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Exploring tourists' stress and coping strategies in leisure travel

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ABSTRACT

Leisure travel can mediate daily stress, but also provoke stress. Tourists experience multiple stress during their vacations. The aim of this study was to identify what types of stress tourists encounter during their travel experiences and what strategies they use to cope with stress. Using semi-structured interviews and participant observation, the study findings reveal that tourists encounter four major types of stress (i.e., service-provider-related stress, traveler-related stress, travel-partner-related stress, and environment-related stress) during their vacations and use many strategies (i.e., problem-focused and emotion-focused coping) to cope with stress. These findings not only contribute to tourism research by documenting specific types of stress in the travel context and exploring new insights into ways of coping with stress, but also provide suggestions for how tourism and hospitality professionals should modify programs/experiences in response to tourists' stress and the need to cope with stress during travel experiences.

1. Introduction

Research on stress and coping strategies has been conducted for decades. Evidence suggests that stress influences individuals' physical and mental health (Brown & Lawton1986; Lazarus, 1993; Shields, 2004; Watson, 1988). Many studies have considered leisure a destructive mediator to manage stress (Iwasaki & Mannell, 2000; Lazarus &Folkman, 1984), but according to existing evidence, leisure can also provoke stress (e.g., Coleman & Iso-Ahola, 1993; Iwasaki & Mannell, 2000). Thus, it is important to understand how tourists address stress, which might influence the positive outcomes of their travel experience.

As an inherent and ubiquitous part of life, people often face stressful events, such as daily hassles and chronic strains (Lazarus & Folkman, 1984), which negatively impact their well-being (Lazarus, 1993; Watson, 1988). Existing studies focus heavily on how stress relates to health, with coping strategies as mediators (e.g., Iwasaki & Mannell, 2000; Lazarus; Folkman, 1984; Taylor & Schneider, 1989). Leisure has been considered a means to cope with stress and maintain health by playing a buffering role and neutralizing the negative effects of stress on health (Coleman & Iso-Ahola, 1993; Iwasaki & Mannell, 2000; Iwasaki et al., 2001).

Despite the mediating role of leisure on stress, evidence suggests that

leisure per se may cause stress (Iwasaki & Mannell, 2000). In the recreation setting, for example, recreation hassles have been identified as a form of stress (Schuster, Hammitt, & Moore, 2003). Individuals who are more physically active in physical activities have been found to have higher levels of stress (Kimball & Freysinger, 2003). Additionally, Schneider and Hammitt (1995a) found that outdoor recreation conflict can provoke stress and that visitors use problem-focused and emotion-focused coping strategies (Schneider & Hammitt, 1995b). In the tourism context, business travelers have been found to have various stressors (e.g., long working hours, health concerns) that differ from leisure travelers' stress (Bricker, 2005; Cohen & Gössling, 2015; Ivancevich et al., 2003). In leisure travel, vacation experiences may not always foster happiness and may even cause "holiday syndrome" (Steyn, Saayman, &Nienaber, 2004). Recent evidence suggests that tourists experience various stress during vacation, including work-related stress, travel-related stress, and stress linked to the travel group (Gao & Kerstetter, 2018; Zehrer & Crotts, 2012).

Therefore, leisure can be used as a means to cope with stress, but it may also provoke stress. In the leisure travel context, despite evidence indicating that tourists may encounter stress on vacation (Gao & Kerstetter, 2018; Zehrer & Crotts, 2012), we have little knowledge about how tourists deal with stress in the temporary and fluid travel and

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tourism context. Built upon the transactional theory (Lazarus & Folkman, 1984), this study used the stress-coping construct, and was aimed to identify (1) what types of stress tourists encounter during their travel experience and (2) what strategies they use to cope with stress.

It is valuable to study ways of coping with stress in the travel and tourism context for a number of reasons. First, this study is the first to link the stress-coping construct to the travel context by exploring and identifying specific types of stress that tourists encounter during their travel experiences. In addition to general leisure activities, this study's results reveal coping strategies that are specific to the travel context, which in turn can provide new insights into ways of coping with stress and thus contribute to the general leisure and recreation literature. Second, our results provide significant managerial implications for the tourism industry. Considering the important role that stress and coping strategies play in individuals' health, the study results can provide practical implications for service providers in the tourism industry in finding ways to reduce or eliminate potential conditions that may cause stress for tourists and modifying their programs/products in response to tourists' stress and the need to cope with stress during travel experiences.

2. Literature review

2.1. Stress-coping scholarship

Lazarus and Folkman developed the Transaction Model of Coping in 1984, which illustrates the process of a potentially stressful personenvironment transaction. Their model included five components: (1) person and environment influencing factors, (2) cognitive appraisal, (3) stress, (4) coping, and (5) outcomes. In particular, cognitive appraisal and coping act as critical mediators of stressful person-environment relationships and their immediate and long-term outcomes (Lazarus &Folkman, 1984). According to the transactional theory, stress is not a single variable; it is viewed as a relationship between the demands of a person's environment and the resources available to the person to respond to them. Examples of stress include daily hassles, role strains, chronic life problems, life transitions, and life crises (Iwasaki &Mannell, 2000).

Coping is a fundamental approach to manage stress and refers to constantly changing cognitive and behavioral efforts to manage a troubled person-environment relationship (Lazarus & Folkman, 1984). In general, coping strategies have two main types: problem-focused and emotion-focused strategies (Lazarus & Folkman, 1984; Taylor & Schneider, 1989). Problem-focused coping aims to alter the source of the stress or to solve problems through direct actions, whereas emotion-focused coping is intended to reduce or manage the emotional distress that is associated with stressors through avoidance, distancing and selective attention (Lazarus & Folkman, 1984). Both strategies can be used as an initial response to stress (Folkman & Moskowitz, 2004).

Lazarus and Folkman's (1984) model offers a good perspective to examine the relationships among leisure, stress and coping strategies (Miller & McCool, 2003; Schneider & Wilhelm Stanis, 2007). It is widely acknowledged that leisure plays a role in maintaining and improving individuals' health (Coleman and Iso-Ahola, 1993; Moen. Dempster-McClain & Williams, 1989) by helping people cope with stress (Heintzman & Mannell, 2003; Iwasaki & Mannell, 2000). In 1993, Coleman and Iso-Ahola adopted a transactional view and suggested that leisure has a buffering effect against life stress and functions as a means of coping with stress. Based on this perspective, Iwasaki and Mannell (2000) developed a hierarchical model of leisure stress coping and divided leisure coping into two dimensions: (1) leisure coping beliefs and (2) leisure coping strategies. Leisure coping beliefs refer to dispositional coping resources generated by leisure and act as a buffer against stress. In contrast, leisure coping strategies are situation-specific coping behaviors or cognitions that are available through leisure and act as a process or mediator (Iwasaki & Mannell, 2000).

Iwasaki and Mannell's (2000) hierarchical model was widely applied and supported by a number of subsequent studies (e.g., Iwasaki, 2003a, b; Iwasaki &Schneider, 2003; Patry, Blanchard & Mask, 2007). For example, Iwasaki (2002) showed that leisure coping significantly affected adaptive outcomes, such as coping effectiveness, stress reduction, health and psychological well-being. However, Heintzman and Mannell (2003) suggested an improvement to Iwasaki and Mannell's model by adding the dimension of spiritual leisure coping. Hutchinson et al. (2008) suggested that meaning-focused leisure coping could be added to this model. In addition, the impacts of leisure activities on stress coping have been examined. Caltabiano (1994) found that leisure involving outdoor-active sports and social and cultural hobbies could reduce stress. Brajša-Žganec, Merkaš, and Šverko (2011) found that individuals' well-being declined with age but was boosted by family leisure activities, such as visiting friends and relatives and attending church.

In the outdoor recreation context, a variety of coping strategies have been explored in response to stressful experiences (Miller & McCool, 2003; Schuster, Hammitt; Moore, 2006). Because both physical and social forces may be perceived as causing stress, participants in outdoor recreation are likely to use both problem- and emotion-focused coping strategies (Schuster, Hammitt; Moore, 2006). Additionally, unique coping responses in recreation settings, such as displacement and activity substitution, were identified by Miller and McCool (2003).

According to Iwasaki and Schneider (2003), taking a vacation is believed to be a means of coping that can moderate or reduce stress. However, other evidence suggests that vacations may cause stress instead of buffering the effects of stress on well-being. For example, Strauss-Blasche, Ekmekcioglu and Marktl (2002) found that vacations had a deteriorating impact on the quality of sleep, social activities, and mood. Zehrer and Crotts (2012) developed a vacation stress model that showed that internal travel stressors led to a much lower stress level than stressors caused by the external environment and that pre-trip stressors caused more stress. Although leisure researchers have systematically studied leisure stress coping, there is limited evidence regarding tourists' stress and coping strategies in the unique tourism and travel context.

2.2. Stress in tourism scholarship

From the tourist perspective, travel is considered a way of relieving stress, with a perceived recovery experience and improved life satisfaction (Chen, Petrick, & Shahvali, 2016). Evidence, however, suggests that travel generates stress. Vacation experiences may not always foster happiness and may even cause "holiday syndrome" (Cattell, 1955; Steyn; Saayman, &Nienaber, 2004). DeFrank et al. (2000) defined leisure or vacation stress as individuals' responses to problems faced during travel. Zehrer and Crotts (2012) found that vacation travelers face stress, including pre-trip stressors, stressors related to actual travel to the destination and stressors related to the stay at the destination. They presented vacation stress as a multi-dimensional concept in which destination stressors are the strongest influence on overall vacation stress.

There is some evidence regarding travel stress in the business travel context, where business travelers face different stress. Examples include planning the trip and delegating work, which might negatively impact business travelers' well-being by causing chronic diseases and decreasing job performance (Burkholder, Joines, Cunningham-Hill, & Xu, 2010; Cohen & Gössling, 2015; DeFrank et al., 2000). Because travel is part of work, business travelers experience stress due to long working hours, higher workload and stress when returning from the trip (Striker, Dimberg, &Liese, 2000; Westman, &Etzion, 2002; Westman; Etzion, &Gattenio, 2008). They also experience a higher frequency and intensity of travel activities and thus suffer higher levels of travel and work stress (Chen, 2017).

Evidence suggests that in the outdoor recreation settings, multiple

leisure activities and situations may boost individuals' stress level, including conflicts and risks that people commit their discretionary saving of time, money and energy to exchange, and physically active leisure participation (Kimball & Freysinger, 2003; Schneider & Hammitt, 1995a,b; Schuter, Hammitt, & Moore, 2003). Given that tourism experience could be stressful and affect tourist's physical and mental health (Dolnicar, Yanamandram, & Cliff, 2012; Waterhouse, Reilly, Atkinson, & Edwards, 2007), it is important to understand the sources of stress and how tourists coping with these hassles.

Overall, previous research has demonstrated that travel experiences have positive effects on well-being and has established models to understand leisure stress and coping strategies (Dhar, 2011; Iwasaki &Mannell, 2000; Iwasaki, 2006; Schuster, Hammitt; Moore, 2006). However, it remains unknown how tourists address these stress to maximize the positive outcomes of their travel experience. Our study is aimed to uncover tourists' specific stress during travel and to examine how they deal with the stress experienced during vacations.

3. Methods

3.1. Study site

Shenzhen is a municipal area in southern China with approximately 12 million urban residents (SZSA 2017⁻¹; SBGD 2017) situated in the Pearl River Delta. Like many cities in China, Shenzhen has experienced rapid economic growth and urbanization processes, with an annual average growth rate of GDP 22.6% (SZSA, 2017) in forty years. This has resulted in Shenzhen becoming China's third wealthiest city (e.g., GDP of 2200 billion RMB in 2017) and being titled the Miracle City and the Efficient City. In the past, Shenzhen was a pioneer of reform and China's opening up. Currently, it is the National Innovation City with many leading companies, such as Huawei, Tencent and DJI-Innovations, and accounts for half of the total national Patent Cooperation Treaty. Shenzhen is also a promising city with many young people (i.e., the average age is 32.5 years old) who earn higher average wages and have more per capita disposable income than most urban residents (SZSA, 2017).

The tourism industry in Shenzhen experienced a boom consistent with the development of the economy. Shenzhen is an important destination and source market for international and domestic tourism. In 2017, Shenzhen had a total of 13.15 million tourists, with an increase of 5.31% on a yearly basis. The tourism income was 148.5 billion RMB, with an increase of 8.30% on a yearly basis (CTA, 2017a,b,c). As the most important attraction and landmark in Shenzhen, the Splendid China Folk Village Theme Park is considered the first customer-centered site and a must-go attraction for all types of tourists.

Our decision to select the Splendid China Folk Village Theme Park in Shenzhen was multifaceted. First, to address our study purpose, which was to understand tourists' stress and coping strategies during their travel experiences, we had to recruit participants who were traveling during our data collection. Therefore, we chose a theme park that allowed us to recruit participants who had ongoing travel experiences. Second, we chose to draw our sample from a theme park, the Splendid China Folk Village, which is a representative tourism destination in Shenzhen. The Splendid China Folk Village was the first theme park in China and has the most cumulative visitors. As the largest and most abundant real miniature scenic spot, the Splendid China Folk Village is considered the best representation of Chinese culture because it has twenty-four life-sized ethnic villages that showcase different customs, arts, architecture, and cuisines across the nation.

3.2. Data collection

To investigate tourists' stress during their travel experiences as well as their coping strategies, this study employed multiple qualitative approaches that incorporated semi-structured in-depth interviews and participant observation to collect data. This allowed the researchers to uncover the "lived experience of other people and the meaning they make of that experience" (Seidman, 2006, p. 9). One of our authors spent 3 months as a "secret shopper" at the theme park, who collected data for this study. Thus, we considered her an "insider" who might understand the participants' experience because of the time she devoted to observation. During the study, her identity as a secret shopper aroused the participants' interest (the participants were enthusiastic about sharing their travel stories), facilitated our data collection process and broke the ice in the initial stage of the interviews.

Overall, a total of 49 tourists were interviewed from October to December 2016. Using convenience sampling, participants identified in major spots of the park during various times of the day were invited to participate in the study. Given the content of the interviews, only individuals 18 years of age or older were invited to participate because they were considered to have sufficient knowledge and awareness of their stress experienced during vacation and because they may be able to discuss corresponding coping strategies.

During the interviews, participants were asked to (1) briefly describe their travel plan, (2) discuss their overall travel experience in Shenzhen and at the theme park, (3) talk about any stress experienced during their vacations, (4) think of examples of how they coped with these stress, and (5) discuss how coping with stress affected their vacation positively and negatively. The interviews followed an iterative process that involved constant reflection from the interviewer (Dey, 1993; Miles &Huberman, 1994). For example, if participants indicated that they had encountered and coped with stress, they were asked to talk about what they had learned by trying to cope with stress. The duration of each interview ranged from 30 min to 1 h.

The interviews were digitally recorded after consent was obtained from the participants. Participants were told that their responses would remain confidential, and excerpts from their interview could potentially be included in publications and presentations generated from the study. The interviews were conducted until a point of saturation was reached (i.e., no new information was introduced).

3.3. Data analysis

The majority of participants were from the mainland of China, except for six participants (i.e., William, Mark, George, Karen, Joshua, and Jeffery), who were Chinese but resided in other countries (e.g., Malaysia, Australia, New Zealand, Korea). Therefore, all the interview transcripts were initially recorded in Mandarin Chinese and then translated into English. To ensure the reliability of the transcription and translation, a second individual fluent in Mandarin Chinese and English back translated the transcripts. Coding and analysis of the transcribed data were iterative in that themes were allowed to emerge along with data reduction and display (Dey, 1993; Miles &Huberman, 1994). Chunks of text were allocated to each code after the interviews were coded. This iterative process uncovered key themes as well as sub-themes in the interview data (Lofland & Lofland, 1995). Then, the authors continued to code separately until they reached the point at which subsequent coding did not lead to any new insights (Lofland & Lofland, 1995). Lastly, using a method of constant comparison (Glaser & Strauss, 1967), the key themes and sub-themes were continually compared and contrasted against the existing literature. In addition, data from participant observation was used to assist authors to better understand these transcripts during the data analysis process.

¹ Since 2006, according to the Shenzhen Municipal government, the data of the registered population refer to people who have registered and lived in Shenzhen for more than half a year.

4. Findings

The interview participants included 28 females and 21 males (Table 1). Most of them were between the ages of 21 and 30 years old; 74% were independent travelers who arranged their vacations themselves, and 86% were domestic travelers. They were working full-time in fields such as accounting, sales, finance, education, and government and administration, and 27% were students on their holiday break.

Our analysis process led to the creation of Table 2, which includes our themes (i.e., *service-provider-related stress, traveler-related stress, travel-partner-related stress and environment-related stress*) and sub-themes (i.e., *rip-offs, hospitality, attractions, destination, physical health, mental health, cancelled trips, conflicts, obligations, accommodations, family issues, weather and transportation*). The data analysis also led to the creation of Table 3, which highlights the coping strategies leisure travelers used to deal with stress experienced during their vacation.

Table 1

Information about study participants.

No	Pseudonyms	Age	Occupation	Independent travel(IT)/ Package tour(PI)
1	Mary	26	Executive assistant	IT
2	Patricia	46	Self-employed	IT
3	Linda	30	Sales	IT
4	Roy	25	Self-employed	IT
5	John	37	Local Government	IT
			&Administration	
6	Elizabeth	33	Housewife	IT
7	Jennifer	14	Student	IT
8	Maria	28	Sales	IT
9	Margaret	60	Retired	IT
10	Robert	32	Office worker	IT
11	Lisa	24	Executive assistant	IT
12	Nancy	23	Sales	PT
13	Paul	38	Local Government & Administration	PT
14	David	26	Consultant	IT
15	William	40	Agent	PT
16	Mark	16	Student	PT
17	Karen	15	Student	PT
18	Betty	33	Office worker	PT
19	Richard	28	Finance	IT
20	Joseph	34	Finance	IT
21	Thomas	22	Student	IT
22	Betty	21	Student	IT
23	George	40	Agent	PT
24	Steven	72	Retired	PT
25	Sarah	18	Dancer	PT
26	Edward	30	Sales	IT
27	Sandra	25	Office worker	IT
28	Kevin	27	Finance	IT
29	Kimberly	26	Accounting	IT
30	Shirley	25	Student	IT
31	Jessica	30	Sales	IT
32	Amy	26	Teacher	PT
33	Louis	80	Artist	IT
34	Anne	25	Executive assistant	IT
35	Jeffery	40	Sales manager	IT
36	Frank	22	Student	IT
37	Eric	35	Sales	PT
38	Rebecca	21	Student	IT
39	Corrine	32	Office worker	IT
40	Kathleen	25	Office worker	IT
41	Joshua	40	Agent	PT
42	Amanda	23	Student	IT
43	Deirdre	35	Sales	IT
44	Susanna	21	Student	IT
45	Maria	22	Student	IT
46	Julie	20	Student	IT
47	Peter	30	Accountant	PT
48	Angela	24	Executive assistant	IT
49	Ellen	23	Office worker	IT

Table 2

Stress tourists experienced during their leisure travel experience.

Key themes	Subthemes
1 Service-provider-related stress	1.1 Rip-offs
	1.2 Hospitality
	1.3 Attractions
	1.4 Destination
2 Traveler-related stress	2.1 Physical health
	2.2 Mental health
3. Travel-partner-related stress	3.1 Cancelled trips
-	3.2 Conflicts
	3.3 Obligations
	3.4 Accommodations
	3.5 Family issues
4. Environment-related stress	4.1 Weather
	4.2 Transportation

4.1. Service-provider-related stress

A service provider in the tourism industry generally refers to a firm that offers a collection of service packages (Peters, 1994), such as transport, accommodation, food, and entertainment, to meet the various needs of customer segments. Specifically, tourism-related services include those provided by hotels, restaurants, catering, travel agencies and tour operator services, and tourist guide services (World Tourism Organization, 2011). During their vacations, tourists experience various stress from service providers who offer travel services and goods, including local providers, tour guides, hospitality and destination providers, which influence tourists' travel experience and satisfaction.

4.1.1. Rip-offs

Tourists experience stress when they encounter rip-offs at local stores or compulsive shopping by tour guides, which leaves them with a negative impression and has a substantial impact on their emotions during a trip. For example, Linda complained that she felt annoyed and embarrassed when "... some salesman who may have seen [you] would make you buy; his attitude was very tough " Maria, who visited a famous commercial street, said that "there were illegal cab drivers. They would take you to other stores to buy things, and you couldn't leave until you bought...."

Some tour guides also caused stress for tourists. As Richard noted, "The guide said because two persons didn't buy anything, the car wouldn't start. It was miserable, so it extremely affected my mood, because I did not want to buy. It was not expensive, but I just did not want to...." This compulsive shopping is a reason for the stress felt by travelers in the process of shopping.

4.1.2. Hospitality

Given that hospitality is an indispensable part of all vacations, tourists also encounter stressful issues at restaurants, hotels and shopping areas. Some travelers feel stressed about the safety, price and environment of restaurants and hotels. For Sandra, "the hotel was too expensive, and the price didn't match the environment." They feared getting sick and feared for their safety on a trip because of the food and accommodations, which affected their emotions during their travel. For example, Mark mentioned that the food in the tourist attractions "should be improved; it was even more unpalatable than fast food outside."

4.1.3. Attractions

Many visitors suffer stress at tourism destinations, such as admission fees, shows, crowding, guide maps and signs and construction in tourist attractions. The following comments represent this stress:

"It is not very convenient that there are only three signs. Basically, that means that it can only refer to part of the attraction, and this side is not mentioned. We had to go to a place and then know how to go to other places." (Lisa)

"The line was too long. We just strolled around and played nothing." (David)

"He did not tell us that the show was upgrading. I thought that if you were upgrading, you should not wait to tell us until we arrived." (Jessica)

The shows in the study site are famous and were main attractions for most participants. However, some tourists indicated that shows were arranged in a confusing way. Steven said, "Why were the shows not arranged to follow the route? ... You had to go and then turn back. We went back and forth three times, walked the same way three times!"

Tourists were also concerned about the admission fees. Several participants thought that "tickets were too expensive" (Betty, Amy and Frank). Eric, who visited the park two times, indicated that "... too many things were under construction. It made me feel that my money never worked."

4.1.4. Destination

Tourism destinations are also a source of stress for tourists. When tourists arrive at a tourism destination, the first impression of the destination comes from the airport. For some participants, the design of Shenzhen airport was unfriendly, and they felt uncomfortable and stressed. Joshua, who had traveled to Shenzhen several times, stated, "... we pushed the luggage to the restroom; our hands were full of bags, while the restroom was too small, very limited toilet and weak light. We closed the door with luggage outside, and it was truly troublesome. What's more, we had to wait in a long line "George also had experience with the airport, and he said that he "walked out of the airport, and it was rainy and windy; the sun was shining strongly, but the airport bus is outdoors."

4.2. Traveler-related stress

Evidence suggests that travelers may have physical and psychological health problems that may increase health risks and thus produce stress (Bruni & Steffen, 1997; Burkholder et al., 2010; Richard & Rundle, 2011).

4.2.1. Physical health

Travelers may be exposed to health issues, such as jet lag, illness from climatic changes, diarrhea and colds, backaches and headaches and poor sleep (Bruni & Steffen, 1997; Waterhouse et al., 2007; Cobelens et al., 1998). These are common symptoms that interact with travelers' exhaustion and stress to deteriorate their physical health. For instance, Mary said that her "ears were unbearably painful when flying because of the pressure " Nancy had a similar experience and had "serious car sickness when driving over 1 h" Some tourists mentioned that the park was so large that they walked for a long time and felt exhausted. Kathleen indicated that she "was just tired, even more tired than work." For Elizabeth, who was a younger mother, "taking care of my baby on the trip always made me very tired, and I needed more time to take a rest." Travelers' poor physical condition may also result from eating unhealthy food. Jeffery, who is Malaysian, suffered diarrhea during the trip because he ate food from street vendors and "got diarrhea for the whole day and had to take a rest in the hotel."

4.2.2. Mental health

In addition to physical issues, travelers may encounter problems that threaten their mental health, such as work stress, culture shock, loneliness, unexpected incidents and travel arrangements.

When travelers are on a trip, they may experience interference from various work activities, such as business calls, temporarily needing to delegate work, sudden vacation cancellations and difficulty asking for leave. Because work is part of life, travelers sometimes have to spend time dealing with work. Edward, who is a market salesman working for a large company, said that "travel doesn't mean you have no work, so if there is anything or any work, I had to deal with it first." For Joseph, a stock trader, "it was difficult for me to ask for leave—maybe only one week off in a year." In general, conflict between work and travel and a heavy workload during vacation may be reasons for tourists' stress.

"Culture shock" is frequently used to describe how people react to unaccustomed or new situations. It occurs when individuals travel from their place of origin to another country (Furnham, 1984). There were some participants from other countries (e.g., Australia, Malaysia, and New Zealand). For example, Karen, a woman from Australia who visited China twice, said that "the toilets here were all squat toilets. We never squat in New Zealand and Australia. There was a hole, and then they did not give you paper. It was very strange." Moreover, language barriers are stressors for non-resident travelers: "When taking a bus, I was confused with the announcement. It was in Cantonese! And I missed my stop..." (Joshua).

Long stays at tourism destinations may induce feelings of loneliness and increase tourists' stress. Some travelers who traveled alone "... felt a little bit alone because [they] could not share with other people..." (Richard and Nancy). In addition to loneliness, there was also inconvenience relate to taking photos: "... for girls like me who have to selfie, it was troublesome for me to get satisfying photos" (Shirley).

Additionally, unexpected accidents while traveling (e.g., flight delays or cancellations, lost luggage, car crashes, and being lost) have a significant effect on travel and become major stressors. For instance, Betty became lost in the park because she "... had a bad sense of direction [and] walked three times and finally found the right place " Robert encountered a situation in which his friends cancelled the trip without notifying him in advance: "... that made me feel terrible and interrupted all my plans."

In the pre-trip period, tedious travel arrangements, such as seeking information, transportation reservations, and developing an itinerary, and preparation for unanticipated changes in travel plans can potentially increase travelers' stress: "There is too much information on the Internet, but not all is right and recent. It was troublesome to make a travel plan and do hotel and transportation reservations by myself..." (Angela). Amanda agreed with this and said, "It was very difficult to make a good travel itinerary that makes everyone satisfied. And I had to spend lots of time to make sure that we did not have to take a detour and could save our energy."

4.3. Travel-partner-related stress

The travel partner and/or spouse influences travel-related decisions to some degree (Kerstetter, Bricker and Gitelson, 1996). Thus, these people may be a source of stress during vacation. Zehrer and Crotts (2012) suggested that compared with solo travel, traveling with partners (e.g., spouse, children and relatives) is more likely to evoke stress in the vacation-planning stage and increase travelers' stress in other stages, including travel to the destination and at the destination.

4.3.1. Cancelled trips

For a number of visitors, an unexpected cancellation by travel partners was annoying and had an impact on their travel arrangements. Edward reflected on his experience on this trip: "... then I got a call, and my plan had to be canceled.... I felt very disappointed." Paul also expressed frustration with his experience: "canceling a trip means that you will you're your deposit, and the refund of the ticket and reservation is kind of troublesome. Sometimes you have to face some unavoidable loss."

4.3.2. Conflicts

Conflicts with travel partners can happen anytime and anywhere on a trip due to different interests, wants and needs from person to person. This issue was highlighted as a cause of stress by multiple respondents: "It was difficult to form a travel group and coordinate time with friends.... For example, some people want to shop, some people want leisure, some people want to experience a variety of attractions. The rhythm is not the same. It is very tiring to play together." (Kimberly)

"[I] felt unhappy. My friend, he always followed the flow. For example, we wanted to go somewhere, he said A, I said B, and let him choose one. He said it depended on me. [I] couldn't help getting angry and annoyed." (Kathleen)

"I am not interested in playing, but he is. So when he was playing and watching [a show], I just sat there and waited for him." (Margaret)

4.3.3. Obligations

For tourists who travel with family, the obligation to take care of their children and family members can be highly stressful, especially for female travelers. Elizabeth stated that "[my] children were too young, and I had to pay more attention to them than [if I were] traveling alone. I needed to take care of them, sometimes feeding them, sometimes watering ... and it cost more and we had no time to visit, just following " In addition to children, elderly people require attention and responsibility. "It was inconvenient for some old people [when taking the shuttle bus in the park]. The car drives too fast and stops for a short while at the scenic spot. They had no time to visit" (William). A young traveler stated, "[I] had to stay with my family and visit somewhere I'm not interested in. I felt anxious and bored" (Jennifer). Therefore, these travelers prefer to visit with friends rather than family, which makes them relaxed and is less stressful.

4.3.4. Accommodations

Accommodations with travel partners are a necessary and a vital part of the trip, which may also result in stress for travelers. As Thomas stated, "There was a person who did everything slowly and wasted so much time. We all were anxious and unhappy about waiting for him. But [we] had to continue waiting for him and could not leave "Shirley also said that "three persons together always made everything more complex and worse. If there were only two, [they] could negotiate with each other easily. The third one sometimes felt embarrassed when he or she joined later."

4.3.5. Family issues

Regarding stress from travel partners, family issues were mentioned frequently in the study, and most of the respondents indicated that these issues provoked psychological stress during the vacation. Joseph said that his "children cried on the plane after a one- or 2-h flight. That made me worried and stressful. For adults, we also felt uncomfortable after a long journey." Amy had similar experiences and said, "The children were so young and weak. They were vulnerable to becoming sick if they got sunburn "

4.4. Environment-related stress

Evidence has revealed that various components of a destination environment influence tourists' experience and satisfaction. We also found that tourists experienced environment-related stress, including weather and transportation at the destination.

4.4.1. Weather

The most stressful aspect of the natural environment is weather, which is associated with heat, cold, rain and strong sunshine. Mary and Patricia indicated that the weather in Shenzhen was very hot when they visited Splendid China, and they felt uncomfortable. Steven, who suffered a sudden cold wave, reflected on his experience: "I thought it was still hot at 20° because of the weather forecast. It wasn't expected that the weather just cooled down to 10°." He complained that this unexpected change of weather interrupted his travel plans: "I had planned

the day before, and it rained the next day, so it would be a day off." A similar situation was shared by Linda and Jennifer: "It rained heavily and influenced my feelings. It was a little dark, so it made me feel down," and "Because of the weather, some recreational facilities didn't open." For a number of female tourists, the strong sunshine increased their stress and worry about being tanned. As Rebecca stated, "... the UV was very strong, and I had to end my visit. I did not visit all of Splendid China."

4.4.2. Transportation

As Strauss-Blasche, Ekmekcioglu, and Marktl (2002) found in studies of stress, long-distance travel, whether by plane or in traffic, and adapting to new physical and social environments produces high stress levels. In this study, tourists experienced abundance stress from transportation at the tourism destination, such as delayed trains or flights, traffic jams, ticket booking, and transfer and driving issues.

John shared his experience traveling on a long journey: "The flight was delayed. I would have arrived at 4:45, but it took until 11 to get here," and "it made me feel bad and exhausted." Thomas had a similar experience: "The flight was delayed an hour," and "I had to take a taxi to downtown, which cost me over 100 yuan." In addition, expensive checked luggage fees and delayed luggage annoyed and stressed travelers: "My luggage was delivered by the next flight and sent to me the next day. It was a little troublesome" (William).

Traffic jams were major problems for most respondents. They mentioned that "the car traffic lights were too much, too stuffed" (Shirley), and "I felt quite uncomfortable because I have car sickness badly if there is a traffic jam on the road" (Sandra). In particular, tourists driving to the park indicated that "since there was a traffic jam, I had to stop for a second and go. It's better to walk and faster" (Edward). In addition to traffic jams, tourists encountered driving problems. For example, Amy stated that "... there was single and double limit lines in Shenzhen, so we had to wait until 6:30 p.m. " Parking is also a source of stress. For Kevin, "parking was difficult. It was easy to come, but more difficult to go back home." Betty felt stressed when she drove the wrong way: "It was really annoying and wasted so much time."

For tourists who choose public transportation, ticket booking and transferring are issues related to travel arrangements. For instance, Frank and Angela stated that "it was very hard to buy tickets because the holiday was coming. I booked my tickets in advance and still hadn't got the return tickets." When transferring from one place to another, Kimberly felt confused by the complex transportation: "The public transportation was so complex, and there were many lines. I couldn't easily find the right line, and it had a great impact on my traveling."

4.5. Stress coping strategies

Based on the existing coping framework (Lazarus &Folkman, 1984; Taylor & Schneider, 1989), we categorized coping strategies into problem-focused coping and emotion-focused coping. In this study, the

Table 3

Coping strategies used by tourists to deal with stress experienced during a vacation.

Key themes	Subthemes
1 Problem-focused coping	1.1Post on social media
	1.2 Talking with others
	1.3 Altering intended travel plan
	1.4 Playing with phones
	1.5 Taking a break
	1.6 Forgetting work
	1.7 Asking others for help
	1.8 Searching online
2 Emotion-focused coping	2.1 Emotion regulation
	2.2 Thinking differently
	2.3 Understanding
	2.4 Staying alone

coding results led to the creation of Table 3, which highlights the key themes and subthemes of the coping strategies used by tourists to address stress experienced during a vacation.

4.5.1. Problem-focused coping strategies

Problem-focused coping strategies refer to the processes that improve the troubled person-environment relationship by managing the problem. Seven subthemes related to problem-focused coping strategies in leisure travel emerged: posting on social media, talking with others, altering intended travel plans, playing with phones, taking a break, forgetting work, asking others for help and searching online.

Posting on social media was frequently mentioned by the participants. Several respondents indicated that they liked to post when something happened during their trip on social media, such as Wechat and Weibo. Julie, for example, who had a depressing experience on her trip, mentioned, "When I face unhappy things, I post photos on Wechat Moments. This makes me feel better." Sophia, who waited in a long line for the show in the theme park, also noted that she "... had to wait there and posted on Moments first, and then waited for likes and replies " The posts on social media created a way to share the stressful experience with friends or family and also distracted the travelers from this stress.

Talking with others, such as travel partners, friends and family, about changing the undesirable condition or situation during the trip was a strategy used by many participants, who reported that they decided to talk with other members of the group who could do something about the situation when they felt stressed. As Lisa said, "Sometimes I ask my partner for some suggestions, and then I can slowly get through the issue." Similar sentiments were shared by John and Deirdre: "There is no way to solve it; wait for it, chat with friends and listen to music ...," and "... sharing with each other cheered me up, and I regained a good mood."

Altering the intended travel plan is also a coping alternative available to tourists People can visit the site at a different time, visit a different location at the site, change their activity, or change their future travel plans. Suffering from the ongoing construction of the travel destination, Sarah said, "It's really a pity we can't visit there, but maybe we will plan to visit it next time. You know, we can't predict everything." Ellen also shared her experience traveling on a rainy day: "It rained, so we didn't go out and played indoors "Finally, she had to change her travel plans to include more indoor activities instead of outdoor activities. Roy, who had an undesirable transportation experience during his trip, stated that "you have to plan well before you do anything. So I will be prepared well in advance for the next trip." This finding is consistent with the results of Miller's (1997) investigation of recreation conflicts, which showed that higher stress intensity among recreationists was associated with displacement, which was the dominant behavioral coping strategy.

When people are stuck in a stressful situation, *playing with phones* is regarded as a way to deal with the stress. Julie indicated that when she felt stressed, she liked to "... sit alone for a while, play with my phone and look around " Jessica also reflected on her experience in the theme park: "I usually played with my phone, listened to music or played mobile games to kill time when waiting in a line and make myself happy during the trip." Many participants agreed that the fun and relaxation obtained from playing with their phones helped them recover from stressful experiences and regain balance between themselves and the environment.

Taking a break generally occurred when people feltparticularly stressed and exhausted by a challenging or threatening environment during the vacation. Corrine, who was on the last day of her trip, stated, "... I had to take a break after a few hours walking in the park, and after that I thought it was fine to go on my trip." John also shared his experience: "My wife was walking around, but I felt too tired. So I needed to sit here for a break and wait for her to come back. I'm old and feel a little exhausted sometimes on this trip, and at those times, I'd like to just stay in the hotel for more sleep." Another strategy, *forgetting work*, was also highlighted by multiple respondents as a coping behavior to manage work issues that occurred during vacation:

"Now I've chosen to come out—I won't worry about what's going on in my store and whatever is related to my work." (Kathleen)

"Work is work, vacation is vacation. Once I'm on vacation, I totally forget work and enjoy myself on the vacation. When my coworkers call me or email me, I just turn off my phone and let it go." (Roy)

The problem-focused coping strategy of *asking others for help* occurred when tourists had problems and felt stress related to finding a solution. For example, Fiona, who became lost in the theme park and could not find the show stage, mentioned, "... I was so anxious and pressed for time as the show was coming up shortly," but "... fortunately, I found a staff member working here, and she showed met the direction of the stage. I finally caught up." Angela had a similar experience and said, "When I have problems, I like to find someone who is passionate and kind and then talk with them for help." In addition to talking to the staff in the theme park, some participants asked their friends for help via phone. Louis noted, "My friend visited here before. I called him and asked about solutions for the issues I encountered on my trip. He gave me some very important and specific solutions that we could not easily find online."

Finally, *searching online* is a critical and effective strategy for tourists to find quickly and timely information regarding stressful events. Susanna and Anne shared their experiences with developing travel plans in the pre-trip stage. According to Susanna, she "... did a lot of research online on the destination, this theme park and feature activities. There is some very useful information that helped us make a perfect plan and also lessened our anxiety." Anne added that "thanks to the Baidu Map and GPS, we almost got lost on the way coming here." Lisa said, "I used to search information online, for example, online comments on hotels. I can know others' lodging experience and decide whether to order or not. Also, when I hesitate to choose restaurants, some apps can give me real-time and rich information about local restaurants."

4.5.2. Emotion-focused coping strategies

Emotion-focused coping strategy is employed when an individual attempt to maintain a state of cognitive consistency and rationalize stress conditions as satisfactory (Schuster, Hammitt, & Moore, 2006). This strategy was found tobe associated with lower levels of stress and to be most prevalent among visitors to stressful outdoor recreation experiences (Miller, 1997; Schneider, 1995). "People may have habitual ways of coping, regardless [of] objective properties or subjective appraisals of the stressor" (Shewchuk, Elliott, MacNair-Semands, & Harkins, 1999, p. 686). In this study, emotion-focused coping strategies were directed toward emotion regulation, thinking differently, understanding, and staying alone.

Emotion regulation is a process that involves initiating, inhibiting or modulating an individual's cognition or behavior in a given situation (Gross, & John, 2003). Through emotion regulation, people attempt to increase positive emptions and decrease negative emotions to balance their emotional states (Gao, Zhang, Kerstetter, & Shields, 2019). The emotion regulation process triggers a goal either in oneself or in someone else (Gao & Kerstetter, 2018). Various participants indicated that emotion regulation was generally used in stressful situations:

"Every time when you have a bad mood, you have to adjust a little. Don't feel that there is something to sacrifice. I have adjusted my mood." (Linda)

"When your emotions are well controlled, it is really enjoyable to come out. It is not just a trip. It is the best way to make friends.... After travel, it is possible that they even can be business partners in the future." (Elizabeth) "I think that when you are on vacation, the most important thing is that everyone has a good mood and that you don't influence their emotions due to your own bad mood." (Jessica)

Thinking differently, especially finding positive value in negative events and positive comparisons, is another emotion-focused coping strategy that is utilized to address uncontrollable events and unexpected accidents during a trip. Maria, who experienced a sudden storm when visiting a tourism attraction, said, "Everyone wants to go to a place that is sunny. It may be cloudy and rainy. I don't think there's too much impact because you can have a different experience. Others can see the sunny scenery, but you can see a different landscape that others have not seen. Don't get too serious about it." William also shared his experience when visiting the theme park: "You may encounter good things during the trip, but you can also encounter some things that are not very satisfactory. It is a kind of harvest in life. How do you face these problems? Of course, everyone needs to face it, and life is not always good, right?"

In stressful circumstances, participants employed *understanding* as an emotion-focused coping strategy, which is also discussed as rationalization in other studies (e.g., Schuster, Hammitt, & Moore, 2006). This strategy suggests that tourists attempt to rationalize the activities and environmental conditions that make them stressful. For example, Amy encountered construction in the park and stated that "the construction there may have some effect on mood, but you have to understand. Everything can happen during traveling. It's reasonable and acceptable." Paul experienced an emergency cancellation of his trip and stated that "it's acceptable. I can understand him. Because the issue is related to his family, he didn't deliberately cancel but had to. If I were him, I would also do it."

For a number of tourists, the emotion-focused coping strategy they applied to manage stress events was *staying alone*. In this strategy, an individual reduces his or her emotional distress through avoidance or distancing. As Shirley said, "When I feel uncomfortable or stressed, I just stay for a while and then solve it myself. I don't like to bother others or impact my partner's feelings." John also indicated that he had some conflicts with his wife Deirdre during the trip, and when these conflicts happened, he "... stayed away from my wife, and I didn't let it get to me. That made us calm down and regain a good mood. After a while, we went on as if nothing had happened and continued enjoying our trip."

5. Discussions and conclusion

Using Lazarus and Folkman's transaction theory as a guiding framework, our study examined tourists' stress and the coping strategies they used during vacations. Based on the existing leisure research on the buffering role that leisure plays in coping with stress (Cattell, 1955; Zehrer and Crotts, 2012; Coleman & Iso-Ahola, 1993; Iwasaki & Mannell, 2000; Steyn, Saayman, & Nienaber 2004; Schuster, Hammitt, & Moore, 2003), our study extended the stress coping research into the leisure travel context by focusing on travelers and their stress as well as their ways of managing stress through different coping strategies. Our findings support the evidence that tourists encounter stress during travel (Zehrer and Crotts, 2012; Gao; Kerstetter, 2018), and vacation experiences may not always foster happiness (Schneider &Hammitt, 1995a, 1995b; Steyn; Saayman, &Nienaber 2004). Understanding the stressors and coping strategy used by the tourists would positively influence individuals' well-being by relieving stress (Chen, Petrick; Shahvali, 2016; Dhar, 2011; Iwasaki, 2006; Iwasaki & Mannell, 2000; Schuster, Hammitt & Moore, 2006).

Our findings revealed that tourists encountered stress from themselves and their travel partners, the service provider, and the environment. These findings not only confirm existing evidence on tourists' stress during vacations (Cohen & Gössling, 2015; Gao & Kerstetter, 2018; Chen, 2017) but also importantly acknowledge that tourists face different stress in different phases of their vacation, which is in line with previous studies suggesting that stress is multi-dimensional and dynamic (Zehrer and Crotts, 2012; Kimball &Freysinger, 2003). For example, during transit, tourists may experience stress due to fears of terrorist attacks. At the destination, they may have increased emotional (e.g., fears, anxiety) and psychological reactions toward cultural experiences or concerns about personal safety (Larsen et al., 2009). As such, travelers are advised to practice the process of balancing various sources of stress and their cognition when interpreting the environment and stressors.

Furthermore, our findings suggest that poor management and operations at the destination and industry levels caused stress to tourists, which is consistent with existing evidence that several destination factors, such as traffic and crowding, lead to stress (Zehrer and Crotts, 2012). This may also be because travelers confront physical and psychological problems due to the intensity and length of travel (Bauer, 2012; Chen, 2017; Larsen et al., 2009; Striker et al., 1999). Therefore, service providers may want to invest resources in information search and acquisition, making tourists' consumption and travel experiences more friendly (Baron, Patterson, & Harris, 2006; Ryan & Rao, 2008). For example, a destination manager can provide real-time traffic information on a mobile app for tourists to track, avoid peak traffic time, and thus better organize their trips. In terms of factors related to the environment, tourism infrastructure and public services, which make the travel experience more complicated, our study findings reveal that tourists cope with these stress by using emotion regulation and mood management, which confirms the findings of Coleman and Iso-Ahola (1993), Gao and Kerstetter (2018), Gao et al. (2017), and Iwasaki and Mannell (2000).

Travelers learn to manage their stress by utilizing different coping strategies, including thinking differently, understanding and rationalization, and manipulating emotions. This might be because tourists may have little control over the situation, so they choose emotionrelated strategies (Lazarus &Folkman, 1984). These cognitive coping strategies lead to changes in tourists' behaviors and thoughts. For example, tourists seek opportunities to socialize with others on social media by posting on Wechat. This strategy of using Wechat is unique to the specific country context of China but may be applied to other contexts by using different social media. In this way, problem-focused and emotion-focused coping strategies can be used together. However, further studies are needed to compare the use of these strategies in different phases with different stressors. On the other hand, younger tourists choose social media to vent or obtain support to cope with stress instead of talking to family members. This preference might partly be explained by the self-determination or self-confidence of the younger generation in China, who believe that there are more benefits of travel than risks (Kotler, Bowen, & Makens, 2009). A confident tourist also tends to hold beliefs of personal control and intrinsic motivation (Iwasaki &Mannell, 2000).

Other findings that are unique to the context of China include stress from travel partners and employers, which is in line with previous evidence suggesting that gender, race, age, travel experience and travel groups influence reported stress and coping strategies. Thus, more members of the younger generation choose solo travel and are away from work during vacation.

Despite these contributions to the tourism field, there are several limitations to this study. First, this study only collected data on their travel experience relating to visiting the theme park that might be a specific and narrow context; therefore, future studies should examine a wider sample of contexts by collecting more travel data, such as length and purpose of vacation. Additionally, several factors, such as gender, social identity and family support, have been found to influence individuals' stress and coping (Hutchinson et al., 2003; Kim & Iwasaki, 2016). Thus, future researchers should examine how these factors impact tourists' stress and coping strategies. Because stress is considered a process between an individual and the environment (Jensen &Wrisberg, 2014), future studies are advised to use quantitative methods to further examine the relationships among stressors, their

antecedents, and physical and psychological responses. Furthermore, stress is dynamic and changes in different phases of travel (Zehrer & Crotts, 2012; Unger et al., 2016). Thus, coping strategies might vary during travel experiences (Gao & Kerstetter, 2018). Although we categorized different coping strategies, our results did not differentiate stressors and coping strategies across time and space based on the phases of travel (e.g., pre-travel, post-travel). Future studies may want to examine tourists' use of coping strategies across different travel phases.

Our study results also provide valuable practical implications. For example, the results suggest that tourists experience stress due to different aspects of the service provider, including hospitality, destinations and attractions. Professionals in the service industry must acknowledge and respond to tourists' stress by improving their service and modifying facilities. On the other hand, tourists use a variety of strategies (e.g., social media) to cope with stress. Thus, service professionals and public service providers might benefit from knowing how to modify and develop programs and facilities to address tourists' stress and accommodate their coping strategies. Using the information on social media, such as Wechat and blogs, tourism professionals can obtain more objective feedback about their services. These professionals are encouraged to provide free Wi-Fi connections for tourists to share their opinions online. Our results also revealed that the young generation (e. g., Millennials, Gen Y) prefers to travel in small groups and use this coping strategy (i.e., traveling solo) to relieve the stress of traveling with partners. Therefore, tourism providers should account for this segment of tourists and respond to their needs.

In conclusion, this study used Folkman and Lazarus' (1984) transnational stress coping theory to identify four types of stress from the service provider, the traveler, travel partners, and the environment during vacation. It also uncovered two coping strategies, problem-focused and emotional-focused strategies. These findings contribute to tourism research by documenting how leisure travel may provoke stress, which can affect tourists' experiences as well as their overall satisfaction and revisit intentions. The findings also provide suggestions for how service providers and policy makers should modify facilities and programs in response to tourists' stress.

Impact statement

This study provides important implications to the tourism industry, tourists and the society overall. First, results showed that tourists experience stress due to different aspects of the service provider, including hospitality, destinations and attractions. Professionals in the service industry must acknowledge and respond to tourists' stress by improving their service and modifying facilities. Service professionals and public service providers might benefit from knowing how to modify and develop programs and facilities to address tourists' stress and accommodate their coping strategies. Using the information on social media, such as Wechat and blogs, tourism professionals can obtain more objective feedback about their services. Results also have critical message on how to cope with stress and increase individual well-being to tourists, who seek for happiness during vacation. These messages on stress coping and well-being together would contribute to the societal well-being.

Author contributions

Dr. Mingfang Zhu co-managed the research project with Dr. Gao, and was responsible for data collection and manuscript writing. **Dr. Jie Gao** co-managed the research project with Dr. Zhu, and participated in the study proposal, data collection and analysis, as well as manuscript writing. **Linan Zhang** helped with data collection and participated in manuscript writing. **Dr. Shenglang Jin** helped with data analysis and participated in manuscript writing.

Declaration of competing interest

None.

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References

- Baron, S., Patterson, A., & Harris, K. (2006). Beyond technology acceptance: Understanding consumer practice. *International Journal of Service Industry Management*, 17(2), 111–135.
- Bauer, I. (2012). Australian senior adventure travellers to Peru: Maximising older tourists' travel health experience. *Travel Medicine and Infectious Disease*, 10(2), 59–68.
- Brajša-Žganec, A., Merkaš, M., & Šverko, I. (2011). Quality of life and leisure activities: How do leisure activities contribute to subjective well-being? *Social Indicators Research*, 102(1), 81–91.
- Bricker, J. B. (2005). Development and evaluation of the air travel stress scale. Journal of Counseling Psychology, 52(4), 615.
- Brown, J. D., & Lawton, M. (1986). Stress and well-being in adolescence: The moderating role of physical exercise. *Journal of Human Stress*, 12(3), 125–131.
- Bruni, M., & Steffen, R. (1997). Impact of travel-related health impairments. Journal of Travel Medicine, 4(2), 61–64.
- Burkholder, J. D., Joines, R., Cunningham-Hill, M., & Xu, B. (2010). Health and wellbeing factors associated with international business travel. *Journal of Travel Medicine*, 17(5), 329–333.
- Caltabiano, M. L. (1994). Measuring the similarity among leisure activities based on a perceived stress-reduction benefit. *Leisure Studies*, 13(1), 17–31.
- Cattell, J. P. (1955). The holiday syndrome. The Psychoanalytic Review.
- Chen, H. S. (2017). Travel well, road warriors: Assessing business travelers' stressors. *Tourism Management Perspectives*, 22, 1–6.
- Chen, C. C., Petrick, J. F., & Shahvali, M. (2016). Tourism experiences as a stress reliever: Examining the effects of tourism recovery experiences on life satisfaction. *Journal of Travel Research*, 55(2), 150–160.
- China Tourism Academy(CTA). (2017a). Annual report of China outbound tourism development. Beijing: China Tourism Education Press.
- China Tourism Academy(CTA). (2017b). Annual report of China inbound tourism development. Beijing: China Tourism Education Press.
- China Tourism Academy(CTA. (2017c). Annual report of China domestic tourism development. Beijing: China Tourism Education Press.
- Cobelens, F. G., Leentvaar-Kuijpers, A., Kleijnen, J., & Coutinho, R. A. (1998). Incidence and risk factors of diarrhoea in Dutch travellers: Consequences for priorities in pretravel health advice. *Tropical Medicine & International Health: TM & IH*, 3(11), 896–903.
- Cohen, S. A., & Gössling, S. (2015). A darker side of hypermobility. Environment and Planning A: Economy and Space, 47(8), 166–1679.
- Coleman, D., & Iso-Ahola, S. E. (1993). Leisure and health: The role of social support and self-determination. Journal of Leisure Research, 25(2), 111.
- DeFrank, R. S., Konopaske, R., & Ivancevich, J. M. (2000). Executive travel stress: Perils of the road warrior. Academy of Management Perspectives, 14(2), 58–71.
- Dey, I. (1993). *Creating categories. Qualitative data analysis.* london: Routledge. Dhar, R. L. (2011). Leisure as a way of coping with stress: An ethnographic study of the
- low-income construction workers. *Leisure/Loisir*, *35*(3), 339–360. Dolnicar, S., Yanamandram, V., & Cliff, K. (2012). The contribution of vacations to
- quality of life. Annals of Tourism Research, 39(1), 59–83.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. Annual Review of Psychology, 55, 745–774.
- Furnham, A. (1984). Tourism and culture shock. Annals of Tourism Research, 11(1), 41–57.
- Gao, J., & Kerstetter, D. (2018). From sad to happy to happier: Emotion regulation strategies used during a vacation. Annals of Tourism Research, 69, 1–14.
- Gao, J., Kerstetter, D., Mowen, A., & Hickerson, B. (2017). Changes in tourists' perception of well-being based on their use of emotion regulation strategies during vacation. *Journal of Travel & Tourism Marketing*, 35(5), 567–582.
- Gao, J., Zhang, Y., Kerstetter, D., & Shields, S. (2019). Understanding changes in tourists' use of emotion regulation strategies in a vacation context. *Journal of Travel Research*. https://doi.org/10.1177/0047287518798511.
- Glaser, B. G., & Strauss, A. L. (1967). The constant comparative method of qualitative analysis. The discovery of grounded theory. *Strategies for qualitative research*, 101, 158.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality* and Social Psychology, 85(2), 348.
- Heintzman, P., & Mannell, R. C. (2003). Spiritual functions of leisure and spiritual wellbeing: Coping with time pressure. *Leisure Sciences*, 25(2–3), 207–230.
- Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods.

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- Hutchinson, S. L., Bland, A. D., & Kleiber, D. A. (2008). Leisure and stress-coping: Implications for therapeutic recreation practice. *Therapeutic Recreation Journal*, 42 (1), 9.
- Hutchinson, H., Mackay, W., Westerlund, B., Bederson, B. B., Druin, A., Plaisant, C., & Roussel, N. (2003, April). Technology probes: Inspiring design for and with families. In Proceedings of the SIGCHI conference on Human factors in computing systems (pp. 17–24). ACM.
- Ivancevich, J. M., Konopaske, R., & Defrank, R. S. (2003). Business travel stress: A model, propositions and managerial implications. Work & Stress, 17(2), 138–157.
- Iwasaki, Y. (2002). Exploring leisure coping processes: Roles of leisure activities and psychosocial functions of leisure coping. *Annals of Leisure Research*, 5(1), 27–50. Iwasaki, Y. (2003a). Examining rival models of leisure coping mechanisms. *Leisure*
- Sciences, 25(2–3), 183–206.
 Iwasaki, Y. (2003b). The impact of leisure coping beliefs and strategies on adaptive outcomes. *Leisure Studies*, 22(2), 93–108.
- Wasaki, Y. (2006). Counteracting stress through leisure coping: A prospective health study. Psychology Health & Medicine, 11(2), 209–220.
- Iwasaki, Y., & Mannell, R. C. (2000). Hierarchical dimensions of leisure stress coping. *Leisure Sciences*, 22(3), 163–181.
- Iwasaki, Y., & Schneider, I. E. (2003). Leisure, stress, and coping: An evolving area of inquiry. Leisure Sciences, 25(2–3), 107–113.
- Iwasaki, Y., Zuzanek, J., & Mannell, R. C. (2001). The effects of physically active leisure on stress-health relationships. *Canadian Journal of Public Health*, 92(3), 214-218.
- Jensen, P. R., & Wrisberg, C. A. (2014). Performance under acute stress: A qualitative study of soldiers' experiences of hand-to-hand combat. *International Journal of Stress Management*, 21(4), 406.
- Kerstetter, D., Bricker, K., & Gitelson, R. (1996). The influence of a spouse or partner in travel decision-making. Visions in Leisure and Business, 15(2), 6.
- Kimball, A., & Freysinger, V. J. (2003). Leisure, stress, and coping: The sport participation of collegiate student-athletes. *Leisure Sciences*, 25(2–3), 115–141.
- Kim, J., & Iwasaki, Y. (2016). Role of leisure-generated meanings in adaptation to acculturation stress of Korean immigrants in Canada. Loisir et Société/Society and Leisure, 39(2), 177–194.
- Kotler, P., Bowen, J. T., & Makens, J. C. (2009). Marketing for hospitality and tourism. Prentice Hall.
- Larsen, S., Brun, W., & Øgaard, T. (2009). What tourists worry about–Construction of a scale measuring tourist worries. *Tourism Management*, 30(2), 260–265.
- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. Psychosomatic Medicine, 55(3), 234–247.
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. In The handbook of behavioral medicine (pp. 282–325).
- Lofland, J., & Lofland, L. H. (1995). Developing analysis. Analyzing Social Setting, 183–203.
- Miller, T. A. (1997). Coping behaviors in recreational settings: Substitution displacement and cognitive adjustments as a response to stress.
- Miller, T. A., & McCool, S. F. (2003). Coping with stress in outdoor recreational settings: An application of transactional stress theory. *Leisure Sciences*, 25(2–3), 257–275.
- Moen, P., Dempster-McClain, D., & Williams, R. M., Jr. (1989). Social integration and longevity: An event history analysis of women's roles and resilience. *American Sociological Review*, 635–647.
- Patry, D. A., Blanchard, C. M., & Mask, L. (2007). Measuring university students' regulatory leisure coping styles: Planned breathers or avoidance? *Leisure Sciences*, 29 (3), 247–265.
- Peters, T. J. (1994). The Tom Peters seminar: Crazy times call for crazy organizations. *Vintage*.
- Richards, C. A., & Rundle, A. G. (2011). Business travel and self-rated health, obesity, and cardiovascular disease risk factors. *Journal of Occupational and Environmental Medicine*, 53(4), 358–363.
- Ryan, C., & Rao, U. (2008). Holiday users of the Internet—ease of use, functionality and novelty. *International Journal of Tourism Research*, 10(4), 329–339.
- Schneider, I. E. (1995). Describing, differentiating, and predicting visitor response to on-site outdoor recreation conflict.
- Schneider, I. E., & Hammitt, W. E. (1995a). Visitor response to outdoor recreation conflict: A conceptual approach. *Leisure Sciences*, 17(3), 223–234.
- Schneider, I. E., & Hammitt, W. E. (1995b). Visitor Responses to on-site recreation conflict. Journal of Applied Recreation Research, 20(4), 249–268.
- Schneider, I. E., & Wilhelm Stanis, S. A. (2007). Coping: An alternative conceptualization for constraint negotiation and accommodation. *Leisure Sciences*, 29(4), 391–401.
- Schuster, R. M., Hammitt, W. E., & Moore, D. (2003). A theoretical model to measure the appraisal and coping response to hassles in outdoor recreation settings. *Leisure Sciences*, 25(2–3), 277–299.
- Schuster, R., Hammitt, W. E., & Moore, D. (2006). Stress appraisal and coping response to hassles experienced in outdoor recreation settings. *Leisure Sciences*, 28(2), 97–113. Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education*
- and the social sciences. Teachers college press. Shenzhen Statistic Administration(SZSA. (2017). Shenzhen statictical year book 2017.
- retrieved on December http://www.sztj.gov.cn/xxgk/zfxxgkml/tjsj/tjnj/201712/P0 20180822606533537093.pdf.
- Shields, M. (2004). Stress, health and the benefit of social support. *Health Reports*, 15(1), 9.
- Statistics Bureau of Guangdong Province (SBGD. (2017). Annoncements on adjustment of the accounting method of R & D expenditure to revise the accounting data of GDP. retrieved on December 9 http://www.gdstats.gov.cn/tjzl/tjgb/201712/t201712 09_377708.html.

- Steyn, S., Saayman, M., & Nienaber, A. (2004). The impact of tourist and travel activities on facets of psychological well-being. South African Journal for Research in Sport, Physical Education and Recreation, 26(1), 97–106.
- Strauss-Blasche, G., Ekmekcioglu, C., & Marktl, W. (2002). Moderating effects of vacation on reactions to work and domestic stress. *Leisure Sciences*, 24(2), 237–249.
- Striker, J., Dimberg, L., & Liese, B. H. (2000). Stress and business travel: Individual, managerial, and corporate concerns. *Journal of Organizational Excellence*, 20(1), 3–10.
- Striker, J., Luippold, R. S., Nagy, L., Liese, B., Bigelow, C., & Mundt, K. A. (1999). Risk factors for psychological stress among international business travellers. *Occupational* and Environmental Medicine, 56(4), 245–252.
- Taylor, S. E., & Schneider, S. K. (1989). Coping and the simulation of events. Social Cognition, 7(2), 174–194.
- Unger, J. (2016). The transformation of rural China. Routledge.
- Waterhouse, J., Reilly, T., Atkinson, G., & Edwards, B. (2007). Jet lag: Trends and coping strategies. *The Lancet*, 369(9567), 1117–1129.
- Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology*, 54(6), 1020.
- Westman, M., & Etzion, D. (2002). The impact of short overseas business trips on job stress and burnout. Applied Psychology, 51(4), 582-592.
- Westman, M., Etzion, D., & Gattenio, E. (2008). International business travels and the work-family interface: A longitudinal study. *Journal of Occupational and Organizational Psychology*, 81(3), 459–480.
- WTO Services. (2011). Tourism and travel-related services. Retrieved from https://www. wto.org/english/tratop e/serv e/tourism e/tourism e.htm.
- Zehrer, A., & Crotts, J. C. (2012). Vacation stress: The development of a vacation stress model among US vacation travelers. *Tourism Review*, 67(3), 41–55.



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