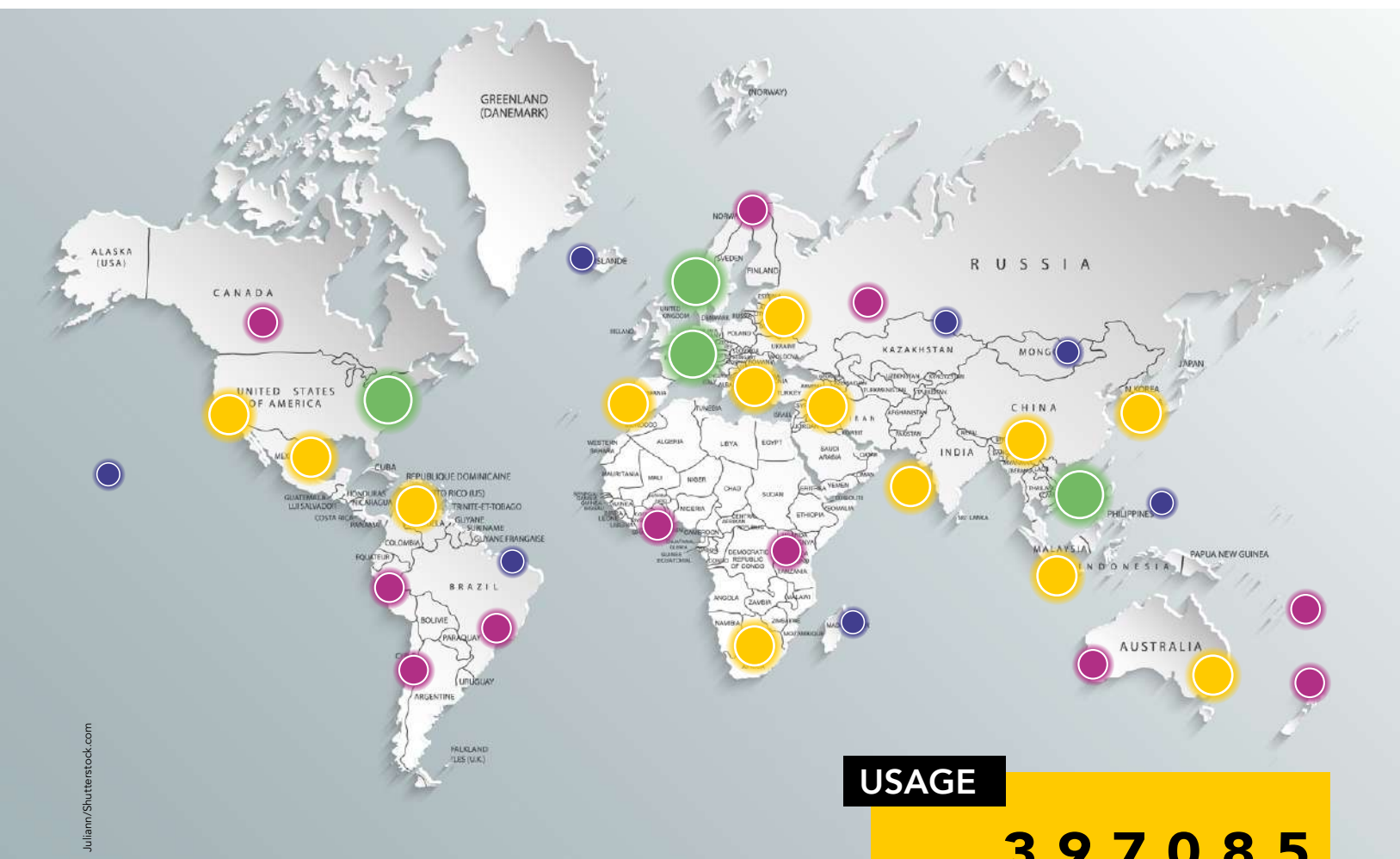
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