

This is the accepted version of the publication Tse, S., & Tung, V. W. S. (2022). Measuring the Valence and Intensity of Residents' Behaviors in Host-Tourist Interactions: Implications for Destination Image and Destination Competitiveness. *Journal of Travel Research*, 61(3), 565–580. Copyright © 2021 (The Author(s)). DOI:10.1177/0047287521997576.

TITLE: Measuring the Valence and Intensity of Residents' Behaviors in Host-Tourist Interactions: Implications for Destination Image and Destination Competitiveness

ABSTRACT

While studies have documented the valence (e.g., facilitation and harm) of residents' behaviors toward tourists, research into the intensity (i.e., activeness or passiveness) for such behaviors and the corresponding matrix that could be generated by considering both of these dimensions in the context of tourism remains unexplored. This research offers a more holistic conceptualization of residents' behaviors by generating a matrix which constitutes the framework of the Behaviours from Intergroup Affect and Stereotype (BIAS) Map. Twelve behaviors were measured and cross-culturally validated via samples from Hong Kong, Singapore, and the United States: Active-Facilitation (i.e., socializing, interacting, and starting a conversation with tourists); Passive-Facilitation (i.e., tolerating, accepting, and enduring tourists' behaviors); Active-Harm (i.e., mocking, threatening, and being unfriendly to tourists); and Passive-Harm (i.e., resisting, refraining, and being reluctant to help tourists). This research provides implications for tourism policymakers to manage host-guest relations that could influence destination image and destination competitiveness.

KEYWORDS: resident behaviors; destination image, host-guest relations; intergroup behaviors; destination competitiveness

INTRODUCTION

Tourism can facilitate intergroup relations between residents and tourists (Lin, Chen, and Filieri 2017), and intergroup relations could be conceptualized as comprising of cognitive, affective, and behavioral components. For instance, previous studies have explored residents' cognitive evaluations of tourists and tourism in various contexts, such as stereotypes (Tung, King, and Tse 2020), destination image (Stylidis, Shani, and Belhassen 2017), tourist-resident conflicts (Tsaur, Yen, and Teng 2018), and tourist discriminations (Tse and Tung, 2020a). Studies have also investigated residents' affective reactions in terms of emotional relationships (Woosnam and Norman 2010), and attachment with tourists (Ouyang, Gursoy, and Sharma 2017).

Yet, research into residents' behavioral responses to tourists warrants more attention. Although studies have documented residents' positive (e.g., interactions with tourists) and negative actions (e.g., verbal and physical harassment), they have largely remained within the confines of understanding the 'valence' of intergroup behaviors; that is, the 'good' or 'bad' of such actions (Chen, Hsu, and Li 2018; Kozak 2007). What is neglected is the consideration of 'intensity' (i.e., activeness or passiveness) for such behaviors and the corresponding matrix that could be generated by considering both the dimensions of valence and intensity in the context of tourism research. Both dimensions are crucial as the connection between valence and intensity can progress the conceptualization of residents' behaviors from a dichotomous view (i.e., positive or negative) to a multi-facet perspective (i.e., 2 x 2 matrix).

To address this gap, the goal of the present research is to offer a more holistic view of residents' intergroup behaviors for and against tourists by generating a 2 (valence) x 2 (intensity) matrix which constitutes the focal framework of the Behaviours from Intergroup Affect and Stereotype (BIAS) Map that has yet to be examined in the tourism context

(Cuddy, Fiske, and Glick 2007). Specifically, the present research aims to develop a framework that maps the valence (i.e., facilitative or harmful) against the intensity of behaviors (i.e., active or passive) to reflect four distinctive quadrants of residents' engagement with tourists: Active-Facilitation, Passive-Facilitation, Active-Harm, and Passive-Harm.

This goal is achieved through two related studies. To begin, Study 1 uses a sample of Hong Kong residents to assess a range of active or passive, as well as facilitative or harmful behaviors against tourists in order to develop a 2x2 model. Next, Study 2 provides cross-cultural validity to the model by using two new samples of residents from Singapore and the United States. It also provides a comparative analysis to evaluate the results between Singaporeans and Americans across each of the quadrants.

The present research contributes to the field by connecting insights from the BIAS Map in social psychology with the tourism literature. This line of work is crucial as residents' behaviors could influence host-guest relations and tourists' subsequent image of a destination (Gong, Detchkhajornjaroensri, and Knight 2018; Kock et al. 2019; Monterrubio 2016). From a practical perspective, the interactions between residents and tourists could be leveraged by tourism policymakers to improve the attractiveness and competitiveness of the destination (Crouch 2011; Mariani et al. 2014). There are also important implications on how residents' behaviors may be deployed (e.g., as ambassadors of their place) by destination marketing organizations (DMOs) to help destinations promote themselves and contribute to improve tourists' perceived destination image (Styvén, Mariani, and Strandberg 2020).

Literature Review

Host-Guest Relations

Host-guest relations in tourism research refers to the study of interactions between residents and tourists within a destination (Sharpley 2014). The quality and nature of interactions can influence host and tourist perceptions and attitudes as well as support for tourism development (Eusébio, Vieira, and Lima 2018). Among the breadth of existing studies in host-guest relations, a frequent topic is the examination of residents' perceptions towards tourism impacts, such as economic, socio-cultural and environmental impacts within a destination (Nunkoo and Gursoy 2012). Additionally, positive host-guest relations could influence tourists' image of a destination (Tasci and Severt 2017).

Examining host-guest relations resolves around the study of both the quantity and quality of exchanges between residents and tourists. Quality contact situations between residents and tourists could increase their sense of affection towards each other, and the frequency of contact could reduce inter-cultural differences (Bornstein 1989). However, residents' emotions could be volatile with respect to the number of inbound tourists (Doxey 1975). As suggested by Doxey's Irritation Index, residents could start with euphoria, passing through apathy and annoyance, and eventually reach antagonism. These four levels of irritations reflect the destination stages of exploration, development, consolidation, and declination. This framework offers insights into the negativity that residents may attach to tourism development, and the corresponding feelings and behaviors that they may exhibit against tourists.

In many destinations, however, host-guest relations have been under significant pressure due to issues such as anti- and overtourism. For example, in Barcelona, residents have demonstrated anti-tourism sentiments by protesting about the high number of visitors

(Hughes 2018). This has been fueled in part by the impact of overtourism, which affects residents' everyday life and the makeup of their communities (Gonzalez, Coromina, and Galí 2018). Consequently, residents may oftentimes want to avoid interactions with tourists, although interactions between them may form an important element in a tourist's experience (Sharpley 2014).

Intergroup Relations and Behaviors

The actions that a resident exhibit towards a tourist reflect a form of intergroup behaviors. Intergroup behaviors refer to the actions performed by an individual towards a member of another social group based on perceived group identification (Tajfel 1984). These actions could be categorized into two types: approach and avoidance (Wyer 2010). Approach are positive actions that reflect an individual 'moving towards another person' while avoidance are negative actions associated with 'moving away'. Individuals who engage in approachable behaviors could promote intergroup relations while those who avoid other individuals could erode intergroup contact (Elliot 2006).

While the approach-avoidance spectrum represents the positive and negative sides of one's behaviors, it does not indicate the intensity of the behaviors performed. Furthermore, not all behaviors are direct interactions as some could be indirect, such as ignoring others. Consequently, a more comprehensive intergroup behavior model based on two primary dimensions of valence and intensity was extended from the approach-avoidance spectrum (Cuddy et al. 2007). Valence reflects facilitation (i.e. pro-social or approach) and harmful behaviors (i.e., anti-social or avoidance), while intensity discerns the activeness or passiveness of such behaviors. Activeness refers to actions that are produced in maximal deliberative efforts, purposive intention, direct and high risk. Passiveness refers to actions that are produced with minimal deliberative efforts, possibly unintended, and indirect. The

corresponding 2x2 matrix that could be generated by considering both the dimensions of valence and intensity is referred to as the Behaviors from Intergroup Affect and Stereotype (BIAS) Map. It has four-quadrants: Active-Facilitation, Active-Harm, Passive-Facilitation, and Passive-Harm (see Table 1).

Table 1 – BIAS Map and Associated Behaviors

Active-Facilitation (Act for) Assist Help Protect	Active-Harm (Act against) Fight Attack Sabotage
Passive-Facilitation (Act with) Cooperate Unite Associate	Passive-Harm (Act without) Demean Exclude Neglect

(Cuddy et al., 2007)

Active-Facilitation represents intentional behaviors that aim to help, protect, and benefit others. Passive-Facilitation reflects cooperative or associative actions, and contact between individuals are tolerated, but not necessarily intentional. Active-Harm reflects intentional behaviors that produce negative outcomes for others, such as attacking, fighting or sabotaging. Passive-Harm represents actions where an individual distances or demeans other individuals by devaluing their social worth through exclusion or neglect. These four quadrants could be seen as act for, act with, act against, or act without, members of another social group (Cuddy et al. 2007).

The BIAS Map has been used in various empirical studies to measure, predict, and comprehend intergroup behaviors among social groups, especially in the area of majority-minority interactions (Seate and Mastro 2017). For instance, Cuddy, Fiske, and Glick (2008) examined attributional antecedents of these four quadrants, and highlighted the importance of social judgment, context, and cultural differences in affecting one’s behaviors. Becker and

Asbrock (2012) suggested that stereotypes and differences in socio-economic status between individuals could influence the extent to which they exhibit harmful behaviors. It is important to clarify that Cuddy et al. (2007) also considered the connections amongst stereotypes, emotions, and behaviours, with emotions mediating the relationship between stereotypes and behavioural-tendencies. However, the scope of the present research focuses primarily on understanding intergroup behaviors rather than the full conceptual links amongst tourist stereotypes, and residents' emotional reactions and behavioural responses.

Adopting and Revising the BIAS Map for Tourism Research

The BIAS Map has yet to be examined in the tourism context. Existing studies have largely focused on reporting the valence of residents' behaviors (Carmichael 2000; Chen et al. 2018; Tse & Tung 2020b) without considering the intensity nor the corresponding matrix that could be generated by considering both of these dimensions in a multi-facet perspective (i.e., 2 x 2 matrix). However, despite the strengths of the BIAS Map, it would be inappropriate to directly adopt the framework without considering the unique context of tourism. For example, some of the attributes in the BIAS Map, such as 'attacking' and 'fighting' do not represent typical resident-tourist interactions. The BIAS Map measures intergroup behaviors with respect to the hierarchical ranks of the social groups, such as locals versus immigrants, and superiors versus subordinates; however, the hierarchy between residents and tourists is less discrete.

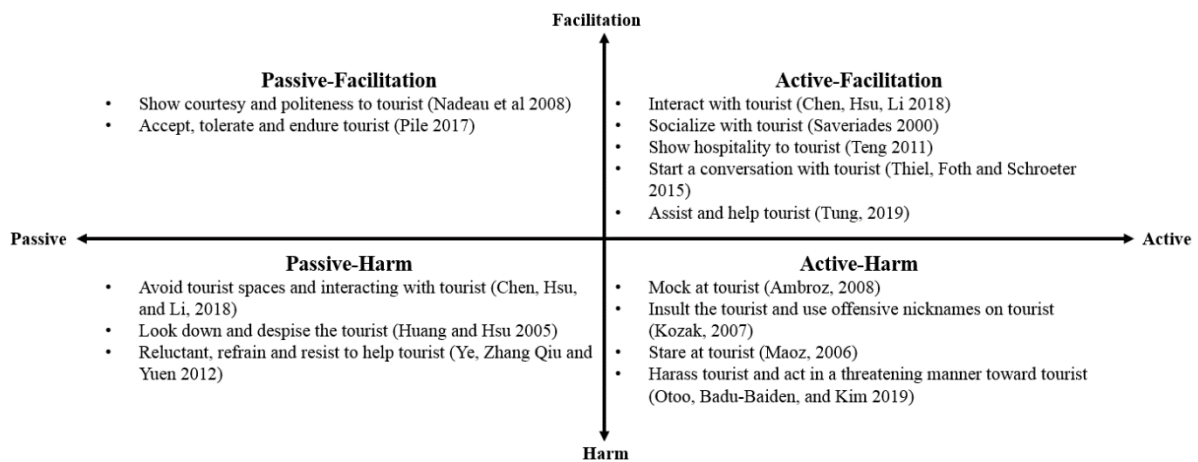
An important step in revising the BIAS Map to suit tourism research is to identify a range of positive and negative, verbal and non-verbal behaviors that have been investigated in the existing literature. Casual conversations, courtesy, and politeness, for instance, could stimulate intergroup interactions between residents and tourists (Nadeau et al. 2008; Thiel, Foth, and Schroeter 2015; Tung 2019). Some scholars also recognized that resident showing

hospitality to tourists and willing to interact and socialize with the tourists (Chen et al. 2018; Saveriades 2000; Teng 2011). Regrettably, with news of unpleasant tourist behaviors at many destinations, residents' attitudes have shifted from positively and actively engaging with tourists to simply 'accepting', 'tolerating' and 'enduring' them (Pile 2017).

In contrast to the line of research on positive behaviors, another area of focus has been residents' negative behaviors against tourists. This includes insulting (Kozak 2007), mocking (Ambroz 2008), and staring at tourists to display a sense of disagreement and dissatisfaction (Maoz 2006). More aggressive behaviors from residents have also been documented, such as harassing or threatening tourists (Otoo, Badu-Baiden, and Kim 2019).

It is important to note that a weakness of the BIAS Map is the dichotomy between active and passive, which suggests that intention is either present or absent in behaviors. There could be situations, however, in which an individual may not intend to act at the onset, but the real-life situation changes and moves that individual to behave unintentionally. For example, a resident may not intend to socialize with a tourist, but when the tourist approaches the resident for assistance, such as asking for directions or suggestions, the resident is placed in a situation in which he/she interacts (i.e., Active-Facilitation), although that was not the initial intent. Despite this limitation, the conceptualization of the BIAS Map still adds considerable value to the literature by considering residents' behaviors in terms of both valence and intensity in the context of host-guest relations. Figure 1 summarizes a number of behaviors from residents against tourists within the BIAS Map.

Figure 1 – Summary of residents’ behaviors from existing literature



Residents’ Behaviors and Destination Image

Destination image is an important aspect of tourism research. Tourists can form a perceived image through different marketing and social media channels, as well as an actual image of the destination through their first-hand tourism experiences (Beerli and Martin 2004; Martín-Santana, Beerli-Palacio, and Nazzareno 2017). These images reflect both cognitive and affective components; cognitive image refers to the tangible attributes of a destination while affective image represents the general feelings about the destination (Pike and Ryan 2004).

Tourists’ perceived or actual images of a destination could be influenced by their views and experiences with local residents; that is, residents’ behaviors – positive or negative – could strongly influence tourists’ destination image. For example, tourists’ perceptions of local residents as ‘friendly’ is a key attribute of cognitive image (Agapito et al. 2013; Elliot, Papadopoulos, and Kim 2011). Positive behaviors from residents, such as interacting and socializing, may strengthen tourists’ view of locals as hospitable and friendly whereas residents’ irresponsible behaviors could have a highly negative impact on tourists’ image of the community and the destination (Kour, Jasrotia, and Gupta 2020). Harmful behaviors from

residents against tourists (e.g., yelling at them) could also be reflected in tourists' views of the destination as unpleasant and distressing, which are affective components of destination image.

While the literature above considered tourists' destination image, it is also important to consider destination image from the residents' perspective. Positive destination image perceived by residents' could improve their perceived economic, socio-cultural, and environment impacts from tourism, which then enhances their support for tourism development (Stylidis et al. 2014). In turn, this could affect the extent to which they are willing to exhibit positive, facilitative behaviors – instead of negative, harmful behaviors – to tourists.

Moving a step further, destination image studies have been a precursor of destination competitiveness research (Enright and Newton 2004). Tourism destinations that are able to contribute to economic prosperity, maintain environmental stewardship, and improve standard of living as well as quality of life could improve residents' image of tourism and the competitiveness of the destination overall (Crouch and Ritchie 1999). In this regard, DMOs could encourage positive behaviors from residents to improve tourists' perceived destination image (Styvén et al. 2020), which ultimately could improve the competitiveness of a destination (Crouch 2011; Mariani et al. 2014).

METHODS AND FINDINGS

After a review of the literature, the next step is to collect empirical evidence for the model. There are two studies in the present research. Study 1 develops a resident behavior model from a sample of Hong Kong residents. Study 2 provides cross-cultural validation from Singaporeans and Americans.

Study 1

Development of initial items

A focal tourist group is needed to begin the classification of residents' behaviors into the four quadrants of the model. Mainland Chinese tourists were chosen as the focal group because it is an influential source market for many destinations. An initial pool of positive and negative behaviors was generated from a review of the literature as per Figure 1. Next, a supplementary online free response task was conducted with fifty-six Hong Kong residents based on the process suggested by Hall, Philips, and Townsend (2015). Residents of Hong Kong were chosen as the sample for several reasons. Hong Kong has been one of the most visited destinations by Mainland Chinese tourists due to its close proximity. A series of policy relaxations by the Chinese government has promoted Mainland Chinese tourists' tremendous growth in the city (Tourism Commission 2019). While this market has contributed significantly to the city's economy, it has also stirred negative social tensions, such as over-crowding and parallel trading. Consequently, there have been reports of residents' harmful behaviours against them, such as verbal abuse and unfair treatments (Qiu Zhang et al. 2017). Overall, the identification of items from Hong Kong residents could assist the city's tourism authority in understanding residents' behaviors that are necessary for fostering positive destination image and a competitive destination.

Hong Kong residents were recruited through convenience and snowball sampling. The research team invited respondents through their contacts, and then asked them to share the online questionnaire via their social networks. Respondents were invited to list all positive and negative, verbal and non-verbal behaviors that they have performed on Mainland Chinese tourists. Behaviors that were mentioned by more than one respondent were retained, and in the case of different variations of the same behavior, only one version was kept. This

process produced seven positive and six negative behaviors that were added to the pool of items from the literature. In total, the list consisted of 37 items (i.e., 18 positive and 19 negative) (Appendix 1). All these items were presented to the calibration sample for the scale purification process.

Calibration Sample

An online questionnaire using Qualtrics was distributed to Hong Kong residents in May 2019. Qualtrics is an online survey company based in the United States that recruits respondents internationally. Qualtrics has been employed in recent tourism studies for data collection (e.g., Campbell and Kubickova 2020; Suess, Woosnam, and Erul 2020). In the questionnaire, respondents were required to indicate: “how often do you perform the following behaviors towards Mainland Chinese tourists, from 1 = never to 7 = often”, for each of the 37 items. In total, 178 respondents were recruited (see Table 2).

Table 2 - Respondent Characteristic (Study 1 - Calibration and Validation Sample)

Variables	Calibration Sample (n = 178) Distribution (%)	Validation Sample (n = 381) Distribution (%)
Gender		
Female	135 (75.8)	208 (54.6)
Male	43 (24.2)	173 (45.4)
Age		
18 - 24	118 (66.3)	154 (40.4)
25 - 34	30 (16.9)	111 (29.1)
35 - 44	13 (7.3)	81 (21.3)
45 - 54	12 (6.7)	22 (5.8)
55 and above	5 (2.8)	13 (3.4)
Education		
Up to Secondary School	13 (7.3)	30 (7.9)
Post-Secondary	30 (16.9)	66 (17.3)
Bachelor	125 (70.2)	241 (63.3)
Master	8 (4.5)	39 (10.2)
Doctorate	2 (1.1)	5 (1.3)
Resident District		
Hong Kong Island	38 (21.4)	124 (32.6)
Kowloon Peninsula	67 (37.6)	127 (33.3)
New Territories	73 (41.0)	130 (34.1)

Purification of the scale

Since the initial pool of items consisted of both positive and negative behaviors, the scale purification was conducted separately prior to a full model assessment. This separation could decrease the possibility of misrepresentations in the results due to the opposite directions of signs and inconsistencies in meanings of the measured items (Kim et al. 2015). This approach was used in previous tourism studies (Chan, Hsu, and Baum 2015; Lyons et al. 2016; Tung et al. 2020). Item-to-total correlations were examined, and items that were correlated at less than 0.4 with the total score were removed (Choi and Sirakaya 2005). After the removal of two items from both positive and negative behaviors, Cronbach's alpha was 0.916 and 0.926, respectively. Both values were greater than the threshold value of 0.7, which represented good internal consistency of the items in each subscale (Nunnally 1978).

Exploratory Factor Analysis (EFA) using Principal Component Analysis (PCA) and Varimax rotation was conducted to assess the dimensionality of each subscale (see Tables 3 and 4). For positive behaviors, Bartlett's Test of Sphericity was 1278.677 ($p < 0.0001$), which indicated that the items were appropriate for factor analysis. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.905, which was considered a respectable representation of the proportion of variance among the measured items (Kaiser 1974). Items with communality and factor loading less than 0.5, as well as factors with eigenvalues less than one were removed (Kaiser 1960). Two factors of positive behaviors were extracted and each contained three items that accounted for 65.7% of the total variance. Factor 1 contained active and facilitative behaviors (i.e., "starting a conversation", "socializing", and "interacting with tourists"). Factor 2 contained passive and facilitative items that represented accommodative behaviors (i.e., "tolerating", "accepting", and "enduring tourists' behaviors"). Cronbach's alpha for both factors were 0.819 and 0.775, respectively.

For negative behaviors, Bartlett's Test of Sphericity was 1679.540 ($p < 0.0001$), and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.867. KMO between 0.8 and 0.9 are regarded as meritorious (Kaiser 1974). Items with communality and factor loading less than 0.5, as well as factors with eigenvalues less than one were removed (Kaiser 1960). Two factors for negative behaviors were extracted and each contained three items that accounted for 70.8% of the total variance. Factor 1 involved passive but potentially harmful behaviors (i.e., "resisting", "refraining", and "being reluctant to help tourists in need"). Factor 2 involved active and harmful behaviors (i.e., "mocking", "threatening", and "being unfriendly to tourists"). Both factors achieved Cronbach's alpha of 0.720 and 0.843, respectively.

Table 3 - Results of Exploratory Factor Analysis (Study 1 - Calibration Sample)

Variables	Eigenvalues	Cumulative Variance (%)	Communalities	Standardized Factor Loading	Composite Reliability	AVE
Facilitation						
<i>Factor 1: Active-Facilitation</i>	1.554	41.110			0.819	0.638
Starting a conversation with tourists			0.692	0.814		
Socializing with tourists			0.736	0.805		
Interacting with tourists			0.735	0.776		
<i>Factor 2: Passive-Facilitation</i>	1.081	24.590			0.775	0.614
Accepting tourists' behaviors			0.608	0.684		
Tolerating tourists' behaviors			0.728	0.830		
Enduring tourists' behaviors			0.792	0.827		
Harm						
<i>Factor 3: Passive-Harm</i>	5.913	38.830			0.720	0.561
Being reluctant to help tourists			0.762	0.856		
Resisting from helping tourists			0.634	0.706		
Refraining from helping tourists			0.585	0.628		
<i>Factor 4: Active-Harm</i>	1.036	31.970			0.843	0.542
Being unfriendly to tourists			0.739	0.797		
Mocking tourists			0.682	0.714		
Threatening tourists			0.639	0.733		

Note: AVE represent Average Variance Extracted of each behavioural quadrant

Table 4 - Construct Intercorrelation (Study 1 - Calibration Sample)

Variables	AF	PF	PH	AH
Active-Facilitation (AF)	1.000			
Passive-Facilitation (PF)	0.336	1.000		
Passive-Harm (PH)	0.233	0.149	1.000	
Active-Harm (AH)	0.238	0.107	0.605	1.000

Validation of the Scale

Confirmatory Factor Analysis (CFA) was used to evaluate the measurement model. The cut-off criteria for the fit indices were: 3 to 1 for the ratio of χ^2 to the degrees of freedom (χ^2/df) (Bollen 1989); values greater than 0.9 for the Comparative Fit Index (CFI) and Goodness of Fit Index (GFI) (Blunch 2008; Kline 2011); and values less than 0.08 for Root Mean Square of Approximation (RMSEA) (Hair et al. 1998; Hu and Bentler 1999).

For convergent validity, the average variance extracted (AVE) should be greater than 0.5, or the value of Cronbach's alpha for the composite reliability of the dimension should be greater than 0.6 (Fornell and Larcker 1981; Huang et al. 2013). For discriminant validity, the squared root of AVE should be higher than the inter-dimension correlation coefficient (Hair et al. 2010), and the correlation among the variables should not be greater than 0.85 (Kline 2005).

Validation Sample

An online questionnaire through Qualtrics software was distributed to a new sample of Hong Kong residents in June 2019. The questionnaire consists of the 12 items from the calibration sample, and items were measured using the same 7-point Likert scale of 1 = Never to 7 = Often. Gender quota sampling was adopted as it is crucial to consider input from both females and males in today's research. Three hundred and eighty-one valid questionnaires were collected (i.e., 54.6% female and 45.4% male). According to the Hong Kong Census

and Statistic Department (2018), the percentage of female and male Hong Kong residents is 54.1% and 45.9%, respectively. 69.5% of the respondents were aged 35 years old and below; 74.8% received at least undergraduate-level education, 32.6% from Hong Kong Island, 33.3% from Kowloon Peninsula, and 34.1% from New Territories.

The results of the validation sample presented good model fit. Maximum degrees of freedom χ^2/df was within the acceptable range ($\chi^2/df = 119.324/46 = 2.594$). CFI (0.971), GFI (0.952), and NNFI, also known as the Tucker-Lewis Index (TLI (0.958) were greater than 0.90, and the RMSEA (0.065) was less than 0.08. The composite reliability for each factor was between 0.745 and 0.885, which suggested reliable internal consistency of the measured variables in their respective constructs. Three factors had an AVE value of 0.5 and above except for Passive-Facilitation (AVE = 0.437), which was slightly lower than the ideal value but achieved a composite reliability of 0.745 (Fornell and Larcker 1981; Huang et al. 2013) (see Table 5). Discriminant validity was achieved as all factors had a squared root of AVE higher than their inter-dimension correlation coefficient with no correlation among variables exceeding 0.85 (see Table 6).

Table 5 - Results of Confirmatory Factor Analysis (Study 1 - Validation Sample)

Variables	Standardized Factor Loading	Composite Reliability	AVE
<i>Factor 1: Active-Facilitation</i>		0.885	0.724
Starting a conversation with tourists	0.849		
Socializing with tourists	0.878		
Interacting with tourists	0.825		
<i>Factor 2: Passive-Facilitation</i>		0.745	0.437
Accepting tourists' behaviors	0.924		
Tolerating tourists' behaviors	0.471		
Enduring tourists' behaviors	0.484		
<i>Factor 3: Passive-Harm</i>		0.659	0.659
Being reluctant to help tourists	0.793		
Resisting from helping tourists	0.785		
Refraining from helping tourists	0.856		
<i>Factor 4: Active-Harm</i>		0.620	0.620
Being unfriendly to tourists	0.836		
Mocking tourists	0.756		
Threatening tourists	0.768		

Table 6 - Construct Intercorrelations (Study 1 - Validation Sample)

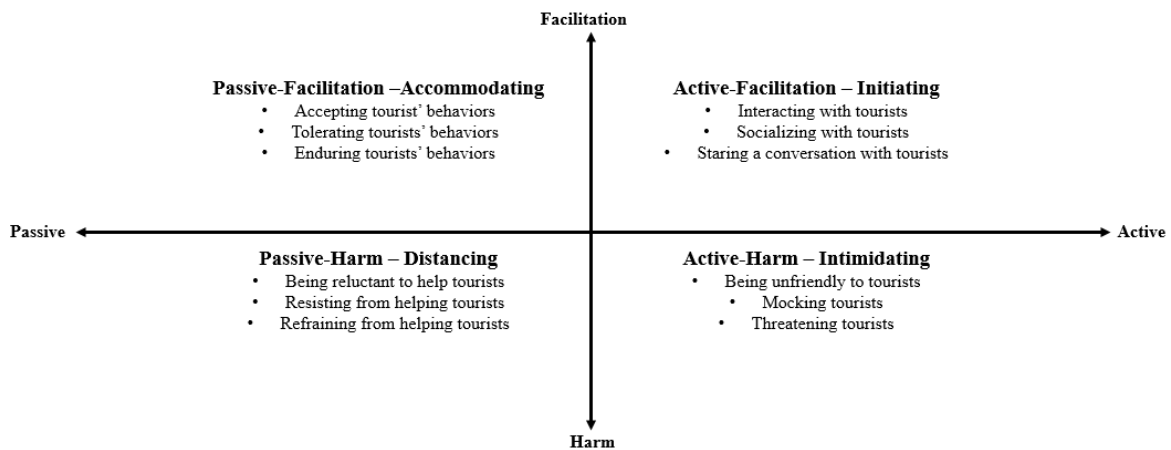
Variables	AF	PF	PH	AH
Active-Facilitation (AF)	0.851			
Passive-Facilitation (PF)	0.549	0.661		
Passive-Harm (PH)	-0.148	-0.159	0.787	
Active-Harm (AH)	0.058	-0.001	0.754	0.812

Note: Bold value is the squared root of AVE

Brief Discussion of Study 1

Study 1 identified a pool of positive and negative behaviors from residents that reflected the four quadrants of the BIAS Map (see Figure 2). The findings highlight the importance of considering both the valence (i.e., facilitation or harm) and intensity (i.e., active or passive) of behaviors.

Figure 2 – Residents’ behaviors in the four quadrants of the BIAS Map



Interestingly, some of the items, such as “answering tourists’ questions” and “helping tourists”, did not loaded into any quadrants of the model. A possible explanation is that technology has changed the nature of prosocial, helping behaviors between residents and tourists. The advancement of information technology and mobile applications that provide itinerary suggestions, navigation, ratings, and reviews have decreased the opportunities for tourists to seek assistance from residents.

While Study 1 focused on a sample of Hong Kong residents, Study 2 aims to provide further cross-cultural validation for the model with two new samples of residents in major destinations: Singapore and the United States. Singapore relies heavily on tourism for its economy, and the government proactively develops and manages an “East meets West” urban destination experience. Similar to Hong Kong, the Mainland Chinese market is one of the largest markets for Singapore (Tay 2019). Additionally, there have been discussion on social media about the increasing tensions between Singaporeans and Mainland Chinese tourists. For example, Singaporeans have complaint that Mainland Chinese tourists have low English capabilities and have violated local values. On the other hand, Mainland Chinese tourists have shared their awful experiences with Singaporean’s harmful behaviors against them. These incidents have been published on social media forums and have fostered resounding discussions between Singaporeans and Mainland Chinese (Moon 2018). Furthermore,

Singapore recorded an unprecedented influx of Mainland Chinese tourist in first half of 2019, and such disturbances could increase and potentially deteriorate host-guest relations.

Singapore can serve to validate the model while the United States can provide insights beyond the Asian context.

Study 2

Participants and Procedure

A questionnaire with the 12 residents' behaviors, measured with 1 = Never to 7 = Often, were distributed to Singaporeans and Americans via Qualtrics, an online survey platform. Using a gender quota sampling approach, 235 and 203 completed questionnaires were collected from Singapore in June 2019 and the United States in February 2020, respectively. The Singaporean sample consisted of 50.6% female and 49.4% male, while American sample consisted of 49.8% female and 50.3% male. The Singaporeans were mainly aged 34 and below (57.3%) while the majority of the Americans were aged 25 to 34 years (33.5%) and at least 55 years old (33.5%) (see Table 7).

Table 7 - Respondent Characteristic (Study 2 - Validation Sample)

Variables	Singapore (n = 235) Distribution (%)	United States (n = 203) Distribution (%)
Gender		
Female	119 (50.6)	101 (49.8)
Male	116 (49.4)	102 (50.3)
Age		
18 - 24	50 (21.3)	0 (0.0)
25 - 34	87 (36.0)	68 (33.5)
35 - 44	64 (27.2)	53 (26.1)
45 - 54	21 (9.0)	34 (16.8)
55 and above	13 (5.5)	68 (33.5)

Assessment of the Model

The overall model fit was evaluated by various goodness-of-fit indices without applying any modifications (see Table 8). For the Singaporean sample, the ratio of χ^2 to the degrees of freedom (1.998) was less than three; CFI (0.914), GFI (0.966), and NNFI (0.952) were greater than 0.90; and the RMSEA (0.065) was less than 0.08. For the American sample, the ratio of χ^2 to the degrees of freedom (2.193) was less than three; CFI (0.986), GFI (0.942), and NNFI (0.980) were greater than 0.90; and the RMSEA (0.05) was less than 0.08. The findings showed good model fit for both samples.

The standardized factor loadings for the 12-items ranged from 0.557 to 0.917 and the composite reliability (CR) scores for each quadrants were between 0.697 and 0.926 in both samples, suggesting good internal consistency of the measured variables (Nunnally 1978). Convergent validity was achieved as the factor loadings of all measured variables were higher than 0.4 and the total average variance extracted (AVE) were higher than 0.50 (Fornell and Larcker 1981). Discriminant validity was supported as the square root of the AVE of each quadrant exceeded the coefficient of intercorrelations between any two quadrants (Fornell and Larcker 1981) (see Table 9).

Table 8 - Results of Confirmatory Factor Analysis (Study 2 – Cross-Cultural Validation Samples)

Variables	Singapore (n = 235)			United States (n = 203)		
	Standardized Factor Loading	CR	AVE	Standardized Factor Loading	CR	AVE
<i>Factor 1: Active-Facilitation</i>		0.879	0.665		0.926	0.807
Starting a conversation with tourists	0.861			0.883		
Socializing with tourists	0.827			0.911		
Interacting with tourists	0.794			0.900		
<i>Factor 2: Passive-Facilitation</i>		0.697	0.355		0.914	0.779
Accepting tourists' behaviors	0.639			0.893		
Tolerating tourists' behaviors	0.588			0.894		
Enduring tourists' behaviors	0.557			0.861		
<i>Factor 3: Passive-Harm</i>		0.830	0.600		0.896	0.750
Being reluctant to help tourists	0.675			0.810		
Resisting from helping tourists	0.820			0.670		
Refraining from helping tourists	0.883			0.917		
<i>Factor 4: Active-Harm</i>		0.813	0.635		0.883	0.713
Being unfriendly to tourists	0.690			0.855		
Mocking tourists	0.827			0.782		
Threatening tourists	0.801			0.892		

Table 9 - Construct Intercorrelations (Study 2 – Cross-Cultural Validation Sample)

Variables	Singapore (n = 235)				United States (n = 203)			
	AF	PF	PH	AH	AF	PF	PH	AH
Active-Facilitation (AF)	0.816				0.898			
Passive-Facilitation (PF)	0.291	0.596			0.715	0.883		
Passive-Harm (PH)	0.265	0.045	0.775		0.128	0.047	0.866	
Active-Harm (AH)	0.370	0.063	0.711	0.797	0.055	-0.026	0.774	0.844

Note: Bold value is the squared root of AVE (Average Variance Extracted)

Comparative analysis was conducted to evaluate the results between Singaporeans (denoted as ‘S’) and Americans (denoted as ‘A’) in the model. Both samples rated facilitative ($M_A = 3.9926$, $SD_A = 1.590$; $M_S = 3.822$, $SD_S = 1.048$) higher than harmful behaviors against tourists ($M_A = 2.178$, $SD_A = 1.416$; $M_S = 2.5447$, $SD_S = 1.238$). Furthermore, they rated passive ($M_A = 2.943$, $SD_A = 1.187$; $M_S = 2.8950$, $SD_S = 1.119$) higher than active behaviors ($M_A = 3.2274$, $SD_A = 1.150$; $M_S = 3.4716$, $SD_S = 0.935$). Overall, both Americans and Singaporeans exhibited higher extents of facilitative and passive behaviors.

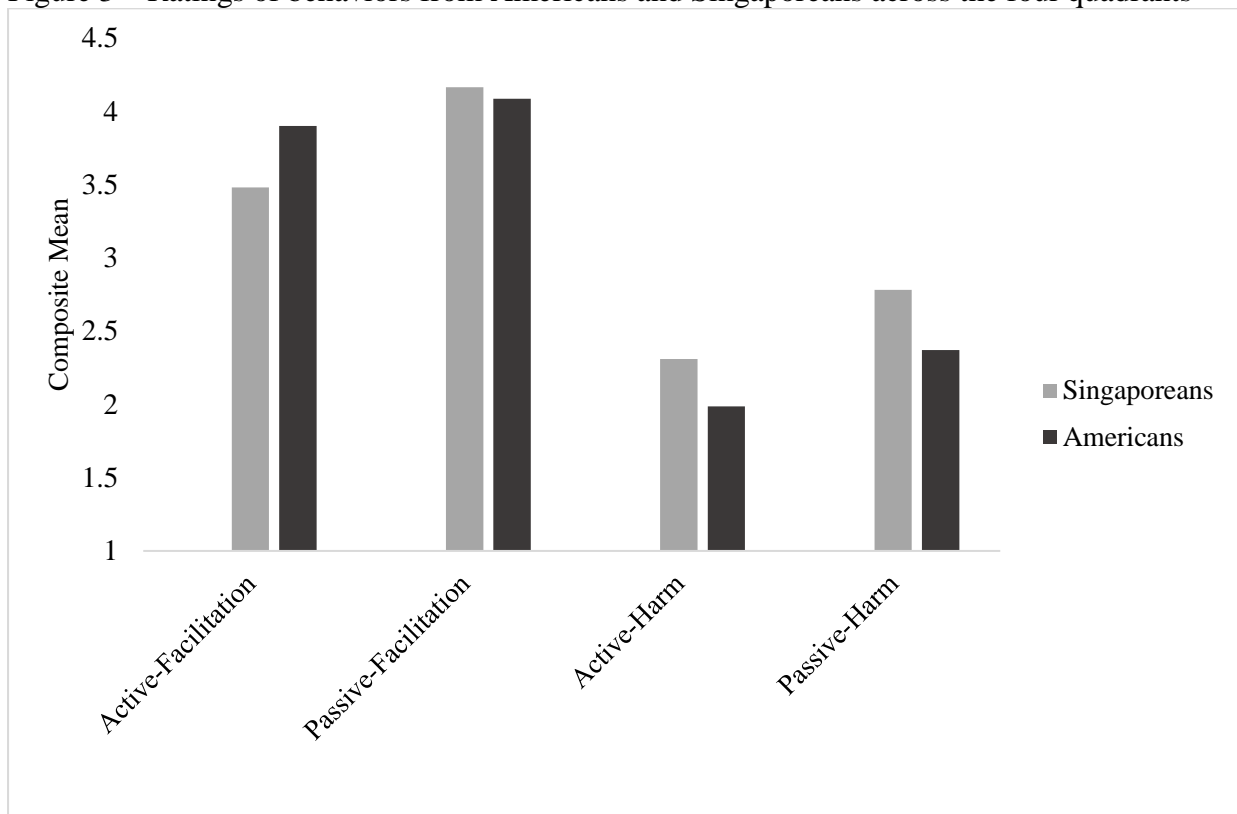
With respect to each of the four quadrants, the results for both Singaporeans and Americans exhibited similar patterns; that is, both samples reported highest ratings for Passive-Facilitation followed by Active-Facilitation, Passive-Harm, and Active-Harm. However, the results between Singaporeans and Americans began to diverge when independent samples t-tests were performed between the samples across each dimension.

The results showed significant differences in three of the four quadrants (see Figure 3). On average, Americans reported a significant higher extent of Active-Facilitation (e.g., conversing and socializing) than Singaporeans ($M_A = 3.899$, $SD_A = 1.711$; $M_S = 3.481$, $SD_S = 1.419$; $t(393) = -2.764$, $p = 0.006$), while Singaporeans indicated higher ratings for Active-Harm (e.g., mocking and being unfriendly) than Americans against Mainland Chinese tourists ($M_A = 1.987$, $SD_A = 1.440$; $M_S = 2.309$, $SD_S = 1.283$; $t(436) = 2.477$, $p = 0.014$).

Furthermore, Singaporeans reported significantly higher ratings for Passive-Harm (e.g., resisting and being reluctant to help tourists) than Americans ($M_A = 2.369$, $SD_A = 1.567$; M_S

= 2.780, $SD_S = 1.395$; $t(436) = 2.878, p = 0.004$). Passive-Facilitation (e.g., tolerating, accepting, and enduring tourists' behaviors) was the only dimension without significant differences between the two samples ($M_A = 4.085, SD_A = 1.724$; $M_S = 4.163, SD_S = 1.185$; $t(350) = 0.541, p = 0.589$). Collectively, the results showed that Singaporeans reported higher extents of harmful behaviors than Americans against Mainland Chinese tourists.

Figure 3 – Ratings of behaviors from Americans and Singaporeans across the four quadrants



Brief Discussion of Study 2

Study 2 provided cross-cultural validation for the model with residents from Singapore and the United States. The results of the comparative analysis showed that both Americans and Singaporeans generally exhibited higher extents of facilitative and passive behaviors to Mainland Chinese tourists. However, when each of the four quadrants were compared between Singaporeans and Americans, Americans indicated higher extents of Active-Facilitation (e.g., conversing and socializing) while Singaporeans reported higher

ratings of Active- and Passive-Harm (e.g., intimidating and neglecting). A possible reason is that prior to COVID-19, there have been increasing reports on cultural violations among Mainland Chinese tourists when they visited Singapore that have sparked disputes among Singaporeans (Chen 2017). For Singapore, a city-state of 5.69 million, there were over 3.6 million visitors from Mainland China compared to around 3 million Mainland Chinese tourists who visited the United States, a country with a much larger population and geographical area. Given the current health situation with COVID-19 as well as the political tensions between the United States and China, it would be interesting to see how Americans' behaviors may change as international travel and tourism hopefully resumes when borders re-open in 2021.

GENERAL DISCUSSION

This research consisted of two studies that highlighted the intergroup behaviors between residents and tourists. Study 1 developed a scale to measure the valence (i.e., facilitation vs. harm) and intensity (i.e., active vs. passive) of residents' behavior by drawing from the BIAS Map. Twelves types of behaviors were identified and categorized into four quadrants: Active-Facilitation, Passive-Facilitation, Active-Harm, and Passive-Harm. These four quadrants could be regarded as residents' initiatives that could benefit tourists; residents' accommodative behaviors toward tourists; residents distancing away from tourists; and residents' intimidating behaviors against tourist, respectively. Study 2 examined the cross-cultural validity of the model by using a new sample of Singaporeans and Americans. The model fits of both samples provided further support for the model. The results indicated that Singaporeans exhibited higher extents of harmful behaviours, both actively and passively, while Americans reported higher Active-Facilitation towards Mainland Chinese tourists.

Theoretical Implication

This study connected the BIAS Map in the social psychology literature with tourism research to develop a valid and reliable model to measure residents' behaviors. While previous studies identified residents' attitudes and how these attitudes could affect host-guest interactions (Ap and Crompton 1993; Butler 1975; Carmichael 2000), existing studies have not examined residents' behaviors in terms of both valence and intensity concurrently. Both considerations are critical as valence provides important information about the attractiveness or averseness of the target while intensity informs about the level of engagement of these behaviors.

It is important to note, however, that residents may behave differently even within the same destination. Some residents may be willing to interact and socialize, while others may mock or be unfriendly to tourists. This study sought to identify the various types of behavioral reactions that residents may perform, but residents may certainly perform them differently and to various extents. Furthermore, for some destinations, socio-cultural differences amongst residents may be as large as socio-cultural differences between residents and tourists. This would be relevant for multi-cultural nations such as Canada and the United States. In contrast, Hong Kong is comparatively homogenous as over 95% of the population are local Cantonese-speaking residents (Hong Kong Census and Statistic Department 2020). Singapore also has a strong Singaporean identity; hence, although the majority of residents are ethnically Chinese, they are proud to be Singaporean first-and-foremost.

Besides that, the dominance of the Mainland Chinese market could have affected residents' experiences with tourism and influenced their behaviors. Due to proximity, Mainland Chinese tourists have been the top inbound tourist market for Hong Kong (43 million in 2019) and Singapore (3.6 million in 2019). However, record arrival numbers

combined with inappropriate tourist behaviors and overcrowding have fostered detrimental host-tourist encounters as well as negative sentiments, and harmful behavioral responses. On the other hand, the United States received fewer Mainland Chinese tourists (i.e., 2.9 million in 2019) compared to the other two city destinations; hence, the problems related to urban density and overcrowding from tourist arrivals in Hong Kong and Singapore may not have been experienced by Americans to the same extent.

There is theoretical merit for linking the BIAS Map in tourism to the wider destination image literature. Positive host-guest interactions through residents' facilitative behaviors (e.g., interacting and socializing) could lead to tourists' emotional attachment with residents and overall satisfaction; in contrast, negative interactions could have the opposite effect and damage tourists' post-travel evaluations of destination image (Fan et al. 2017; Styliadis 2020; Woosnam, Styliadis, and Ivkov 2020). For instance, Kour et al. (2020) analyzed the impact of the COVID-19 pandemic situation on host-guest relationships and its future impact on travel intentions among tourists in India. Residents' mistrust and irresponsible behaviors towards tourists has a highly negative impact on the image of the community and the destination.

This study contributes to the social psychology literature by providing context to the BIAS Map, and by identifying new behavioral attributes in an applied tourism perspective. Many studies in psychology have employed the BIAS Map without consideration of a prevalent societal context (i.e., tourism), which is a limitation as intergroup dynamics could change according to the relationships between social groups (i.e., in this case, residents and tourists) as well as the examined context (i.e., Hong Kong, Singapore, or the United States). Tourism serves as a platform for social exchanges in daily life, and thus, the behavioral attributes in this research reflect real-life considerations between residents and tourists that are beyond a controlled psychology setting.

The results of this research also shows that intergroup behaviors in the tourism context could differ from general intergroup behaviors identified in the BIAS Map from the social psychology literature. For example, the behavioral items from Passive-Facilitation, Active-Harm, and Passive-Harm were replaced with new items in the model that were more relevant for tourism. In Passive-Facilitation, the items in this research reflected different levels of residents' accommodative behaviors, ranging from accepting and tolerating to enduring tourists' behaviors. The behavioral items for residents' harmful behaviors were also different from the BIAS Map. While the original BIAS Map considered an item such as 'fighting' under Active-Harm, this behavior may not be particularly applicable in the tourism context as residents typically do not 'fight' tourists. Instead, this research reconceptualized items for Active-Harm to reflect residents' who may 'threaten or 'mock' tourists instead. These are items that are worthy of additional research attention.

Practical Implication

There are a number of ways for DMOs and tourism policymakers to leverage positive interactions between residents and tourists to improve the attractiveness and competitiveness of their destination. For example, residents' behaviors might be deployed by DMOs to help destinations promote themselves and contribute to improve tourists' perceived destination image. This could be done in the form of enlisting residents as 'place ambassadors' (Styvén et al. 2020). Recent research by Styvén et al. (2020) suggests that local residents could act as valuable ambassadors and co-creators of place-related brand communication. DMOs could involve residents more proactively in promoting their destinations, which could enhance both destination competitiveness (Crouch and Ritchie 2012) and advertising effectiveness, since embedding residents to sustain tourism could be a more organic and cost-effective approach (Uchinaka, Yoganathan, and Osburg 2019).

Positive destination image perceived by residents' could improve their perceived economic, socio-cultural, and environment impacts from tourism, which then enhances their support for tourism developments (Stylidis et al. 2014). In turn, this could affect the extent to which they are willing to exhibit positive, facilitative behaviors. Tourism policymakers are encouraged to carefully assesses residents' perceptions of the place before they develop their destination marketing plans. This could involve evaluating and supporting residents' sense of positivity so that they are inspired to share organic communication material for the destination as local place ambassadors.

In the digital age, destination could also promote themselves by encouraging residents and tourists to share interactions between them. For example, DMOs could execute a bottom-up approach by allowing the residents and tourists to upload their positive interactions with each other through online photos or videos on social media. Organic content from residents and tourists could be viewed as more credible than communication from official destination marketing sources (Palmer, Koenig-Lewis, and Medi Jones 2013).

DMOs and tourism policymakers could also consider more internal marketing to facilitate residents' awareness of Active-Facilitative behaviors. Educational videos and poster could be employed by DMOs and policymakers to deliver prosocial norms and messages to residents. As per the results of this research, content of the videos could be further streamlined to show interactions, socialization, and conversations between residents and tourists. For example, the Hong Kong Tourism Board has videos that promoted positive host-guest interactions with residents showing hospitality and smiling at tourists (Sun 2016). Indirectly, DMOs could collaborate with other government agencies to stimulate prosocial behaviors among individuals within society. For instance, the Equal Opportunity Commission (EOC) of Hong Kong has created videos to encourage local residents on facilitative

behaviors, such as interacting and socializing with other individuals. The aim is to encourage residents to act positively to cultivate an inclusive society.

Internal marketing from DMOs and tourism policymakers could also address potential negative behaviors from residents. Social learning theory suggests that individuals could acquire new behaviors by observing and imitating others in a social context (Bandura 1971). Individuals who acknowledge a shared identity (e.g., residents) may be encouraged to mimic behaviors performed by other members of the same social group towards outgroup members (e.g., tourists). For example, if a resident performed a certain action (i.e., negative behavior) on a tourist and was observed by other residents, there is a possibility that a contagion effect of that negative behavior could occur within the society (Tung, 2021). In this view, DMOs and tourism policymakers are recommended to address residents' harmful behaviors immediately when they occur through internal marketing, such as public announcements, to address possible negative contagion effects among residents.

Finally, in addition to marketing communication and internal marketing in the digital age, DMOs could also facilitate face-to-face opportunities for residents and tourists to interact. These opportunities could include cultural events, festivals, and activities. The purpose is to enable residents to engage with, and share their norms and values with tourists. For DMOs, the goal is to showcase Active-Facilitation from residents to strengthen the positivity of the tourists' perceived destination image and enhance destination competitiveness (Ritchie and Crouch 2003).

LIMITATIONS AND FUTURE RESEARCH

There are limitations in this study and opportunities for future research. The two studies in this research were conducted in Hong Kong and Singapore, and both destinations represented a limited, urban tourism context. This study focused solely on Mainland Chinese

tourist and future research could investigate residents' behaviors toward tourists from other source markets.

This research measured residents' memories of behaviors rather than actual behaviors. There could have been potential capitalization of memories as they related to perceived behaviors, with subsequent implications on destination image (Tung, Cheung, and Law 2018). Furthermore, although instructions were given to respondents, some respondents may have evaluated their perceived behavioral intentions rather than their actual behaviors. Future studies could address this limitation by observing residents' actual behaviors instead.

Although this study mapped residents' behaviors along the dimensions of valence and intensity, the associations of these two dimensions with other psychological constructs such as stereotypes and emotions were excluded. Cuddy et al. (2007) suggested that positive stereotype could elicit upwards emotions and facilitative behaviors while negative stereotypes could induce downward emotions and harmful behaviors. Future studies could extend these theoretical concepts with the adoption of the model in this research to investigate the relationships among tourist stereotypes, residents' emotions and behaviors, thereby enhancing knowledge of intergroup interactions in host-guest relations.

Although the present research assessed the cross-cultural validity of the measurement model, it did not investigate nomological validity. Future studies could take inspiration from Gatignon et al. (2002) and examine the nomological validity of the present model by assessing its predictive powers on related constructs. For instance, Gatignon et al. (2002) developed a measurement scale to assess innovation's locus, type and characteristic through a structural approach. In similar vein, future studies could explore the predictive power of the present model on tourists' perceived destination image and destination competitiveness in a structural approach (Kour et al. 2020).

Nomological validity could also be investigated by assessing how the present model could predict future developments. For instance, Govindarajan and Kopalle (2006) investigated the predictive power of their measurement scale on innovation disruptiveness to future market developments and profit generation. Future research could evaluate the predictive power of the model in this research on residents' support for future destination development and willingness to act as place ambassadors (Styvén et al., 2020).

There are limitations to viewing residents and tourists as two groups with distinct social identities. There may be tourists that had previously been residents in a specific area, such as individuals going back for holidays to visit family and friends. Residents should not always be viewed as a homogenous social group due to individual-level differences as previous travel experience, openness to other cultures, and other factors could affect their behaviors. In these circumstances, stereotypes and affect are relevant at an individual-level, and there could be a limitation to applying the BIAS Map to host-tourist relationships.

Future researcher may investigate the influence of resident-tourist contacts in residents' behaviors. Although contact theory suggests that contact between individuals of different social groups could increase individuals' affections towards each other and reduce categorization (Allport 1979), 'contact reduction' and 'social distancing' have become the norm in light of the current COVID-19 pandemic situation; consequently, stereotyping and discrimination against Mainland Chinese in particular, have become ever more salient. As the situation continues, it is possible that more harmful behaviors could be directed towards Chinese visitors when international tourism resumes. Future research could longitudinally examine the changes in residents' behaviors towards Mainland Chinese tourists over time.

This study adopted convenience and snowball sampling in recruiting Hong Kong residents for the free response task and calibration sample, which may under-represent the

city's population as the sample was skewed towards young and educated female residents. As a result, the items in the model are not definitive for the population. Future studies could collect data using probability sampling to strengthen representation.

Finally, it would be interesting for future research to investigate the connection between residents' behaviors based on the four quadrants with the competitiveness of a destination or tourism flows as per the Destination Competitiveness and Sustainability (DCS) Model by Ritchie and Crouch (2003). It would also be relevant for future research to investigate the relationships between the model in the present study with positive host-guest relationships and tourists' perceptions of destination brands, given the importance of facilitating positive and memorable tourism experiences for tourists (Stylidis, Belhassen, and Shani 2015; Tan and Wu 2016).

References

- Agapito, D., P. Oom do Valle, and J. da Costa Mendes. 2013. "The cognitive-affective-conative model of destination image: A confirmatory analysis." *Journal of Travel and Tourism Marketing* 30(5): 471-481.
- Allport, G. 1979. *The Nature of Prejudice* (unabridged, 25th anniversary ed.). Reading, MA: Addison-Wesley.
- Ambroz, M. 2008. "Attitudes of local residents towards the development of tourism in Slovenia: The case of the Primorska, Dolenjska, Gorenjska and Ljubljana regions." *Anthropological Notebooks* 14(1): 63-79.
- Ap, J., and J. L. Crompton. 1993. "Residents' strategies for responding to tourism impacts." *Journal of Travel Research* 32(1):47-50.
- Bandura, A. 1971. *Social Learning Theory*. Morristown.
- Becker, J. C., and F. Asbrock. 2012. "What triggers helping versus harming of ambivalent groups? Effects of the relative salience of warmth versus competence." *Journal of Experimental Social Psychology* 48(1): 19-27.
- Berli, A., and J. D. Martin. 2004. Factors influencing destination image. *Annals of Tourism Research*, 31(3), 657-681.
- Blunch, N.J. 2008. *Introduction to structural equation modeling using SPSS and AMOS*. London: Sage Publications.
- Bollen, K. A. 1989. "A new incremental fit index for general structural equation models." *Sociological Methods and Research* 17(3): 303-316.

- Bornstein, R. 1989. "Exposure and affect: Overview and meta-analysis of research, 1968–1987." *Psychological Bulletin* 106(2): 265-289.
- Butler, R.W. 1975. "Tourism as an Agent of Social Change." Paper presented at the International Geographical Union's Working Group on the Geography of Tourism and Recreation, Trent University, Peterborough, Ontario.
- Campbell, J. M., and M, Kubickova. 2020. "Agritourism microbusinesses within a developing country economy: A resource-based view." *Journal of Destination Marketing and Management* 17: 100460.
- Carmichael, B. A. 2000. "A matrix model for resident attitudes and behaviours in a rapidly changing tourist area." *Tourism Management* 21(6): 601-611.
- Chan, A., C. H. Hsu, and T, Baum. 2015. "The impact of tour service performance on tourist satisfaction and behavioral intentions: A study of Chinese tourists in Hong Kong." *Journal of Travel and Tourism Marketing* 32(1-2): 18-33.
- Chen, N., C. H, Hsu, and X. R, Li. 2018. "Feeling superior or deprived? Attitudes and underlying mentalities of residents towards Mainland Chinese tourists." *Tourism Management* 66: 94-107.
- Chen, S. 2017. "Dos and don'ts for Chinese tourists visiting Singapore: no whistling at the theatre and don't steal stuff from the plane." *South China Morning Post*, September 23. <https://www.scmp.com/news/china/society/article/2112564/dos-and-donts-chinese-tourists-visiting-singapore-no-whistling>
- Choi, H. S. C., and E. Sirakaya. 2005. "Measuring residents' attitude toward sustainable tourism: Development of sustainable tourism attitude scale." *Journal of Travel Research* 43(4):380-394.

- Crouch G. I. 2011. "Destination competitiveness: An analysis of determinant attributes." *Journal of Travel Research* 50(1): 27-45.
- Crouch, G. I., and J. B, Ritchie. 1999. "Tourism, competitiveness, and societal prosperity." *Journal of Business Research* 44(3): 137-152.
- Crouch, G. I., and J. B, Ritchie. 2012. "Destination competitiveness and its implications for host-community QOL." *Handbook of Tourism and Quality-of-Life Research*: 491-513.
- Cuddy, A. J., S. T. Fiske, and P. Glick. 2007. "The BIAS Map: behaviors from intergroup affect and stereotypes." *Journal of Personality and Social Psychology* 92(4): 631-648.
- Cuddy, A. J., S. T. Fiske, and P. Glick. 2008. "Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS Map." *Advances in Experimental Social Psychology* 40: 61-149.
- Doxey, G. V. 1975. "A causation theory of visitor-resident irritants: Methodology and research inferences." *Travel and tourism research associations sixth annual conference proceedings*: 195-98.
- Elliot, A. J. 2006. "The hierarchical model of approach-avoidance motivation." *Motivation and Emotion* 30(2):111-116.
- Elliot, S., N. Papadopoulos, and S. S. Kim. 2011. "An integrative model of place image: Exploring relationships between destination, product, and country images." *Journal of Travel Research* 50(5): 520-534.
- Enright, M. J., and J. Newton. 2004. "Tourism destination competitiveness: a quantitative approach." *Tourism Management* 25(6): 777-788.

- Eusébio, C., A. L. Vieira, and S. Lima. 2018. "Place attachment, host–tourist interactions, and residents' attitudes towards tourism development: The case of Boa Vista Island in Cape Verde." *Journal of Sustainable Tourism* 26(6): 890-909.
- Fan, D. X., H. Q. Zhang, C. L. Jenkins, and P. Tavitiyaman. 2017. "Tourist typology in social contact: An addition to existing theories." *Tourism Management* 60: 357-366.
- Fornell, C., and D. F. Larcker. 1981. "Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and statistics." *Journal of Marketing Research* 18(3): 382-388.
- Gatignon, H., M.L. Tushman, W. Smith, and P. Anderson. 2002. "A structural approach to assessing innovation: construct development of innovation locus, type, and characteristics." *Management Science* 48(9): 1103–1122.
- Gong, J., P. Detchkhajornjaroensri, and D. W. Knight. 2019. "Responsible tourism in Bangkok, Thailand: Resident perceptions of Chinese tourist behaviour." *International Journal of Tourism Research* 21(2): 221-233.
- Gonzalez, V. M., L. Coromina, and N. Galí. 2018. "Overtourism: residents' perceptions of tourism impact as an indicator of resident social carrying capacity-case study of a Spanish heritage town." *Tourism Review* 73(3): 277-296.
- Govindarajan, V., and P. K. Kopalle. 2006. "Disruptiveness of innovations: measurement and an assessment of reliability and validity." *Strategic Management Journal* 27(2): 189–199.
- Hair, J. F., R. E. Anderson, R. L. Tatham, and C. William. 1998. *Multivariate Data Analysis*. 5th ed. New York: Prentice-Hall.

- Hair, J.F., W.C. Black, B. J. Babin, and R. E. Anderson. 2010. *Multivariate data analysis: A global perspective*. 7th ed. New Jersey: Pearson Prentice Hall.
- Hall, E. V., K. W. Phillips, and S. S. Townsend. 2015. "A rose by any other name?: The consequences of subtyping "African-Americans" from "Blacks"." *Journal of Experimental Social Psychology* 56: 183-190.
- Hong Kong Census and Statistic Department. 2018. "Women and Men in Hong Kong Key Statistics." <https://www.statistics.gov.hk/pub/B11303032018AN18B0100.pdf> (accessed December 29, 2020).
- Hong Kong Census and Statistics Department. 2020. "Hong Kong Monthly Digest of Statistics – Use of Language in Hong Kong". <https://www.statistics.gov.hk/pub/B72001FB2020XXXXB0100.pdf> (accessed June 14, 2020).
- Hu, L. T., and P. M. Bentler. 1999. "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives." *Structural Equation Modeling: A Multidisciplinary Journal* 6(1): 1-55.
- Huang, C. C., Y. M. Wang, T. W. Wu, and P. A. Wang. 2013. "An empirical analysis of the antecedents and performance consequences of using the moodle platform." *International Journal of Information and Education Technology* 3(2): 217-221.
- Hughes, N. 2018. 'Tourists go home': anti-tourism industry protest in Barcelona. *Social Movement Studies* 17(4): 471-477.
- Kaiser, H. F. 1960. "The application of electronic computers to factor analysis." *Educational and Psychological Measurement* 20(1):141-151.

- Kaiser, H. F. 1974. "An index of factorial simplicity." *Psychometrika* 39(1):31-36.
- Kim, W., H. M. Jun, M. Walker, and D. Drane. 2015. "Evaluating the perceived social impacts of hosting large-scale sport tourism events: Scale development and validation." *Tourism Management* 48: 21-32.
- Kline, R. B. 2011. *Convergence of structural equation modeling and multilevel modeling. The SAGE Handbook of Innovation in Social Research Methods.*
- Kline, R.B. 2005. *Principles and Practice of Structural Equation Modelling.* 2nd ed. New York: The Guilford Press.
- Kock, F., A. Josiassen, A. G. Assaf, I. Karpen, and F. Farrelly. 2019. "Tourism Ethnocentrism and Its Effects on Tourist and Resident Behavior." *Journal of Travel Research* 58(3):427-439.
- Kour, P., A. Jasrotia, and S. Gupta. 2020. "COVID-19: a pandemic to tourism guest-host relationship in India." *International Journal of Tourism Cities.*
<https://www.emerald.com/insight/content/doi/10.1108/IJTC-06-2020-0131/full/html>
- Kozak, M. 2007. "Tourist harassment: A marketing perspective." *Annals of Tourism Research* 34(2): 384-399.
- Lyons, K. D., T. Young, J. Hanley, and P. Stolk. 2016. "Professional development barriers and benefits in a tourism knowledge economy." *International Journal of Tourism Research* 18(4): 319-326.
- Maoz, D. 2006. *The mutual gaze.* *Annals of Tourism Research* 33(1): 221-239.
- Mariani, M., D. Buhalis, C. Longhi, and O. Vitouladiti. 2014. "Managing change in tourism destinations: Key issues and current trends." *Journal of Destination Marketing and Management* 2: 269–272.

- Martín-Santana, J. D., A. Beerli-Palacio, and P. A. Nazzareno. 2017. "Antecedents and consequences of destination image gap." *Annals of Tourism Research* 62: 13-25.
- Monterrubio, C. 2016. "The impact of spring break behaviour: An integrated threat theory analysis of residents' prejudice." *Tourism Management* 54: 418-427.
- Moon, L. 2018. "Outburst at Singapore food court stirs sympathy for workers from China" *South China Morning Post*, June 21.
<https://www.scmp.com/news/china/society/article/2151729/outburst-singapore-food-court-stirs-sympathy-workers-china>
- Nunkoo, R., and D. Gursoy. 2012. "Residents' support for tourism: An identity perspective." *Annals of Tourism Research* 39(1): 243-268.
- Nunnally, J.C. 1978. *Psychometric theory*. New York: McGraw-Hill.
- Otoo, F. E., F. Badu-Baiden, and S. S. Kim. 2019. "A qualitative cognitive appraisal of tourist harassment." *International Journal of Tourism Research* 1-15.
- Ouyang, Z., D. Gursoy, and B. Sharma. 2017. "Role of trust, emotions and event attachment on residents' attitudes toward tourism." *Tourism Management* 63: 426-438.
- Palmer, A., N. Koenig-Lewis, and L. E. M. Jones. 2013. "The effects of residents' social identity and involvement on their advocacy of incoming tourism." *Tourism Management* 38: 142-151.
- Pike, S., and C. Ryan. 2004. "Destination positioning analysis through a comparison of cognitive, affective, and conative perceptions." *Journal of Travel Research* 42(4): 333-342.
- Pile, T. 2017. "Who are the world's worst tourists? Six nations that stand out – you may be surprised." *South China Morning Post*, July 14.

<https://www.scmp.com/magazines/post-magazine/travel/article/2102308/who-are-worlds-worst-tourists-six-nations-stand-out>

- Qiu Zhang, H., D. X. Fan, T. S. Tse, and B. King. 2017. "Creating a scale for assessing socially sustainable tourism." *Journal of Sustainable Tourism* 25(1):61-78.
- Ritchie, J. B., and G. I. Crouch. 2003. *The Competitive Destination: A Sustainable Tourism Perspective*. Oxon: CABI.
- Seate, A. A., and D. Mastro. 2017. "Exposure to immigration in the news: The impact of group-level emotions on intergroup behavior." *Communication Research* 44(6):817-840.
- Sharpley, R. 2014. "Host perceptions of tourism: A review of the research." *Tourism Management* 42: 37-49.
- Stylidis, D. 2020. "Exploring Resident–Tourist Interaction and its Impact on Tourists' Destination Image." *Journal of Travel Research* 0047287520969861.
- Stylidis, D., Y. Belhassen, and A. Shani. 2015. "Three tales of a city: Stakeholders' images of Eilat as a tourist destination." *Journal of Travel Research* 54(6): 702-716.
- Stylidis, D., A. Biran, J. Sit, and E. M. Szivas. 2014. "Residents' support for tourism development: The role of residents' place image and perceived tourism impacts." *Tourism Management* 45: 260-274.
- Stylidis, D., A. Shani, and Y. Belhassen. 2017. "Testing an integrated destination image model across residents and tourists." *Tourism Management* 58: 184-195.
- Styvén, M. E., M. M. Mariani, and C. Strandberg. 2020. "This is my hometown! the role of place attachment, congruity, and self-expressiveness on residents' intention to share a place brand message online." *Journal of Advertising*: 1-17.

- Suess, C., K. M. Woosnam, and E. Erul. 2020. "Stranger-danger? Understanding the moderating effects of children in the household on non-hosting residents' emotional solidarity with Airbnb visitors, feeling safe, and support for Airbnb." *Tourism Management* 77: 103952.
- Sun, N. 2016. "Hong Kong finance chief John Tsang pokes fun at himself in tourism promotion video." *South China Morning Post*, April 23.
<https://www.scmp.com/news/hong-kong/economy/article/1937829/hong-kong-finance-chief-john-tsang-pokes-fun-himself-tourism>
- Tajfel, H. 1984. "Intergroup relation, social myths and social justice in social psychology." In *The Social Dimensions*, edited by H. Tajfel, 695-715. Cambridge: Cambridge University Press.
- Tan, W. K., and C. E. Wu. 2016. "An investigation of the relationships among destination familiarity, destination image and future visit intention." *Journal of Destination Marketing & Management* 5(3): 214-226.
- Tasci, A. D., and D. Severt. 2017. "A triple lens measurement of host–guest perceptions for sustainable gaze in tourism." *Journal of Sustainable Tourism* 25(6): 711-731.
- Tay, T. F. 2019. "Trump-Kim summit and Crazy Rich Asian film put Singapore in the global spotlight." *The Straits Times*, February 14.
<https://www.straitstimes.com/singapore/tourist-arrivals-spending-at-record-highs>
- Thiel, S. K., M. Foth, and R. Schroeter. 2015. "Ad hoc communities on the road: Serendipitous social encounters to enhance tourist experiences." *Proceedings of the Annual Meeting of the Australian Special Interest Group for Computer Human Interaction*: 643-652.

- Tourism Commission, The Government of Hong Kong Special Administrative Region. 2019. "Tourism Fact Sheets."
https://www.tourism.gov.hk/english/papers/papers_fact_sheets_2018.html (accessed December 29, 2020).
- Tsaur, S. H., C. H. Yen, and H. Y. Teng. 2018. "Tourist–resident conflict: A scale development and empirical study." *Journal of Destination Marketing and Management* 10: 152-163.
- Tse, S., & Tung, V. W. S. 2020a. "Residents' discrimination against tourists." *Annals of Tourism Research*. <https://doi.org/10.1016/j.annals.2020.103060>
- Tse, W. T. S., & Tung, V. W. S. 2020b. "Assessing explicit and implicit stereotypes in tourism: self-reports and implicit association test." *Journal of Sustainable Tourism*, 1-24.
- Tung, V. W. S. 2019. "Helping a Lost Tourist: The Effects of Metastereotypes on Resident Prosocial Behaviors." *Journal of Travel Research* 58(5): 837-848.
- Tung, V. W. S. 2021. "Reducing Tourist Stereotyping: Effectiveness of Communication Messages." *Journal of Travel Research* 60(2): 281 – 292.
- Tung, V. W. S., C. Cheung, and R. Law. 2018. "Does the listener matter? The effects of capitalization on storytellers' evaluations of travel memories." *Journal of Travel Research* 57(8): 1133-1145.
- Tung, V. W. S., B. E. M. King, and S. Tse. 2020. "The Tourist Stereotype Model: Positive and Negative Dimensions." *Journal of Travel Research* 59(1): 37-51.
- Uchinaka, S., V. Yoganathan, and V. S. Osburg. 2019. "Classifying residents' roles as online place-ambassadors." *Tourism Management* 71: 137-150.

Woosnam, K. M., and W. C. Norman. 2010. "Measuring residents' emotional solidarity with tourists: Scale development of Durkheim's theoretical constructs." *Journal of Travel Research* 49(3): 365-380.

Woosnam, K. M., D. Styliadis, and M. Ivkov. 2020. "Explaining conative destination image through cognitive and affective destination image and emotional solidarity with residents." *Journal of Sustainable Tourism* 28(6): 917-935.

Wyer, N. A. 2010. "Salient egalitarian norms moderate activation of out-group approach and avoidance." *Group Processes & Intergroup Relations* 13(2):151-165.

Appendix 1 - Pool items from existing literature and free-response task

	Positive Behaviors	Negative Behaviors
Existing Literature	<ol style="list-style-type: none"> 1. Accept the tourist behaviors 2. Assist the tourist 3. Endure the tourist behaviors 4. Help the tourist 5. Interact with the tourist 6. Show courtesy to tourist 7. Show hospitality to tourist 8. Show politeness to tourist 9. Socialize with the tourist 10. Start a conversation with tourist 11. Tolerate the tourist 	<ol style="list-style-type: none"> 1. Act in a threatening manner toward tourist 2. Avoid going to spaces filled with tourist 3. Avoid interacting with tourist 4. Despise the tourist 5. Harass the tourist 6. Insult the tourist 7. Look down on tourist 8. Mock at the tourist 9. Refrain to help tourist 10. Reluctant to help tourist 11. Resist to help tourist 12. Stare at the tourist 13. Use offensive nicknames on tourist
Free-Response Task	<ol style="list-style-type: none"> 12. Answer questions from tourist when they ask 13. Compliment the tourist 14. Going to spaces filled with tourist 15. Practice good manner on tourist 16. Provide recommendations to tourist 17. Respect the tourist 18. Volunteer to help tourist 	<ol style="list-style-type: none"> 14. Express unfriendliness to tourist 15. Ignore questions from tourist when they ask 16. Scold the tourist for their wrongdoings 17. Show hostility to tourist 18. Speak negatively about tourist 19. Use negative words on tourist