

Chapter 12

CHINESE TOURISTS AND THE SUN Implications for Designing Experiences

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Abstract: Consistent exposure to sunshine with high ultraviolet values has significant negative effects on human skin. Key risks include melanoma and the rapid onset of signs of ageing. For Chinese, these are viewed as undesirable, because their genetic legacy predisposes them to greater numbers of skin blemishes and because darker shades are culturally and socially viewed as less attractive. Properties in sunshine locations may need to modify aspects of their infrastructure and service delivery to meet the needs of the globally influential Chinese market. Shaded spaces, new activities, scheduling of experiences in the early morning, evening and at night, are all a part of the required innovations in experience design. **Keywords:** Ageing and sunshine; sun and sea destinations; Chinese female tourists; skin tones; infrastructure design; scheduling

INTRODUCTION

The influence of sunshine on the topics of physical attractiveness, beauty, and the color of human skin might not seem like issues of substance for

tourism researchers. It might be anticipated that those interested in these issues would belong to the study areas of art, fashion, and aesthetics, or even health sciences. A closer look at these topics for tourist behavior, and most especially for Chinese tourist activities, suggests that inspecting the links is not only worthwhile but also timely due to the tastes and concerns of the changing global market in tourism.

Among the many statistics that highlight the importance of the outbound Asian market for both neighboring and more distant locations, one forecast can serve as a dramatic benchmark to orient contemporary management thinking. Euromonitor International (2019) has predicted more than 250 million outbound Chinese tourists in 2030. The figure is not fanciful since the actual numbers in 2017 were 130 million, and an annual growth rate of 7–10%, aligns well with this prediction (Pearce & Wu, 2017). It follows that any combination of factors and issues that shape the interests and demands of this massive market need consideration. It is the argument of scholars that the ways sections of the Chinese (and indeed broader Asian) market react to being in the sun offer important implications for multiple sun-drenched tourist locations.

The pathway from analysis to action in this chapter consists of pursuing and extracting key ideas from many sources. The greatest stress is on building implications for sunny destinations where new waves of Chinese tourists are somewhat likely to spend future holiday time. The overall aim of the chapter can therefore be captured by the goal of delivering advice and implications to destinations where the Chinese market is expanding but traditional sunshine based activities may need to be reconsidered and redesigned. The action and applications in the chapter offer options for rejuvenating destinations for relevant businesses and their tourists.

An important ethical position and, indeed, critical theory inspired stance buttresses this analysis (Ateljevic, Morgan & Pritchard, 2013). The researchers seek to avoid any covert biases or issues of evaluation and stereotyping in this appraisal of human skin color. The treatment of members of the human species who differ in their skin color has, of course, been a source of prejudice, bigotry, and violence across human history (Blainey, 2004). As one of the markers of the differences among groups of people, skin color has served as an identifier and at times a pejorative label for those in conflict. As researchers with different backgrounds, one Chinese and another Anglo-Australian, attempts are made to avoid any of these tainted and negative appraisals of people due to skin color and instead work toward providing satisfying tourism experiences and outcomes for all stakeholders.

CONCEPTUALIZING THE OPPORTUNITY IN THE SUN

The topics to be considered are the physiology of the skin and differences among subpopulations when exposed to the sun's rays. From this foundation analysis, it will be argued that a special set of consequences for health and wellbeing exist for Chinese and other Asian groups. A second source of information derives from the traditional historical and cultural conceptions of skin color and beauty. This discussion is framed under the broad heading of cultural differences and derives from key historical markers relating to indoor and outdoor work and iconic statements and depictions of what is culturally attractive. As a supplement to these cultural considerations, a succinct treatment of contemporary social views about how to manage appearance for Chinese women is advanced. Primary data from interviews with them provide the base for capturing some of the affective and cognitive understanding of what people feel, think, and seek to do in the sun. Building on these discussions, key implications for tourist settings to reorient their experiential offerings are suggested. These ideas summarize what has already been done but add further directions based on the researchers' familiarity with Chinese social and leisure life.

Physiological Foundations

Based on the archaeological evidence, it appears that the species *Homo sapiens* evolved in Africa and migrated north and westward over 100,000 years ago. These early "tourists or travelers" had dark skin (Jablonski & Chaplin, 2017). A process of depigmentation, the loss of dark skin color, appears to have happened in two locations in the subsequent history of this migration. The genetic evidence suggests that the ancestors of modern Western Europeans and those of modern Eastern Asians acquired their lighter skin tones independently, perhaps as little as 8,000 years ago (Norton et al., 2006). The probability of there being different genetic mutations is a likely cause of these evolutionary changes. It is also likely that natural selection favored those with lighter skin in the higher latitudes of the northern hemisphere due to issues involving the metabolism of vitamin D. On a more speculative level, humans may have reinforced the natural selection forces due to an aesthetic preference for lighter skinned mates (van den Berghe & Frost, 1986). Why does this matter? The importance of this issue is that while both modern Westerners and Asians are lighter skinned than their African forebears, the genetics are different and

exposure to the sun produces contrasting effects for these groups in the short and longer term.

These differences in human skin and especially the properties of Asian skin pigmentation are linked to the patterns of melanin distribution. Fundamentally, the type of melanin individuals produce affects skin tone (Knaggs, 2009; Roulin, 2014). The visible freckles which appear in some Westerners are a very clear indication of unevenly distributed melanin. Following exposure to ultraviolet light from the sun, cells with a special function at the base of the skin respond by producing extra melanin. The resulting pockets of melanin sit on top of the cell nucleus as a way of protecting DNA from ultraviolet (UV) damage. For pale skinned individuals, especially those with a northern European Western heritage, the reddening of the skin and then potentially the appearance of a “tan” is the visible outcome of the protection process. For most Chinese and Asian individuals, the melanin is better distributed and while they are somewhat less likely to be “burnt by the sun,” a phrase summarizing the clear reddening of the skin with overexposure in European skin surfaces, damage to Asian skin from the sun has its own consequences.

For the Chinese in the sun, there can be a slower darkening of the skin tone with repeated exposure to the sun’s rays. UV scores in the higher range above 7 (the range is from 1–13) are likely to have powerful impacts (World Health Organisation, 2019). The different genetic backgrounds which resulted in depigmentation has also resulted in a 10-year delay for the onset of wrinkles in Chinese individuals (Knaggs, 2009). Chinese men and women do appear to experience a delayed ageing process for their skin with rapid changes becoming visible between the ages of 40 and 50. For Chinese women in particular, there is a much greater likelihood of visible pigmented brown spots on the face as they grow older. Caucasians exposed to similar amounts of sunlight are more prone to develop wrinkles.

The emphasis and effects for Chinese women are central to the present interest and chapter. There are in fact long running conversations in the literature about skin color and sexual dimorphism. Starting with the work of Charles Darwin, there has been a proposal that women generally have lighter skin color tones in any group compared to their male counterparts (Aoki, 2002). While this may not be valid in some northern European groups, it does appear to hold in Chinese and other Asian communities (Madrigal & Kelly, 2007). Clearly, the visibility of ageing signs in Chinese women are likely to be greater if the base level of the skin tone is fairer than that of their male peers. Looking young until around their 40th birthday, and then suddenly looking quite a lot older if they have not protected

themselves from the sun, has physiological and biological roots for this group of tourists.

Issues of appearance, both in the short term of skin darkening, and the delayed consequences of accelerating the “crash” of Chinese ageing are not the only issues associated with being in the sun. It has been repeatedly established that a variety of skin cancers are associated with frequent exposure while dehydration, severe sunburn, and hyperthermia may be experienced by those unused to hot and bright sunny days (Rigel, 2008; Saraiya et al., 2004). The researchers do not want to demonize the effects of sunshine and it should also be noted that positive benefits are systematically recorded for mild levels of sunshine exposure. These benefits include both physical and psychological outcomes; the first set deriving from the value of being in the sun for key metabolic and body processes and the latter linked to the symbolic value of relaxation and freedom. A summary of these effects of exposure to the sun is provided in [Table 1](#).

Cultural Images

For the Chinese, there are deep cultural roots underpinning the aesthetic conception that “white [skin] is beautiful.” In ancient China, and dating from the eleventh to seventh century BC, *The Book of Songs* celebrated several key features of female beauty (Waley, 1937). The beauty Zhuang Jiang, known as Madam Patriotism, was praised for her creamy skin and her face was depicted as white and pink. The analogies provided in the

Table 1. Benefits and Problems with Time in the Sun

Negative Consequences of Too Much Sun Exposure	Positive Consequences of Controlled Sun Exposure
Fast onset of wrinkles	Vitamin D absorption
Visible signs of ageing	Bone strength improved
Variety of skin cancers	Improved sleep
Dehydration, severe sunburn	More positive moods
Hyperthermia	Positive self-image

Sources: Jablonski and Chaplin (2017); World Health Organisation (2019).

poetry might not appeal to contemporary sensitivities – her skin was compared to congealed fat while the shade of her face was likened to longicorn larva – but since that celebration of the ideals of beauty, “being white” has become a basic component of Chinese attractiveness.

There is a rich vocabulary in Mandarin to express the link between being fair skinned and beautiful. Some Chinese phrases to describe beauty for females are 皓腕凝霜雪 (“Her pair of fine wrists bare, like the frost and snow”), and 冰肌玉骨 (“a real beauty with flesh of ice and bones of jade; of female skin smooth and fair”). For men, the expressions include 白面书生 (pale-faced scholar (idiom)), while in the Chinese classical novel *Dream of Red Mansions*, the description of the wealthy and desirable figure JiaBaoyuis “面如傅粉，唇若斷脂” (“His face looked as fair as if powdered, his lips red as rouge”). A Chinese proverb says: 一白遮百丑 (*Yi Bai Zhe Bai Chou* (“fair skin can hide many flaws”). Four legendary beauties of ancient China, including Xi Shi 西廝, Wang Zhaojun 王昭君, Diao Chan 貂蟬 and Yang Guifei 杨贵妃 are all depicted as very fair-skinned.

The persistence of the aesthetic evaluation that being white in China is beautiful can be linked to further aspects of the history of the country. The narrative here is analogous in some ways to the appreciation of white and fair skin in Europe. As Morris (2011) argues, the industrial age benefitted the growth and power of England and Europe. Large scale factories and efficient work practices produced new goods at a faster rate than ever before. It also affected the exposure of the workers to the sun. Previously, agricultural laborers were dark skinned and only those in the courts and high society who were shielded from the summer sun were fair (Urry, 1990). As industrialization confined workers to mines and factories, the dark hues of the workers disappeared. So too in China; those working on farms and in the fields were dark skinned and the affluent in the courts were fairer. Prior to industrialization, the dark-skinned people were poorer, not to be envied and less attractive. Only in the twentieth century in Europe with the rise of modern travel did having a tanned skin become a status marker as it reflected the affluence to escape to the Mediterranean shores (deBotton, 2004). In China, this phase of appreciating the sun-tanned returning tourists did not eventuate as modernization was delayed and took a different path.

Contemporary Social Forces

There is some research evidence that the cultural traditions in China of linking fair skin to attractiveness are reinforced by a set of contemporary

forces. Xie and Zhang (2013) examined skin beauty advertisements in the magazines *Cosmopolitan* and *Vogue*. Both the Chinese and US versions of these magazines were content-analyzed. The white ideal was much more prominent in the Chinese publications. A tan ideal was coded as important for the US women but was not as prominent or widespread as the white ideal in China. Krishan, LaTour, and Alishah (2014) report that Asian women are more likely than Caucasians to report being stressed about their skin tones. They labeled the Asian women's concerns as "skin tone tension" and suggested that it is driven by personal comparisons with models in advertisements who were invariably portrayed as having skin tones in the lighter part of the spectrum. Mak (2007), in examining the preference of urban Chinese women for white skin, provides support for the Chinese proverb *Yi Bai Zhe San Chou* ("fair skin can hide many facial flaws"). It appears that for Chinese men and women, white skin is a leading component in the assessment of attractiveness. Mak also highlights the implications of these attitudes for the use of skin whitening products.

The sale of whitening products offers substantial contemporary evidence of the importance of fair skin for the global and Chinese market. Statista (2018) provides figures that the market is worth US\$5 billion in 2018 and is predicted to grow steadily to nearly \$9 billion by 2027. China is a big player in this market. At a more specific scale of analysis, Huixia et al. (2012) studied 354 healthy Chinese women aged between 18 and 80 years. Carefully controlled tests and photographic samples of their cheeks revealed that that skin tone was significantly darker later in the life span. The damage from ageing and exposure to the sun resulted in hyper-pigmented spots and the contrast of these blemishes with surrounding skin were more visible in the older women. As just one of a number of typical research efforts in this area, they conducted a study where 40 women from the set of 354 subjects were asked to apply a whitening cosmetic product daily for a two-month period. The results demonstrated that such application led to a significantly lighter skin tone. Other studies confirm the success of the whitening products at least in terms of assessments of the skin tones (Burger, Landreau, Azoulay, Michel, & Fernandez, 2016). The value of using whitening products is clear for those who seek to alter how they appear. They do seem to work for the users as assessed by objective panels of judges.

Skin whitening products are a huge commercial pharmaceutical business but they may have unwanted side effects (Naidoo, Khoza, & Dlova, 2016). Individual sensitivities or overuse may lead to scarring, fertility problems, and impacts on unborn children, especially if mercury and some steroid-

based products are overused (Zota & Shamasunder, 2017). Further, some of the whitening products sold in Asia contain products which are banned in Europe, which raises the possibility that international tourists may have their expensive creams and lotions confiscated at European borders (Desmedt et al., 2016).

As a way of supplementing these media, pharmaceutical and medical studies about the power of advertising and skin whitening products, the present researchers contacted a select sample of Chinese women. The respondents were 43 university educated women known to them. There were respondents from across mainland China, specifically Quanzhou, Fuzhou, Xiamen, Tianjin, Beijing, Xi'an, Changzhou, Nanning, Qinzhou, Changchun, Shanghai, and Hangzhou, as well as a few based in Australia. The majority of them were located in or from China's southern provinces (16), some from the northwest (10), others from the north (6), the middle eastern coastal cities (5), as well as other eastern areas (3). Three age ranges were used to distinguish among the women, with the accompanying number of respondents being as follows: 20–30 (22), 31–40 (13), 41–50 (8).

Several key questions were asked. How important is staying out of the sun to you? What do you like to do when you go to a beach/very sunny destination? On a five-point rating scale, the response to the former question, the groups' mean score was 4.41, a clear confirmation of the importance of sun aversive concerns. Few variations were found in the responses from the different cities or by women of different ages. To supplement the discussion about contemporary social practices and concerns, behaviors from the second question are presented in [Figure 1](#).

The results depicted in [Figure 1](#) are closely aligned with findings from the work of Chen, Yarnal, Chick, and Jablonski (2018). In an interview-based study of East Asian, Asian American and Euro-American women (coincidentally 43 respondents as in the authors' work), the researchers demonstrated very strong ties between leisure behaviors and cultural perceptions of skin color. The preference for lighter tanned skin among East Asians was identified as contributing to a suite of daily behaviors. As in the study by the authors of this chapter, decision-making regarding sun-seeking, sun-avoidance, and sun-protection behaviors, as well as preferences for indoor versus outdoor pursuits, were all recorded. Clothing choices, the times of the day to undertake activities, and the shunning of the tanning culture by some East Asian respondents, were paralleled in the findings cited in [Figure 1](#). It is a small step from these intensive studies to appreciate that in the coming years the likely behavior of millions of Chinese women (and their partners) who venture to the sunny shores of the

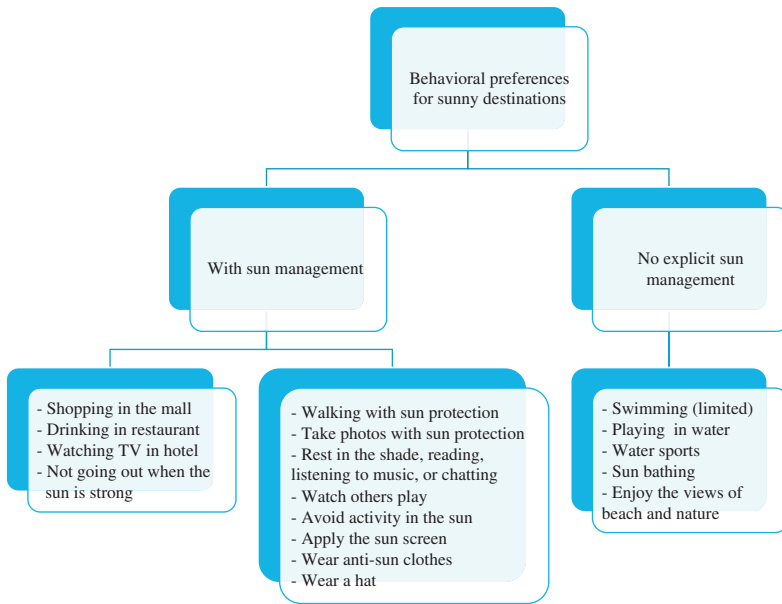


Figure 1. Sun Management for Chinese Women

Mediterranean, Africa, the Middle East or Oceania, or who visit the tropical islands of the globe, will be seeking facilities and experience in accord with these preferences.

One contemporary social practice among Chinese women which has evolved quite recently involves protecting the face with what has been termed the facekini. In essence, this is a colorful mask made of the same material as swimming costumes. It appears to have gained some popularity among Chinese women in the susceptible ageing range of the mid-30s–50s. It can be seen as an addition to the existing array of apparel serving the sun aware Chinese market which includes fashionable and broad brimmed hats, gloves, and lace sleeves for the arms and longer skirts to prevent the legs being burnt. These individual protective measures and sunscreens reinforce the contemporary social message to all who observe Chinese tourists dressed differently; they are unlike the sun seeking Europeans. Figure 2 provides contrasting images to highlight this point. Europeans are depicted enjoying the beach environment in Rhodes, Greece, and Chinese citizens



Figure 2. Contrasting European and Chinese Styles in the Sun (Authors' Photos)

using flotation devices and covering up with the facekini and bodysuits are portrayed in Hainan island, China.

Conceptualizing the Opportunity

The chapter has so far built the case for tourism businesses to think about and respond to the sun aversive behaviors of Chinese tourists, particularly female guests. Of equal importance is the work on design science in tourism and its allied topic of service dominant logic as conceptual ways to plan for and implement changes to tourism properties, staff performance, and business procedures for diverse guests.

Many disciplines and types of professionals are involved in the design and construction processes for tourism properties. Architects, landscape designers, interior designers, engineers, and associated trade personnel plan and build much of the physical infrastructure for tourism. Few of these groups are, however, able to provide a nuanced view of how to redesign spaces for new groups of tourists from different cultures. It is the core of service design logic that a more insider or tourism sensitive view of putting the customer at the heart of the design process is needed to provide the information for such redesign efforts (Lusch, Vargo, & Tanriu, 2010). The same point has been made by those adopting an insider or emic perspective to understand the customer (Pearce & Packer, 2013). In this framework, customers provide information to assist planning and shape service encounters; they are in effect coproducers rather than an objective, passive target for whom change is generated. The customer's primary role is that of a coproducer and informant. The imperative here is for tourism service providers, to build dialogue with their customers in order to learn from them (Matthing, Sandén, & Edvardsson, 2004; Yen, Gwinner, & Su, 2004).

An important but simple distinction can be drawn between changing the physical infrastructure of settings (specialized room design, swimming pool shades, and restaurant layout and other facilities) and experience design (events, interpretation, tours, and activity offerings). Fesenmaier and Xiang (2016) provide a compendium of contributions which suggest some of the key principles to be considered in building new options for different markets. As Pearce and Zare (2017) observe, the toolkit is extensive and different approaches may suit varied problems. The approaches marry ideas from the work of Stickdorn and Schneider (2011) with an eclectic assortment of tools highlighted in tourism, hospitality, and events texts, as well as review studies (Kozinets, 2010; Larsen, 2007; Pacenti & Sangiorgi, 2010;

Page & Connell, 2012; Rakic & Chambers, 2012). Some pathways to access the customers' views include stakeholder maps, systematic observation, contextual interviews, photo elicitation techniques, netnography, cognitive mapping, storyboards, desktop models and simulations, service staging/role plays, service blueprints/cocreation, narratives, and personas/market segments. It is not being suggested that all tools be used on all occasions.

In essence the service dominant logic and the tourist experience design work assert that in thinking about emerging problems such as how to modify a setting for some customers who are sun averse, detailed analyses of the tourists' views and their reactions to planned developments should be pivotal in the conceptualization of change. In pragmatic terms, focusing on one issue such as tourists and the sun, may be inefficient and a wider information search about satisfying the multiple cultural needs of the emerging market is likely to be a realistic direction. Since many markets may coexist at a popular resort or beach destination, the challenge of modifying settings to provide a compromise for multiple cultural groups and styles of activity is a further topic for research that needs to accompany the focus on the newly arriving groups.

Implementation of Findings

Two case studies from different countries indicate the application of some of the discussion ideas for prominent beach and coastal settings. The first setting is that of Gold Coast Australia, a leading Pacific destination that has seen a substantial growth in Chinese tourists across the last decade. In this study, adventure activities and the use of the surf-based Gold Coast beaches were explored. A second case focused on the enclave resorts of Mauritius, an island nation with over one million inhabitants in the southern Indian Ocean where the European markets once dominated the tourist profile but now the Chinese command a large share of the market. Both destinations have abundant sunshine throughout the year with summer temperatures typically around 30 degrees and winter averages closer to 23. The UV radiation scores at both sites are in the very high to extreme range (greater than 10) in summer (World Health Organisation, 2019).

For the Australian case, Scott, Gardiner and Carlini (2014) worked with a number of adventure businesses that used the beach and water environment as the bases for their activities. In undertaking some market analyses, Scott and colleagues found there were significant cultural differences between the attitudes and behavior of younger Australian and Chinese

participants. Fear of the open ocean, the surf itself, and the sun were frequent concerns of the Chinese. The anxiety about getting sunburnt prompted one of the operators involved, a kayaking adventure tour, to plan for more twilight tour times. For another company, which operated an adventurous jet boat trip, providing long sleeved vests (known as “rashies”) was seen as an innovative way to protect participants from the sun. The businesses in the region all noted that the existing Chinese behaviors of being attracted to the beautiful beach landscape had resulted in mostly simply looking at the setting. Their attempts to build engagement with their Chinese tourists worked well when they could emphasize safety, sun protection, and meet the ubiquitous need to have pictures taken for social media sharing. For example, the Get Wet Surf School which participated in the study, built into their package a guarantee of a photo of each tourist standing up on a surfboard in the Gold Coast waves.

The study in Mauritius attended to the nature of activities and the design of facilities in large scale enclave resorts. The island nation of Mauritius has been attractive to European tourists for many years, with French tourists predominating. More recently, South African and other European guests have contributed to the market mix. A tourism policy decision to grant visa free travel to the Chinese market five years ago has seen a recent large-scale influx of these new Asian tourists to the islands’ tropical resorts. Naidoo and Ramseook-Munhurrin (2017), in a wide-ranging study, reviewed all the service and infrastructure modifications to serve the Chinese segment. They reported on the need for resort managers to find ways to deal with language issues, cope with different food habits, and modify the facilities in rooms and around the resort to cater for such behaviors as playing games, tea drinking, and resting. For the beach and sun related activities, the addition of shaded canopies was seen as useful for Chinese and other guests. Activities such as tai chi on the beach in the early morning and adding dance floors so guests could enjoy themselves while listening to the evening entertainment were further ways forward.

CONCLUSION

Abundant evidence exists that Chinese tourists, and particularly women concerned with protecting their appearance and their fair skin, seek to be in tourism settings and behave in ways to minimize exposure to the sun. While the focus in this chapter has been on the concerns of Chinese women, the men too should not be ignored. The range of skin care

products for men and a concern about men's appearance are evident in popular culture and television dating programs, though it would be an exaggeration to suggest that these features were more attractive to many female partners than men's wealth and a good career (Fallows, 2010)! Overall, several major principles can be extracted from these issues for tourism operators managing the Chinese in the sun.

First, work with the market segment to understand changes and preferences for being in the immediate setting. This principle follows the initial steps in tourist experience design and service dominant logic. Second, consider the physical layout of the tourist setting in terms of shade, movement corridors, covered walkways, and the time likely to be spent in the sun at transport nodes, in queues and at attractions. Third, plan the activity schedule to use the early mornings and late evenings for traditional resort activities including swimming classes, walking tours of the setting and energetic adventure sports. Fourth, provide free reusable options or suitable products for purchasing that enable Chinese tourists to cover up in the hotter times of the day. These items may include highly protective swim wear, large sun protective hats, UV resistant clothing, and a range of non-harmful sunscreens. Fifth, develop both indoor and outdoor evening options for Chinese guests that suit cultural preferences and take advantage of the physical beauty of the seascapes and beach environments. These may include evening outdoor dining, singing and dancing opportunities, photography classes for certain times of the day, and marine ecotourism educational tours. Sixth, provide sophisticated medical and weather advice about UV index scores across the day with warnings and advice for behaviors to suit the situation. These should be linked to the maximum desirable times to be in the sun without harmful effects. Finally, have personnel available with skilled knowledge of how to treat sunburn, check for skin rashes and problems, provide early detection of cancer problems, and alleviate hypothermia.