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# Perceived Constraints to Sex Tourism Overseas: Scale Development and Validation

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# Perceived Constraints to Sex Tourism Overseas: Scale Development and Validation

## Abstract

*Purpose:* The relationship between sex and tourism remains ambiguous in the tourism literature. Few studies have examined the underlying motivations behind sex-driven travel, and little is known about factors inhibiting tourists' procurement of commercial sex when traveling. Therefore, this study explored male Chinese tourists' perceived constraints during decision making and developed a comprehensive scale to assess constraints to commercial sex consumption overseas.

*Design / methodology / approach:* Data were obtained from male Chinese tourists purchasing commercial sex while traveling overseas. Our study involved a four-stage process as recommended by Churchill (1979) for scale development research. In Stage 1, preliminary items were generated through a comprehensive review of the constraints literature and in-depth interviews with 16 sex tourists, which generated an initial 26 items. During the second stage to purify the measurement items, six items were eliminated, resulting in 20 items. Stage 3 involved exploratory factor analysis ( $N = 275$ ) to extract the scale's underlying factor structure. Results revealed a five-factor structure with sufficient evidence of internal reliability given Cronbach's alpha coefficients between 0.722 and 0.843. The final stage included confirmatory factor analysis ( $N = 259$ ) to verify the scale's reliability and validity.

*Findings:* Ultimately, 20 items were developed to measure sex tourists' perceived constraints towards engaging in commercial sex services overseas based on five factors: structural constraints, intrapersonal constraints, interpersonal constraints, value conflicts, and service supply-related constraints.

*Originality / value:* This study advances the scope of sex tourism research by verifying how these five constraints are independent, generalized, and can influence the procurement of sexual services overseas. This study is the first in sex tourism research to explore the difficulties facing sex tourists. Results offer marketers important insight on how to better address these constraints while providing a safe and legal sex tourism experience.

**Keywords:** male Chinese tourists; commercial sex; perceived constraints; outbound tourism; measurement scale development

## **1. Introduction**

Sex is recognized as a major aspect of the tourist experience (Berdychevsky, Poria, & Uriely, 2013; Omondi & Ryan, 2017; Ying & Wen, 2019). However, the association between sex and tourism has only recently become a subject of academic research (Bandyopadhyay, 2013; Wen, Klarin, Goh, & Aston, 2020). The term “sex tourism” refers to procuring commercial sex as a tourist (Carr, 2016). Commercial sex tourism has often been associated with West–East tourist flows, exemplifying developed countries’ exploitation of developing areas (Carr, 2016; Opperman, 1999). The literature on commercial sex has also tended to focus on the prostitution of women, with limited attention paid to the positions of men who pay for sex (Plumridge, Chetwynd, Reed, & Gifford, 1997; Ying & Wen, 2019). An investigation of these clients may provide an alternative perspective to contextualize sex tourism more fully.

China is now one of the world’s largest outbound tourism sources (UNWTO, 2018). Trips from China were projected to hit 178.4 million in 2019 along with a tourism expenditure of roughly CNY 1.2727 trillion by 2022 (Travel China Guide, 2019). The Chinese outbound tourism market also shows promise for continued expansion (Li, Harrill, Uysal, Burnett, & Zhan, 2010; Wen, Huang, & Goh, 2020). The boom in outbound travelers from emerging Asian markets has also increased the diversity of tourists’ demands (Wen, Meng, Ying, Qi, & Lockyer, 2018; Ying & Wen, 2019). Given the historical relationship between sex and tourism, it is unsurprising that a growing number of outbound tourists from these new markets are beginning to tap into a sex tourism domain that has, until recently, been largely Western-oriented. Although scholars have started to debate whether the prevailing sex tourism paradigm is suited in today’s global tourism landscape (Bandyopadhyay, 2013; Carr, 2016), the demand-side scale and nature of this phenomenon remains unclear.

Sex tourism research is relatively expansive (Kock, 2021). Much of this work has focused on interpreting and operationalizing the topic; case studies and qualitative analysis are therefore

common. For instance, researchers have examined sex tourism in Thailand in relation to AIDS (Cohen, 1988), the nature of sex tourism in Kenya (Omondi & Ryan, 2017), scale development for sex tourism–related motivations (Ying & Wen, 2019), and sex tourists’ experiences and relationships with locals in the Caribbean (Weichselbaumer, 2012). These studies have advanced the understanding of sex tourism and provided multiple definitions. Descriptions range from typologies, continua linked to geographical areas, relationships, economics, motivations, behavior, and emotions to the gender aspects of sex tourism (Oppermann, 1999). Different from prior work, the current study seeks to explore restrictions around tourists’ engagement in commercial sex. Perceived constraints have been shown to prevent people from embarking on or resuming travel (Kerstetter, Yen, & Yarnal, 2005).

When considering travel, constraints should be investigated to develop a holistic picture of decision making (Jackson, 2005). Crawford et al. (1991) devised a hierarchical model of constraints (i.e., intrapersonal, interpersonal, and structural) which travelers must overcome to participate in leisure tourism (Hudson & Gilbert, 2000). Chinese tourists’ leisure constraints have been studied fairly generally, such as in terms of their intentions to visit the United States (Lai et al., 2013). Others have examined these tourists’ plans to travel to Norway (Mei & Lantai, 2018) or their decision making when arranging trips to Japan (Lin et al., 2017). Yet perceived constraints in special interest tourism (i.e., sex tourism) may differ from constraints in prior contexts. Specific constraints should be further explored to better clarify Chinese male tourists’ concerns related to sex tourism.

Maslow’s hierarchy of needs identifies sex as a core human need (Maslow & Lewis, 1987). From a tourism perspective, male Chinese tourists’ engagement in sex overseas could fulfill their physical as well as spiritual needs. A sizeable proportion of China’s young generation is well educated but time-poor and experience-hungry (Hsu & Huang, 2016; Jin & Spark, 2017). Many Chinese tourists therefore seek adventure through novel life experiences

(Wen et al., 2019). For example, male Chinese tourists may participate in certain activities (e.g., sex tourism) that are prohibited at home but tolerated elsewhere (Wen & Wu, 2020). Many of these tourists engage in sex tourism to pursue relaxation and escape a busy life (Ying & Wen, 2019). Therefore, sex tourism in certain countries could play a crucial role in the Chinese market. Tourism marketers could better accommodate this emerging segment by offering itineraries tailored to male Chinese tourists' special interests.

As Jackson (2005) argued, positive (e.g., motivational) and negative (e.g., inhibitory) factors must be considered when seeking a thorough understanding of tourists' decisions. Constraints are understudied in tourism compared to tourist motivation (Hudson & Gilbert, 2000; Lai, Li, & Harrill, 2013). Although researchers have considered motivation in terms of sex and tourism (Graburn, 1983; McKercher & Bauer, 2003; Wen et al., 2020), it remains difficult to unravel Chinese tourists' perceived constraints to participating in commercial sex. The sensitivity of this topic and associated data collection challenges have greatly hindered discussion of tourists' sex-focused trips from a constraints perspective or within the context of Chinese outbound travel. Therefore, it is important to extend this discussion in terms of sex tourism.

Within a broader project concerning the mindset, behavior, and experiences of male Chinese tourists engaging in commercial sex while overseas, the present study aims to contribute to relevant literature by developing a scale of travel constraints related to sex tourism. Based on 534 male Chinese tourists who procured commercial sex during their overseas holiday, our study serves to 1) investigate constraints that male Chinese tourists perceived to engaging in commercial sex overseas; and 2) develop a comprehensive, reliable scale to measure Chinese tourists' perceived constraints when traveling overseas for commercial sexual experiences.

## **2. Literature review**

### ***2.1. Sex tourism context***

Sex has long been linked to tourism, as the latter provides a liminal setting (Berdychevsky, Poria, & Uriely, 2013; Wen et al., 2020) that enables people to enjoy “a temporarily constrained, socially tolerated period of wish fulfillment, a form of fantasy enactment that is normally denied to people [in their daily environment]” (Ryan & Kinder, 1996, p. 507). Some tourists may travel to fulfill sexual fantasies (Want, 2002), as traveling away from home allows them to temporarily unload baggage that could shape their sexual behavior (McKercher & Bauer, 2003). Debate persists around themes in sex tourism. For instance, this form of tourism features moral and ethical concerns given its ties to sex trafficking (Brooks & Heaslip, 2019). By contrast, sex tourism has been shown to boost local economies and benefit individuals without a partner (Kock, 2021). A growing number of tourism scholars are beginning to study sex tourism to inform stakeholders based on travelers’ motivations and behavioral patterns (e.g., Brooks & Heaslip, 2019; Carr, 2016; Kock, 2021; McKercher & Bauer, 2003; Ryan & Hall, 2001; Wen et al., 2020).

Purchasing commercial sex is often considered socially deviant (Ryan & Hall, 2001; Want, 2002; Ying & Wen, 2019) due to concerns about morality and social righteousness (Carr, 2016). This judgmental premise around social values relative to sex tourism has discouraged academic work in the area and created practical challenges to obtaining empirical data (Carr, 2016; Graburn, 1983). Few empirical papers have addressed the motivations behind sex tourism (Blackburn et al., 2011; Kock, 2021; Ying & Wen, 2019). Only one conceptual article appears to have highlighted the dark side of sex tourism (Brooks & Heaslip, 2019). Sex tourism has also rarely been compared with other tourism phenomena (Bandyopadhyay, 2013; Clift & Cater, 2000; Wen et al., 2020). Relevant perceived constraints thus need to be understood to better operationalize this emerging topic. Constraints often involve travel barriers, including



time, money, opportunity, knowledge, reluctance, safety, and interest during leisure trips (e.g., Blazey, 1987; Jackson, 1983; Howard & Crompton, 1984; Hung & Petrick, 2012). The link between travel constraints and purchase intention is well established (Hung & Petrick, 2012; Lee et al., 2012). Constraints and their effects remain relatively unknown in the context of sex tourism. This study therefore approaches sex tourism as a tourism activity to explore male Chinese tourists' mindsets and behavior when procuring commercial sex overseas. In particular, the present study focuses on tourists' perceived constraints during the decision-making process.

## ***2.2. Prostitution and commercial sex in China: Values and conflicts***

In post-1949 China, prostitutes were labeled as immoral symbols of corruption and as causing social instability (Gil & Anderson, 1998). Strenuous efforts were undertaken to eliminate prostitution from Chinese society: under the rule of Chairman Mao, all brothels were closed, pimping was penalized, and prostitutes were rehabilitated (Ruan, 2013). Those who forced women into prostitution faced consequences as harsh as capital punishment (Jeffreys, 2006). China's prostitution industry was effectively eradicated by 1953 (Ruan, 2013) but re-emerged in mainland China in the 1980s. Thereafter, strong measures such as the 1979 Criminal Law of the People's Republic of China were enacted to punish traffickers, pimps, and brothel owners severely and to control prostitution.

In response to the AIDS epidemic, China's approach to prostitution moved from essentially moralistic to emphasizing sexual health. With the opening up of China's Special Economic Zones, 84% of female sex workers from Kunming, China were found to have sexually transmitted disease (Chen et al., 2005). Huang et al. (2004) discovered that 11% and 5% of prostitutes in Guangxi and Yunnan provinces were infected with HIV, respectively.

Believing prostitution to be the cause of the spread of disease, several campaigns were launched to curb prostitution and its adverse health effects (Bakken, 2005; Zhou, 2006).

Officially, neither prostitution nor commercial sex is legally allowed in mainland China (Anderson & Gil, 1994; Jefferys, 2006). Chinese society stigmatizes sex workers, particularly clients (Kong, 2016). The Chinese government's position and social emphasis on status suggest that tourists' involvement in nationally prohibited sexual activities (e.g., when overseas) is not domestically acceptable (Wen & Wu, 2020). Indeed, purchasing commercial sex is often considered socially deviant (Ryan & Hall, 2001; Want, 2002). Public perceptions may therefore serve as value-based restrictions to sex tourism. For instance, purchasing commercial sex represents a deviant behavior that opposes ethical and social judgment. Burton (1995) defined travelers' engagement with commercial sex as individuals seeking sex-related enjoyment both on the sexual providers' side and for the experience of a novel journey. A thorough grasp of constraints to sex tourism requires a holistic view integrating tourists' constraints to (commercial) sex and their purchase behavior.

### ***2.3. Constraints to commercial sex consumption in tourism***

#### *2.3.1. Leisure constraints*

The roles of constraints have been well represented in the leisure studies literature. Leisure constraints have been employed as a framework to understand individuals' leisure preferences and experiences (e.g., Alexandris, Du, Funk, & Theodorakis, 2016; Hudson, Walker, Simpson, & Hinch, 2013; Kim, Lee, Kim, & Kim, 2015). Constraints were initially conceptualized as barriers (Jackson 1988), obstacles (Iso-Aholar & Mannell, 1985), or inhibitors (Um & Crompton, 1992) to people's engagement in certain leisure activities. However, the definition of "constraints" has been refined to refer to characteristics that temper

initial or ongoing engagement in leisure services and adversely affect leisure quality (Daniels, Rodgers, & Wiggins, 2005; Nadirova & Jackson, 2000).

To understand how constraints may influence individuals' leisure activities, various leisure constraints theories were developed in the 1980s (e.g., Jackson & Dunn, 1988; Jackson & Searle, 1985). Crawford et al.'s (1991) hierarchical constraint model (HCM) is one of the most influential frameworks (Hung & Petrick, 2010) outlining three constraint types: intrapersonal, interpersonal, and structural. The model posits that people experience such constraints sequentially. Intrapersonal constraints operate at the individual level, including physical and psychological conditions such as poor health or apathy. Interpersonal constraints "arise out of social interaction or relationships among people within social contexts" (Scott, 1991) and include social interactional factors such as travelers' conflicting schedules. Structural constraints are external, including inconvenient transportation or lack of time and money.

Crawford et al. (1991) also put forth a constraint negotiation process in addition to HCM; this process can affect the frequency and intensity of activity (non)participation. Subsequent studies have shown that participation may occur once constraints are successfully negotiated (e.g., Kay & Jackson, 1991; Scott, 1991). During the past two decades, researchers have examined constraint negotiation around numerous leisure activities (e.g., Jackson & Rucks, 1995; Kennelly, Moyle, & Lamont, 2013; Lyu & Lee, 2016).

When measuring leisure constraints as a continual process, it can be helpful to identify which constraints inform leisure participation. Preliminary studies have tended to use analytical tools with low aggregation (e.g., item-by-item analysis), which preclude a consensus regarding an optimal number of constraint items (Scott & Munson, 1994). Following development of the HCM, scholars have generally applied the model as a framework for understanding individuals' leisure behaviors with considerable success (e.g., Alexandris et al., 2016; Gao & Kerstetter,

2016; Jackson & Henderson, 1995). Notable exceptions include work by Samdahl and Jekubovich (1997), who found that the model missed some dynamic factors affecting individuals' leisure choices. They argued that interview data, rather than measurement scales alone, are needed to fully capture influences on individuals' leisure behavior. We have therefore adopted mixed methods in this study.

### *2.3.2. Travel constraints to sex tourism*

Given the applicability of constraints to travel behavior, several studies have applied constraint models to tourism (e.g., Gao & Kerstetter, 2016; Hung & Petrick, 2010; Kazemina, Del Chiappa, & Jafari, 2015). The efficacy of the HCM, as the most widely used model of its kind, has been tested in numerous tourism settings including cruise tourism (Hung & Petrick, 2010), nature-oriented tourism (Fredman & Heberlein, 2005; Hudson & Gilbert, 2000; Nyaupane & Andereck, 2008), event tourism (Kim & Chalip, 2004), dark tourism (Zhang, Yang, Zheng, & Zhang, 2016), and with travelers with disabilities (Tao, Goh & Huang, 2019). In general, factors such as emotional constraints, knowledge, perceptions, anticipation, and self-consciousness (e.g., Daniels et al., 2005; Huang & Hsu, 2009; White, 2008) can be grouped under intrapersonal constraints, as these refer to individual psychological states. Interpersonal constraints have been widely recognized with respect to families, friends, companions, and strangers (Chen, Chen, & Okumus, 2013; Daniels et al., 2005; Huang & Hsu, 2009). By putting tourists in social contexts, these studies have shown the ineluctable role of the influence of other people on tourists' activity (non)participation.

In addition to the HCM's three constraint dimensions, other constraints that influence travel behavior have been identified. For example, Daniels et al. (2005) added a service provider constraint to the category of interpersonal constraints, claiming that the constraints faced by people with disabilities are interactive rather than hierarchical. Chen et al. (2013) also

discerned another constraint dimension, unfamiliar cultural constraints, in tourists' early destination choices. They pointed out that a destination's unfamiliar culture, religion, and atmosphere may inhibit tourists' activity participation. Scholars have also explored the sociodemographic features of travel constraints, namely with respect to age, gender, and family life cycle. It is important to note that travel constraints differ across groups (e.g., Alegre, Mateo, & Pou, 2010; Wen, Huang & Goh, 2020). Context-specific constraints are therefore important to consider.

Despite the extensive attention given to travel constraints (Hung & Petrick, 2012; Khan et al., 2019; Lai et al., 2013), research on constraints related to sex tourism—and with specific national groups—has been largely overlooked. Thus, limited literature has addressed the barriers that affect individuals' (particularly male Chinese tourists') engagement in sex tourism. Little is known about their decisions to purchase commercial sex when traveling. Moreover, as most constraints research has been conducted in Western countries, scholars in Asian contexts have voiced concerns about the efficacy of existing constraint frameworks when exploring local issues (Chick & Dong, 2003; Gao & Kerstetter, 2016). Our study seeks to fill this gap by understanding male Chinese tourists' perceived constraints to purchasing commercial sex overseas.

Based on the HCM, our study conceptualized initial constraints to male Chinese travelers' overseas sex tourism as a multidimensional construct including several dimensions adopted from related research. In-depth interviews and an expert panel assessment served as complementary procedures to enrich and refine constraint constructs specific to outbound Chinese male travelers' sex tourism activities.

### **3. Methodology**

#### ***3.1. Research design and data collection***

To ensure extensive and robust development, we followed Churchill's (1979) four-stage process of developing a constraint measurement scale (Table 1). These steps have been undertaken in various scale development studies in hospitality and tourism (Dedeoglu, Taheri, Okumus, & Gannon, 2020; Lee, 2021; Pan, Zhang, Gursoy, & Lu, 2017). We adopted different techniques at each phase of the process to ensure the validity and reliability of the finalized scale. Rather than relying on a structured questionnaire with predetermined items, we used in-depth interviews and structured surveys to devise our measurement scale and more fully explore sex tourists' perceived constraints.

#### ***Insert Table 1 – Scale development procedures***

Our study population consisted of heterosexual male Chinese tourists who had engaged in commercial sex when traveling overseas within the past 12 months. "Sexual experiences" were broadly conceptualized in this study to cover varying degrees of sexual activities between tourists and professional service providers in overseas destinations, from attending an open sex show to penetrative sex. Random sampling would have been extremely difficult given the sensitivity of the topic and the unclear market scale of Chinese sex tourists. Therefore, convenience sampling was preferred. Research participants for interviews and two questionnaire survey rounds were recruited with assistance from a travel agency headquartered in a major city in China. The agency specialized in customized private or small-group outbound tours to countries where prostitution is legal, and commercial sexual experiences could be arranged upon clients' request.

With help from the collaborating industry partner, tourists and tour guides were recruited to participate in interviews. A survey panel ( $n = 684$ ) was also recruited from the travel agency's clientele who had purchased commercial sexual services overseas within the past 12 months. This panel was randomly split into two equal-sized samples ( $n = 342$ ): one for the first-round survey to establish our measure's dimensionality, and another for the second-round survey to finalize and validate the scale.

Due to the sensitive nature of this topic, we took several steps to ensure high-quality data collection. Because all survey respondents were identified via the collaborating agency, we developed questionnaires for both rounds but allowed the travel agency to oversee survey administration. We hoped that respondents would be more comfortable, and thus more willing to participate, when completing surveys via their former agency. Respondents' identities remained anonymous throughout the research process to ensure that the collaborating travel agency's business interests and their clients' privacy were protected.

A total of 275 valid responses were collected (response rate: 80.4%) in the first-round survey. The second-round survey resulted in 259 completed questionnaires (response rate: 75.7%). Chi-square tests were conducted to compare both samples' sociodemographic profiles (Table 2). No statistically significant differences were found, except that Sample 1 included many more single and fewer low-income (i.e., earning ¥100,000 or less annually) respondents than Sample 2.

***Insert Table 2 -Sociodemographic profile of survey samples***

### ***3.2. Preliminary item generation – Stage 1***

We adopted multiple techniques to define constraint measurement constructs and identify initial measurement items (Echtner & Ritchie, 1993). First, a comprehensive literature review

related to leisure constraints, travel constraints, and prostitution and commercial sex studies was performed to identify relevant constraint items for overseas sex tourism. Items on perceived constraints elicited from the literature were categorized into structural, intrapersonal, and interpersonal constraints in accordance with HCM (Table 3).

The second phase of initial constraint item generation involved a series of semi-structured interviews. The collaborating travel agency invited four tour guides and 30 of their clients to be interviewed. These tourists were chosen via purposive sampling to reflect the sociodemographic diversity of the agency's client base. Eligibility criteria were determined by the researchers without direct access to the respondents' contact information. About half ( $n = 16$ ) of potential participants accepted the interview invitation. This somewhat low participation rate may be due to several factors: (a) some tourists may find it sensitive or embarrassing to discuss sexual topics with others; and (b) some tourists may be reluctant to disclose their overseas commercial sexual experiences due to potential adverse consequences, given that prostitution and commercial sex are politically and socially admonished in China.

Several measures were taken to address pertinent ethical concerns and ensure interviewees felt comfortable reflecting on their sex tourism experiences during interviews. All interviews were carried out online and in Chinese, facilitated by the first author via either Skype or QQ (a Chinese instant messaging platform). To further protect participants' privacy, the interviewer registered for a new Skype or QQ account and shared the account ID and password for interviewees to use. The interviewer then provided an overview of the study at the start of each interview and assured interviewees of their right to withdraw at any time by simply turning the device off. The researcher also obtained verbal consent from all participants before proceeding with interviews. The interviews ranged from approximately 30 to 40 minutes, and no personal details were collected. The researcher took careful notes rather than recording the



interviews. The interviewer sent each interviewee their notes upon the conclusion of the interview to verify accuracy and confirm that no confidential details had been recorded.

The 16 male interviewees were between 24 and 52 years old. Most ( $n = 11$ ) were single. About one-third ( $n = 6$ ) had numerous overseas travel and commercial sexual experiences within the past 2 years; the rest were first-timers. Half of the participants had partaken in commercial sex in either North America or Europe, one-quarter did so in northeast Asia (i.e., Japan and South Korea), and another quarter did so in southeast Asia.

The semi-structured interviews consisted of questions based on our literature review and probing questions. First, interviewees were asked to recall their most recent overseas trip involving commercial sexual experiences. They were also asked to identify any constraints and obstacles they had perceived and/or encountered during their decision-making process. They were then prompted to discuss the negotiation strategies they used to overcome these obstacles; what constraints they perceived during their trip and how these constraints were handled; what they thought about their overseas commercial sexual experiences overall; and how they would manage each of their reported constraints on future sex-oriented trips, if applicable. As a supplement to tourist interviews, four tour guides from the cooperating agency were invited to share observations of their clients. Their input complemented tourists' interview data.

All interview notes were subjected to content analysis to ascertain potential constraint items and generate the initial pool. The first and second authors read through the interview notes and discussed the coding scheme at length followed by manual coding of all notes independently. To ensure inter-coder reliability, the first author compared the two sets of codes and then finalized the results by coming to a decision on which the coders disagreed.

By analyzing the content of coded notes, 26 terms or phrases the interviewees used were identified to describe the constraints they encountered when considering purchasing commercial sex during their last overseas trip. These terms were merged into 20 items

classified under four dimensions, which formed our initial item pool for subsequent analysis. Expanding upon Crawford et al.'s (1991) HCM framework, our four dimensions consisted of structural, intrapersonal, interpersonal, and service supply–related constraints (See Table 3).

In addition to generating initial constraint items, further interview analysis revealed intriguing findings. First, during interviews, all participants situated their discussion of overseas commercial sexual experiences within a travel discourse; this indicates that travel-related constraints constituted an integral part of male Chinese tourists' perceived constraints to engaging in commercial sex while overseas.

***Insert Table 3 - Initial scale for constraint measurement***

Second, although having novel sexual experiences has been viewed as a major motive for travelers to partake in commercial sex overseas, interview results suggested that it was only one side of the story. While the exoticness of having sex with women of different races could stimulate the level of sexual arousal these tourists had been seeking, it could also evoke a new source of psychological stress that tourists would not otherwise experience if purchasing commercial sex in a “homelike” environment. Moreover, interviewees frequently mentioned conflicting social norms and values as intrapersonal obstacles when making decisions about purchasing commercial sex. Compared with other constraint types, these intrapersonal constraints appeared to have more fundamental and lasting impacts on Chinese tourists' decisions around engaging in commercial sex overseas.

Third, in prior studies of tourism constraints, interpersonal constraints often referred to challenges to engaging in travel behavior. Yet the interview results of our study suggest that, in a sex tourism context, this constraint category can be understood from at least two

perspectives. During overseas trips involving commercial sex, male Chinese tourists' perceived interpersonal constraints stemmed from the challenges of finding trusting partners to travel with and from the challenges of "sneaking out" to avoid judgment from family or friends, given the potential value conflicts around prostitution in Chinese society. Analysis of interview notes also revealed a new constraint category specific to overseas commercial sex provision: service supply-related constraints. The high costs and limited choices associated with sexual services, places, and sex workers were considered major constraints to male Chinese tourists' participation in commercial sex overseas.

### ***3.3. Measurement item purification – Stage 2***

To purify our measurement items, the list of items generated in Stage 1 was returned to the interviewees for feedback on the items' clarity before submitting the measurements to an expert panel to assess items' accuracy, applicability, representativeness, and potential redundancy. The panel comprised four tourism faculty and two senior-level personnel in the travel industry. All helped to clarify ambiguous items and to categorize items based on theoretical construct definitions related to sex tourism. After making suggested modifications to items' phrasing, all 20 items were retained after the panel's assessment and included in subsequent analysis.

### ***3.4. Dimensionality determination of measurement scale – Stage 3***

Measurement items were purified through a pretest using our first-round sample of male Chinese sex tourists. The items were scored on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Exploratory factor analysis (EFA) was then performed to determine the scale's underlying dimensions and to eliminate problematic items with either insufficient loadings (lower than 0.4) or heavy cross-loadings. Due to potential correlations between

extracted constraint components, we used promax (oblique) rotation during EFA. Our analysis explained 64.16% of the total variance. Bartlett's test of sphericity was significant ( $p < .00$ ), and the KMO value (0.860) was beyond the 0.6 threshold (Hair et al. 2006), suggesting adequate factorability of our data. The 20 items loaded on five factors rather than the four dimensions drawn from the literature review and interviews (Table 4). The item "Commercial sexual services are too expensive" was shifted to the structural constraint dimension. Three other items, "Conflict with social norms," "Conflict with family values," and "Conflict with personal values," were separated from the intrapersonal constraint dimension and allocated under a new factor, labeled "value conflicts." Cronbach's alpha was used to determine factors' internal reliability; all exhibited alpha coefficients between 0.722 and 0.843, indicating acceptable reliability.

***Insert Table 4 - EFA results of sex tourism constraint measurement***

### ***3.5. Measurement finalization – Stage 4***

Newly modified constraint measurement constructs based on EFA results were further validated using data from the second-round sample of male Chinese sex tourists. First, confirmatory factor analysis (CFA) was performed in SPSS AMOS 22.0 to finalize the scale by determining the convergent/discriminant validity and composite reliability of constraint constructs (Anderson & Gerbing, 1988; Hair et al., 2006).

First, the constraint model's overall fit was tested and found to be acceptable:  $\chi^2(df) = 272.372(124)$ ;  $\chi^2/df = 2.197$ ;  $p = .00$ ; CFI = .941; GFI = .896; AGFI = .856; NFI = .898; RMSEA = .068. These results indicated no structural concerns with the constraint model in fitting to the CFA data. Table 5 displays the tested scale.

***Insert Table 5 - CFA results of sex tourism constraint measure***

Next, the validity and reliability of all constructs were assessed. Composite reliability (C.R.) was used to examine the internal consistency of items evaluating the same underlying factor (Fornell & Larcker, 1981). Bagozzi and Kimmel (1995) noted that a scale can be considered reliable when the C.R. value exceeds 0.6. In our study, the C.R. values of all constraint dimensions met this stipulation (Table 5).

The constructs were further examined for convergent validity to capture the degree of interrelatedness among measures assessing the same construct (Clark-Carter, 1997) by inspecting the average variance extracted (AVE) values and the magnitude of standardized factor loadings on the latent construct to determine our scale's convergent validity. All AVE values were between 0.515 and 0.763 (Table 5), greater than the suggested minimum of 0.5 (Fornell & Larcker, 1981). Additionally, all factor loadings exceeded the threshold of 0.6 (Bagozzi & Yi, 1988) and were statistically significant ( $p < 0.001$ ). The scale therefore exhibited convergent validity.

The constructs were also scrutinized in terms of discriminant validity to evaluate the extent to which an intended measure was distinct from measures of different constructs (Hair et al., 2006). Results showed that no inter-construct correlations exceeded 0.85, reflecting discriminant validity (Kline, 2005). The scale's discriminant validity was further confirmed given that the square root of the AVE for each factor was greater than the correlations among constructs (Fornell & Larcker, 1981). Table 6 shows that the measurement scale met all requirements for discriminant validity.

***Insert Table 6 -Discriminant validity of finalized measurement scale***

Based on the ability to predict future external criteria (Hair et al., 2006), the criterion validity of our measurement scale was established by assessing correlations between constructs and respondents' revisit intentions. Revisit intention was measured using three items: "I plan to travel again to experience overseas commercial sex in the next 12 months," "I would travel again to experience overseas commercial sex in the next 12 months," and "I am eager to travel again to experience overseas commercial sex in the next 12 months." These items demonstrated strong unidimensionality with factor loadings between 0.875 and 0.914 and a Cronbach's alpha value of 0.876. The mean factor score for revisit intention was determined by averaging the scores of relevant items. Our results identified a significant correlation ( $p < 0.05$ ) between intrapersonal constraints and revisit intention with a correlation coefficient of -0.255.

#### **4. Discussion and conclusions**

This study was conducted to (a) understand perceived constraints to male Chinese tourists' participation in commercial sex overseas and (b) develop and empirically test a measurement scale to assess perceived travel constraints related to sex tourism. By referring to an established scale development procedure (Churchill, 1979), we employed qualitative and quantitative approaches and devised a measurement scale to examine male Chinese tourists' perceived constraints to engaging in commercial sex overseas. Our final scale contained five constraint dimensions: structural constraints, interpersonal constraints, intrapersonal constraints, value conflicts, and service-related constraints. The negative relationship between Chinese tourists' perceived intrapersonal constraints and their future sex tourism intentions partially affirmed the role of perceived constraints in tourists' overseas commercial sexual experiences.

Our results suggest that when pursuing overseas commercial sexual experiences, male Chinese tourists may face multifaceted constraints or barriers that could inhibit their

participation in sex tourism activities. These constraints affected non-participants and were perceived by participants. While we identified several constraints to participating in sex tourism overseas, some dimensions were assigned higher scores than others in both rounds of the survey. Among the three major constraint dimensions proposed in Crawford et al.'s (1991) HCM framework, structural constraints received the highest average score ( $M = 4.94$ ), followed by interpersonal constraints ( $M = 4.54$ ) and intrapersonal constraints ( $M = 3.69$ ). Furthermore, as shown in Table 6, the correlation coefficient between intrapersonal and interpersonal constraints was 0.422; that between intrapersonal and structural constraints was 0.322; and that between interpersonal and structural constraints was 0.438. As the constraint level increased from intrapersonal to interpersonal and then to structural, the average score increased, and the correlation decreased. These findings provide some evidence of the hierarchical structure of distinct constraint dimensions as proposed in the HCM. Our results also indicated that male Chinese tourists negotiated each initial constraint level (i.e., intrapersonal, interpersonal, and structural) when pursuing commercial sex while overseas.

In addition to empirically validating the three constraint dimensions of the HCM, our research also identified two new constraint dimensions (value conflicts [ $M = 4.33$ ] and service supply-related constraints [ $M = 4.13$ ]) that are likely specific to the sex tourism context. This finding echoes those of prior tourism constraint studies indicating that constraint structures may be specific to particular tourism contexts and may differ from constraints in leisure settings (Hung & Petrick, 2010; Nyaupane & Andereck, 2008). Consuming commercial sex was perceived to conflict with Chinese social norms as well as familial and personal values, which could thus inhibit male Chinese tourists' desire to partake in commercial sex overseas. Chinese society appears no different from other cultures that consider prostitution and sex tourism to be socially deviant. Limited choices in commercial sexual services, providers, and places constituted another constraint (service supply-related constraints [ $M = 4.19$ ]) that hindered

Chinese tourists' intentions to engage in commercial sex when traveling internationally. As high service costs were categorized as a structural constraint, this new constraint dimension was purely based on service provision. The emergence of this dimension may be partially explained by the fact that respondents only consumed commercial sexual services arranged by travel agents in destinations where prostitution was legal. Legal considerations and language barriers each further limited participants' willingness and ability to seek alternative service options.

In terms of how these constraints influenced male Chinese tourists' plans to engage in subsequent overseas commercial sexual experiences, no constraints outside the intrapersonal dimension exerted significantly negative effects on revisit intention. This trend was similar to that of other leisure and tourism constraint research (e.g., Kay & Jackson, 1991; Shaw, Bonen, & McCabe, 1991; Zhang, Zhang, Cheng, Lu, & Shi, 2012), in which constraints may not be significantly associated with low participation. A possible explanation is that we only investigated male Chinese tourists who had procured commercial sex overseas. Prior to undertaking their previous trip, these travelers had likely either already completed the negotiation process to overcome various obstacles or simply perceived no constraints to participating in sex-related tourism activities. For those who had already participated in sex tourism overseas, it was not particularly surprising to find that their reported constraints had little impact on their revisit intentions.

Among all constraints reported in this study, only intrapersonal constraints displayed a significant negative association with male Chinese tourists' intentions to engage in overseas sexual experiences in the future. This finding coincides with other research revealing that intrapersonal constraints are most prominent in the HCM (Crawford et al., 1991; Iso-Ahola & Mannell, 1985; Zhang et al., 2012). Participation in leisure and tourism requires people to successively overcome intrapersonal, interpersonal, and structural constraints (Fredman &



Heberlein, 2005; Hudson & Gilbert, 2000). Scholars have pointed out that the influences of hierarchical constraints may differ between participants and nonparticipants (e.g., Hung & Petrick, 2010; Zhang et al., 2012). Our findings imply that this distinction can be further extended to participants and re-participants. Tourists are assumed to have overcome all constraint levels before they travel; however, our results suggested that intrapersonal constraints still influenced male Chinese tourists' decision-making process regarding their next overseas trip that might involve commercial sexual experiences. Prior travel experience could function as a double-edged sword in the association between perceived constraints and decisions around subsequent visitation, as tourists' first-hand travel experiences could either ease or reinforce the effects of constraints (i.e., intrapersonal/psychological constraints) on their revisit intentions.

In addition to the three major constraint dimensions of the HCM, our empirical evidence revealed two other constraint dimensions male Chinese tourists encountered when making decisions about overseas trips in which they intended to engage in commercial sexual experiences. Findings suggest that constraints may vary substantially across tourism settings and be specific to social and/or cultural contexts (Lai et al., 2013). Moreover, as only certain constraints (i.e., intrapersonal constraints) were significantly associated with tourists' revisit intentions, these constraints could likely be taken as evidence of the hierarchical and dynamic nature of how constraints influence tourists' visit–revisit decision-making processes.

### **5. 1 Theoretical implications**

Our study enriches current knowledge of sex tourism constraints from the demand side. Although previous studies have applied the HCM model to explain travel constraints in settings such as event tourism (Kim & Chalip, 2004), dark tourism (Zhang et al., 2016), and cruise

tourism (Hung & Petrick, 2010), empirical insight into perceived constraints to sex tourism remains scant. To the best of our knowledge, our work represents the first scale development study on this sensitive topic and fills a relevant gap by identifying an HCM model involving overseas sex tourism among the Chinese. Additionally, by operationalizing an HCM model in relation to sex tourism, this study enhances understanding of this subject. We sought to develop and validate a general five-dimensional leisure constraint approach to uncover the roles of perceived constraints in tourists' decisions. Lastly, the proposed scale extends research measuring tourism obstacles based on intrapersonal constraints, interpersonal constraints, structural constraints, value conflicts, and service supply-related constraints. This work therefore offers fresh insight into HCM's applicability in an emerging travel sector such as sex tourism.

## **5. 2 Managerial implications**

This article can educate tourism stakeholders in several ways. Although most research has shied away from the taboo topic of sex tourism, sex work is a legitimate profession in countries such as the Netherlands. Further, sex tourism partly contributes to the local economy in countries such as Thailand. Comprehending sex tourists' constraints can promote transparency in the sex tourism supply chain (Aston et al., 2021). A key constraint identified in this study concerned the supply of commercial sexual services. If sex tourists knowingly or unknowingly deviate from legalised brothels and clubs, they could find themselves engaging in sexual activities with trafficked victims in illegal establishments. Hence, these practical implications enable stakeholders to better understand the sex tourism sector and to develop protective mechanisms to prevent sex trafficking. Moreover, by considering constraints to sex tourism, members of this travel segment could be redirected to other markets such as food

tourism and wellness tourism. These avenues can afford travelers alternate ways to satisfy their needs through healthy, relaxed tourism offerings that cater to their wellbeing.

## **6. Limitations and future research**

While this study contributes to our understanding of travel behavior as it relates to sex tourism, some limitations pave the way for future research. One pitfall of our work involves its sampling frame and generalizability of results. Data were gathered via convenience sampling, and the resultant constraint measurement scale may only be applicable to this travel agency's client population. Moreover, the sensitivity of this topic calls for caution when seeking to extend our findings. Scholars should verify our scale with other samples of male outbound tourists and female tourists if possible. Further, especially as China is home to a large population, Chinese tourists will differ demographically (e.g., in terms of lifestyle, income, and career). Individuals' perceived constraints and purchase behavior related to commercial sex may vary accordingly. Future studies should include samples with diverse demographics to enhance results' generalizability. Furthermore, the generalizability of this study's results is limited. Data were only collected from Chinese male tourists, who may not represent sex tourists from other cultures or who may hold different perceptions about procuring commercially available sexual services overseas. Researchers can thus gather data from other tourist groups; doing so could enhance the generalizability of findings related to this sensitive topic.

Research has shown that the effects of hierarchical constraints may vary based on whether individuals are participants (e.g., Gibert & Hudson, 2000; Huang & Petrick, 2010). In our case, we focused solely on participants. To better understand the identified constraints' roles during different decision-making stages with respect to sex tourism, future studies should encompass a wider population including non-participants. Although it may be challenging to

identify and recruit travelers who are interested in commercial sex but have not yet pursued it, a sample including non-participants may further contextualize constraints to sex tourism.

As an exploratory study, our work aimed to classify constraints based on the HCM framework developed within a Western leisure context. In addition to the three constraint dimensions within the pioneering model, our results identified two independent constraints involving service provision and cultural values/social norms, respectively. Although the latter dimension may be unique to the Chinese context, it remains unclear whether or how cultural values and social norms might influence tourists' perceived constraints to pursuing commercial sex overseas. A cross-cultural comparison of Chinese and Western tourists' perceived sex tourism constraints may facilitate exploration of cultural differences in constraints to provide greater insight into sex tourism as a sociocultural phenomenon.

Last, while we sought to develop a constraint measurement scale, we contend that tourists' negotiation process cannot be overlooked when examining the roles of constraints in decision making. Future research should continue examining the mechanism of how tourists' negotiation abilities could alleviate the impacts of hierarchical constraints on their visit intentions in a sex tourism context.

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**Table 1.**  
Scale development procedures

<b>Procedure</b>	<b>Techniques</b>
1. Generate preliminary items	Literature review In-depth interviews
2. Purify measurement items	Expert panel assessment
3. Determine measurement construct(s)	First-round questionnaire survey Exploratory factor analysis Reliability assessment
4. Finalize and validate measurement scale	Second-round questionnaire survey Confirmatory factor analysis Reliability and validity assessment

**Table 2.**  
Sociodemographic profile of survey samples

	Sample 1, 1 <sup>st</sup> -round survey ( <i>n</i> = 275)		Sample 2, 2 <sup>nd</sup> -round survey ( <i>n</i> = 259)	
	<i>n</i>	%	<i>n</i>	%
<b>Age</b>				
25 and under	11	4.0	22	8.5
26–35	161	58.5	165	63.7
36–45	88	32.0	60	23.2
46–55	15	5.5	12	4.6
<b>Annual income (1 CNY ≈ 0.16 USD)</b>				
¥100,000 or less	29	10.6	62	23.9
¥100,001–200,000	137	49.8	123	47.5
¥200,001–300,000	72	26.2	49	18.9
¥300,001–500,000	19	6.9	12	4.6
¥500,001 or more	18	6.6	13	5
<b>Marital status</b>				
Single	40	14.6	2	0.8
Unmarried but in a relationship	33	12.0	39	15.1
Married	202	73.4	218	84.2
<b>Travel party composition</b>				
Alone	53	19.3	41	15.8
Small group with friends	137	49.8	150	57.9
Small group with strangers	35	12.7	25	9.7
Large group with friends	36	13.1	32	12.4
Large group with strangers	14	5.1	11	4.2

**Table 3.**  
Initial scale for constraint measurement

Constraint items	Sources & References
<b>Intrapersonal constraints</b>	Gao & Kerstetter (2016); Lai et al. (2013); Lee et al. (2012); In-depth interviews
Physical condition is not suitable for commercial sex	
Too shy to get naked in front of women of different races	
Psychological barrier to having sex with women of different races	
Conflicts with social norms	
Conflicts with family values	
Conflicts with personal values	Chen et al. (2013); Daniels et al. (2005); Huang & Hsu (2009); Kong (2016); Zhang et al., (2012); Zhou (2006); In-depth interviews
<b>Interpersonal constraints</b>	
Hard to find my travel companion	
Hard to find suitable time to travel with friends	Chen et al. (2013); Daniels et al. (2005); Huang & Hsu (2009); Kong (2016); Zhang et al., (2012); Zhou (2006); In-depth interviews
Could not get a chance to travel secretly	
<b>Structural constraints</b>	
Travel distance is too far	Chen et al. (2013); Gao & Kerstetter (2016); Hung & Petrick (2010); Lai et al. (2013); Nyaupane et al. (2004)
Travel cost is too high	
Travel time is too long	
Travel documents are too complicated	
Lack of free time	
Language barrier	
Cultural difference	
<b>Service supply-related constraints</b>	Daniels et al. (2005) In-depth interviews
Commercial sexual services are too expensive	
Limited choices for commercial sexual service types	
Limited choices for commercial sexual service providers	
Limited choices for commercial sexual service places	Daniels et al. (2005) In-depth interviews

**Table 4.**  
EFA results of sex tourism constraint measurement

	<i>M</i>	<i>SD</i>	Factor loading	Item-to-total correlat.	Eigen-value	Cronbach's $\alpha$
<b>Structural constraints</b>					<b>6.509</b>	<b>.843</b>
Travel distance is too far	4.76	1.46	.841	.657		
Travel cost is too high	4.97	1.47	.722	.590		
Travel time is too long	4.88	1.52	.665	.583		
Travel documents are too complicated	5.04	1.45	.583	.459		
Lack of free time	4.93	1.45	.599	.493		
Language barrier	5.17	1.47	.556	.539		
Cultural difference	5.09	1.51	.552	.558		
Commercial sexual services are too expensive	5.01	1.42	.612	.613		
<b>Intrapersonal constraints</b>					<b>1.595</b>	<b>.798</b>
Physical condition is not suitable for commercial sex	3.85	1.80	.715	.600		
Too shy to get naked in front of women of different races	4.15	1.79	.693	.638		
Psychological barrier to having sex with women of different races	3.95	1.86	.821	.688		
<b>Interpersonal constraints</b>					<b>1.243</b>	<b>.722</b>
Hard to find my travel companion	4.53	1.54	.869	.549		
Hard to find suitable time to travel with friends	4.79	1.55	.845	.611		
Could not get a chance to travel secretly	4.84	1.47	.531	.473		
<b>Value conflicts</b>					<b>1.120</b>	<b>.759</b>
Conflict with social norms	4.55	1.63	.701	.601		
Conflict with family values	4.92	1.58	.920	.680		
Conflict with personal values	4.63	1.62	.882	.627		
<b>Service supply-related constraints</b>					<b>1.081</b>	<b>.801</b>
Limited choices for commercial sexual service types	4.47	1.60	.735	.668		
Limited choices for commercial sexual service providers	4.36	1.64	.656	.593		
Limited choices for commercial sexual service places	4.25	1.57	.709	.615		

KMO: .860; Bartlett's test of sphericity: 1982.265,  $df = 153$ , Sig. .000.

Each item scored on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

**Table 5.**  
CFA results of sex tourism constraint measure

	Composite reliability	AVE	Factor loading	S.E.	C.R.	<i>p</i>	<i>M</i>	<i>SD</i>
<b>Intrapersonal constraints</b>	<b>.640</b>	<b>.619</b>					<b>3.69</b>	<b>1.65</b>
Physical condition is not suitable for commercial sex			.715	.071	11.63	***	3.72	1.61
Too shy to get naked in front of women of different races			.789	.074	12.74	***	3.73	1.69
Psychological barrier to having sex with women of different races			.850	--	--		3.62	1.66
<b>Interpersonal constraints</b>	<b>.694</b>	<b>.639</b>					<b>4.54</b>	<b>1.52</b>
Hard to find my travel companion			.815	.112	11.01	***	4.42	1.52
Hard to find suitable time to travel with friends			.900	.123	11.27	***	4.61	1.55
Could not get a chance to travel secretly			.666	--	--		4.59	1.50
<b>Structural constraints</b>	<b>.817</b>	<b>.515</b>					<b>4.94</b>	<b>1.45</b>
Travel distance is too far			.724	.116	10.06	***	4.74	1.51
Travel cost is too high			.819	.121	11.10	***	5.10	1.54
Travel time is too long			.787	.113	10.76	***	4.95	1.45
Travel documents are too complicated			.687	.104	9.63	***	4.99	1.37
Lack of free time			.652	.104	9.21	***	4.84	1.38
Language barrier			.683	.115	9.57	***	5.01	1.52
Cultural difference			.716	.108	9.97	***	5.02	1.42
Commercial sexual services are too expensive			.656	--	--		4.92	1.43
<b>Value conflicts</b>	<b>.619</b>	<b>.763</b>					<b>4.33</b>	<b>1.54</b>
Conflict with social norms			.912	.081	13.04	***	4.25	1.49
Conflict with family values			.833	.087	13.41		4.45	1.54
Conflict with personal values			.806	--	--		4.29	1.61
<b>Service supply-related constraints</b>	<b>.726</b>	<b>.752</b>					<b>4.13</b>	<b>1.52</b>
Limited choices for commercial sexual service types			.896	.086	11.97	***	4.28	1.48
Limited choices for commercial sexual service providers			.837	.082	11.62		4.10	1.53
Limited choices for commercial sexual service places			.801	--	--		4.03	1.55

**Table 6.**  
Discriminant validity of finalized measurement scale

	Intraper- sonal	Interper- sonal	Structural	Value conflicts	Service- related
Intrapersonal	<b>.787</b>				
Interpersonal	.422	<b>.800</b>			
Structural	.322	.438	<b>.718</b>		
Value conflicts	.550	.434	.515	<b>.873</b>	
Service-related	.522	.454	.438	.510	<b>.867</b>

*Note:* Bold diagonal values are the square root of the average variance extracted between constructs and their measures. Off-diagonal values are correlations between constructs.